WILBUR R. INGALLS, INC.
ARCHITECTS
EXCHANGE STREET, PORTLAND, MAINE

May 5, 1975

Wiley Construction Co.
Black Point Road
Scarborough, Maine

Re: PRVTC

Gentlemen:

We received one set of sprinkler system shop drawings (dwgs. 1 - 4 for Building "A" only) on April 24, 1975 - delivered directly to me. They do not bear the required ISO stamp, however on April 28 we received a copy of ISO's letter of approval, so we have proceeded to check these drawings. This is to inform you that these are "approved as noted" with the following comments:

1. Flow switches are not shown. I have obtained proposed locations from Mr. Spaulding of Carco and have sent him a sketch showing necessary revisions in the first floor main for these.

2. The heads at either side of the door to Stair #1 should be connected to a branch line rather than the main so that they will operate the zone flow switch properly.

3. I notice that a head is provided in the pipe space at the third floor. Where this space is closed at each floor level, I would assume that heads are needed at the first and second floors also.

4. No heads are shown in the large duct spaces, however ISO approval would indicate that they are not required.

5. The duct space at the third floor next to Stair #2 has been removed.

6. Confirm type of thread on hose connections with the Portland Fire Dept.

7. Ceilings are UL "Class 25" - I don't know whether this is the same as the Class A shown on the shop drawings or not.

8. Headroom at the overhead door in the General Trades shop is tight. There is a potential conflict between one head and the door.

cont'd.

WILLIAM H. [illegible], JR.
ARCHITECT A. I. A.
[illegible] EXCHANGE STREET, PORTLAND, MAINE 04111

Wiley Const., 5/5/75, cont'd.

9. Not all ceiling heights are @ 9'-0" as shown on drawing #4. Some have been lowered due to field conditions and some were originally scheduled lower.

10. Drawing #1 refers to notes on Bldg. B - we have not yet received the shop drawings for building B.

11. I have not yet checked all of the piping and head locations for conflicts with beams, water lines, heat & ventilating pipes and ducts, light fixtures, etc. Because the contractor has already started fabricating and installing this piping, such a check would not be in time to avoid the necessity of reworking some piping. It is of the upmost importance that this subcontractor coordinate his work with the other trades who have been on the job for many months now.

We are retaining the one set submitted for our records. The required minimum number of sets should be sent for approval.

As soon as Building "B" is submitted we will start checking it. I realize that the piping in the Boiler Room must be held pending a decision on the booster pump, however according to Mr. Spaulding of Carco, the remainder of Building "B" will not be affected by this.

Sincerely,

Gregory K. Johnson

cc: Carco - Harry Spaulding
ISO - David Hale

TELEPHONE SEVEN SEVEN TWO FOUR ZERO SEVEN THREE

6/26/75

ADDRESS Portland Cement
School Bldg A + B
Sprinkler

ROUTING SLIP

FROM

DEPARTMENT OF BUILDING AND INSPECTION SERVICES

✓ FIRE DEPARTMENT

PLANNING BOARD

RENEWAL

N INE WAY

OTHER'S

APPROVED H C Miller F. P. B.

DISAPPROVED BY REASON OF

(quote section or pertinent ordinance or other governing factors)

SPECIAL COMMENTS _____

_____

KEEP SECOND COPY AND RETURN ORIGINAL TO BUILDING AND INSPECTION SERVICES

WILBUR R. INGALLS, JR.
ARCHITECT A. I. A.
45 EXCHANGE STREET, PORTLAND, MAINE 04111

June 23, 1975

R. Lovell Brown, Director
Building & Inspection Services
389 Congress Street
Portland, Maine

Re: Portland Regional Vocational Center

Dear Mr. Brown:

We are sending herewith one set of sprinkler and standpipe drawings for Building "B".

These are for your review & comment and/or approval.

Sincerely,

Greg Johnson
Gregory K. Johnson

TELEPHONE SEVEN SEVEN TWO FOUR ZERO SEVEN THREE

8. ADDITIONAL DATA. Upon further review by the City's Department of Public Works, and pursuant to the City's recently enacted site plan ordinance, the following additional data is needed by Public Works for their approval:

(a.) Bearings, distances and angles of all tangents.

(b.) Equalities for all baseline intersections.

(c.) Stationing of all PT's and PC's for curves.

(d.) Tangent lengths, arc lengths, radiii of curves.

(e.) Tie-ins for the baselines of roadways A & B with Allen Avenue centerline or sideline.

(f.) Calculations should show the proper distances from property lines to roadways. Also, submit all drainage calculations for review.

(g.) Who is responsible for the actual survey work in establishing these baselines?

Kindly complete revised final site plan incorporating the above changes and modifications and submit copies to Planning and Public Works Departments as soon as possible. The Planning Board is scheduled to take this matter up at its workshop session of July 9th.

Gerald A. Holtenhoff

GAH/jk

cc: Donald E. Megathlin, Jr., Planning Director
F. Worth Landers, Director of Public Works
Harry E. Cummings, Chairman, Planning Board
John Chesebro, Highway Design Chief, Public Works
John Kennedy, Public Works
John Murphy, Traffic Eng., Public Works
Joseph Beaulieu, Public Works

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Moriece & Gary, Inc. , and Wilbur Ingalls

DATE: 7-18-74

FROM: Jack Murphy, City of Portland Traffic Engineer I

SUBJECT: Entrance from Vocational School at Allen Avenue

As per the memo from Gerald A. Holtenhoff to your firm dated July 2, 1974, item 1; I have conferred with the Director of Public Works. We have agreed that you shall design the entrance as follows:

1. The entrance roadway shall be eighteen (18') feet wide, the island shall be fourteen (14') feet wide, the exit roadway shall be twenty-six (26') feet wide.

2. The nose of the island shall be set back a minimum of two (2') feet or a maximum of three (3') feet from the edge of the pavement on Allen Avenue.

3. The island radii shall be seven (7') feet, and the curb radii shall be twenty-four (24') feet.

The above are the conditions set forth for the approval of the Director of Public Works in his official capacity as City Traffic Engineer. This approval is required by ordinance prior to construction.

John L. Murphy

JOHN L. MURPHY
TRAFFIC ENGINEER I
PUBLIC WORKS DEPARTMENT

JLM/dmd

MAINE ENGINEERING
Services Company Inc

CONSULTING ENGINEERS • 95 HIGH STREET, AUBURN, MAINE 04210
TELEPHONE (207) 784-5513

OFFICERS
JAMES F. JOHNSTON, JR, P.E.
WILLIAM J. FAKE, P.E.

July 29, 1974

Mr. Wilbur R. Ingalls, Jr., Architect
45 Exchange Street
Portland, Maine 04111

Re: Letter to you from Earle S.Smith, City of Portland Bldg. and Inspection Services dated 18 July 1974, MESCO #7402

Dear Bill:

Following is clarification or expansion of answer to Mr. Smiths questions.

COMBUSTION AIR REQUIREMENTS

With future installation of third boiler, total fuel consumed per hour will be 207.9 gallons or 69.3 gal/hour per boiler of #6 fuel oil at 150,000 BTU/gallon. NFFA chapter 31 para. 1406 requires 1 square inch per 14,000 BTU per hour # sq. inches of free opening in louver is

$$\frac{207.9 \text{ gallons/hour} \times 150{,}000 \text{ BTU/gallon}}{14{,}000 \text{ BTUH/SQ. IN.}} = 2227.5 \text{ SQ. IN.}$$

or 15.49 square feet required.
Louver specified is Carnes #38 88" wide x 72" high with 17.1 square feet free opening.

PRESSURE DROP THRU LOUVER

At 207.9 gph, combustion air required (50% excess air) is 114.2 x 1.5 lbs. air per gallon of oil or

$$\frac{207.9 \times 114.2 \times 1.5}{60 \text{ min/hour}} = 593.5 \text{ \#/min of air}$$

593.5 #/Min x 13.5 cuft/# = 8013 cfm air
from chart of louver manufacturer, pressure drop is less than .05 in. H_2O at velocity of 468 feet/min thru louver.

VENTILATION AIR RATE

Ventilation air rate is 7500 cfm. Note that air is blown into boiler room, creating additional air supply for boiler and excess air may go up chimney or out the combustion air louver.

WILBUR R. INGALLS, JR.
ARCHITECT A. I. A.
45 EXCHANGE STREET, PORTLAND, MAINE 04111

September 11, 1974

Earle S. Smith, Plan Examiner
Building And Inspection Services
City Hall
Congress Street
Portland, Maine

Re: Portland Regional Vocational Technical Center
Allen Avenue, Portland

Dear Mr. Smith:

In reply to your letter of July 18, 1974, concerning non-compliance items, we have done or will do the following:

1. Kitchen area in Building "A" - Plaster partitions and ceilings are 1 hour rated assemblies. Doors 105, 106 & 106A are all "B" Label with closers.
2. Rated assemblies of columns, beams, etc. - These are shown fireproofed with one inch plaster on wire lath on 3/4" chnls. Due to an oversite in the specifications, the plaster for this was specified as gypsum-sand which would give a 1 hour rating. This will be changed (by change order) to gypsum-perlite, which will give a 2 hour rating.
3. Boiler Room air - See attached letter from Maine Engineering Services on this item.
4. Corridor partitions & Doors - The plaster partitions are 1 hour rated. There are 28 classroom doors which we will change by change order to "C" Label. All but 2 of these now have closers and we will add the other 2. Glass in these doors will be changed to ¼" wire. The maximum size glass in these doors is 864 sq. in.
5. Plumbing - See attached letter from Maine Engineering Services on these items.

Because of the time required to obtain prices on the above from the contractor, write the necessary change orders and process them, we would appreciate your approving the project at this time, subject to the above changes. We will send you copies of the change orders as soon as they are processed.

Sincerely yours,

Bill Ingalls

Wilbur R. Ingalls, Jr.

encl.

TELEPHONE SEVEN SEVEN TWO FOUR ZERO SEVEN THREE

THE SANITARY SEWER

The sanitary sewer is specified as cast iron to eight feet outside the building. This will have to be amended to cast iron to the first manhole and A/C pipe from the manhole to the street.

ALL WALL HYDRANTS AND HOSE BIBBS

All wall hydrants and hose bibbs comply with the code requirements. They have back flow preventors or vacuum breakers as specified on Page 15A12 paragraphs 10 and 11.

THE CATCH BASINS FROM THE AUTO SERVICE AREA

The catch basins from the auto service area have an oil interceptor specified on page 15A24 paragraph 15A44. This is a commercial cast iron interceptor for 150 gpm flow rate.

Very truly yours,

William J. Fake, P.E.
MAINE ENGINEERING SERVICES COMPANY, INC.

WJF/hr

172-210 Allen Avenue

Portland Regional Vocational Technical Center

Sept. 13, 1974

Wilbur R. Ingalls, Jr.
45 Exchange Street

Re: letter from Wilbur Ingalls dated 9-11-74 regarding certain requirements for Portland Regional Vocational Technical Center

Dear Mr. Ingalls:

Thank you for your letter of Sept. 11, 1974 correcting the items which we pointed out were in noncomplainee with the BOCA Building Code.

If your contractor now wishes to apply for an excavation and foundation only permit, please contact the Fire Department for their approval, and if you wish to further expedite the permit please send a site plan to the Public Works Department for their approval.

When these two departments notify this office that they havee no objection to an excavation and foundation only permit being issued by us we will be glad to comply with your wishes in that regard.

Very truly yours,

Earle S. Smith
Plan Examiner

ESSsm

WILBUR R. INGALLS, JR.
ARCHITECT A. I. A.
43 EXCHANGE STREET, PORTLAND, MAINE 04111

August 14, 1974

Building & Inspection Services
Att: Mr. Earle S. Smith
389 Congress St. - City Hall
Portland, Maine

Dear Earle,

Inclosed is a copy of a letter from Maine Engineering Services, Inc. with the information requested in you letter dated July 18, 1974.

The ballance of the architectural items have been done on the bid documents.

Please call if additional information is required.

Sincerely,

Bill Ingalls

Wilbur R. Ingalls, Jr.

TELEPHONE SEVEN SEVEN TWO FOUR ZERO SEVEN THREE

MAINE ENGINEERING
Services Company Inc

CONSULTING ENGINEERS • 95 HIGH STREET, AUBURN, MAINE 04210
TELEPHONE (207) 784-3513

OFFICERS
JAMES F. JOHNSTON, JR, P.E.
WILLIAM J. FAKO, P.E.

July 29, 1974

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45 Exchange Street
Portland, Maine 04111

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Louver specified is Carnes #38 88" wide x 72" high with 17.1 square feet free opening.

PRESSURE DROP THRU LOUVER

At 207.9 gph, combustion air required (50% excess air) is 114.2 x 1.5 lbs. air per gallon of oil or

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Very truly yours,

William J. Fake, P.E.
MAINE ENGINEERING SERVICES COMPANY, INC.

WJF/br

FINAL SITE PLAN REVIEW
VOC. SCHOOL.

CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
ADMINISTRATION
(207) 775-5451

F. WORTH LANDERS, P.E.
DIRECTOR OF PUBLIC WORKS
CITY ENGINEER
GERALD B. BREWSTER
DEPUTY DIRECTOR OF PUBLIC WORKS
WILLIAM W. RIDGEWAY, JR.
ADMINISTRATIVE ASSISTANT

July 22, 1974

Mr. Wilbur Ingalls
45 Exchange Street
Portland, Maine

Dear Mr. Ingalls:

This letter is a supplement to Jerry Holtenhoff's letter of July 18, 1974. After reviewing the final site plan drawings I find the following items as not meeting the requirements:

1: The luminaires have no designation as to size.
The luminaires on the roadways will be Z-1's and those on the walkways will be Z-2's.

2: The northerly roadway has no lighting.
As I understand it there will be night classes in the automotive section. Therefore there will be lights on the northerly roadway. These will be the Z-1 luminaires and will be located at stations: 14+90, 16+45, 18+00, 19+40, 21+00 and 22+25±.

3: The parking lots are not adequately lighted.
There shall be in the northwesterly parking lot, four Z-1 luminaires located in the north, south, east and west corners. These luminaires shall be oriented to give the greatest coverage of the lot.
There shall be in the northeasterly parking lot, a minimum of five Z-1 luminaires located as follows: three along the north side; one in the west corner and one near the center of the lot. Again these luminaires shall be oriented to give the greatest coverage of the lot.

4: The bus loop is inadequately lighted.
There shall be Z-1 luminaires located in the island section of the bus loop at the following locations: Station 1+20, 2+80, 3+90, 5+10 and 6+70.

In addition to the above I believe that two Z-2 luminaires should be located in the area between the Horticultural Center and Building "A". One would be directly in front of the Center and the other would be located on the circular path near "A" Building.

Sincerely yours,
William W. Ridgeway Jr.
Administrative Assistant

CC: Harry F. Cummings, Chairman, Planning Board
Donald E. Negathlin, Jr., Planning Director
Gerald A. Holtenhoff, Assistant Planning Director
R. Lovell Brown, Director of Building & Inspection Services
John R. Chesebro, Public Works
Richard Berman, Morioco and Gary

BLD B

HEIGHT & AREA COMPUTATIONS

(ARTICLES 2 & 3 & TABLE 6)

USE GROUP CLASSIFICATION F - 4 (202–213)

ACTUAL BLDG. HT. 2 Story ____ Feet

ALLOW. BLDG. HT. ____ Story ____ Feet

MIN. TYPE OF CONST. BASED ON HT. & AREA ____ (214–218)

ALLOW. TAB. AREA (TBL.6) 36,200 S.F.

REDUCTION FOR HT. (307.3) ____ S.F.

REDUCED ALLOW. AREA → ____ S.F.

FRONTAGE INCR. (308.1) 51,300 S.F. ←

SPRINKLER INCR. (308.2) ____ S.F.

TOTAL AREA INCREASES → 85,000 S.F.

OPEN SPACE (308.1) 730 North, 70 East, 30 West, 30 South

PERIMETER 720 Ft. OPEN PERIM. 720 Ft.

% OPEN PERIMETER = 100 (OPEN PERIM./PERIM.)

% TAB. AREA INCREASE = 2(100-25) 150 (308.1) (2 x (% Open Perim. – 25%))

ALLOW. AREA PER FLOOR 119,300 S.F. ACTUAL BLDG. AREA PER FLOOR 30,000 S.F.

Caution: Max. area may not exceed 3½ times the tab area (308.3).

NOTES: N.R. – Not required
N.A. – Not applicable

UNLIMITED AREA BUILDINGS

(309)

USE GROUP CLASSIFICATION ____ (309.1)

TYPE OF CONST. REQ'D. ____ (309.1)

FIRE SEPARATION (309.2) ____ North ____ East ____ West ____ South

EXT. WALL RATING (309.2) ____ North ____ East ____ West ____ South

EXITWAY FACILITIES ____ (604)

AUTOMATIC SPRINKLERS ____ (1204.20)

ROOF VENTS ____ (309.3)

FIRE ACCESS PANELS ____ (309.4)

MEANS of EGRESS

(ARTICLE 6)

OCCUPANCY LOAD (608 & TABLE 10)

	Floor area	Sq. ft. /person	Occ'y Load
BASEMENT	( ) ÷	( ) =	( )
1ST FLOOR	( ) ÷	( ) =	( )
2ND FLOOR	( ) ÷	( ) =	( )
____FLOOR	( ) ÷	( ) =	( )
____FLOOR	( ) ÷	( ) =	( )
____FLOOR	( ) ÷	( ) =	( )

CAPACITY OF EXITWAYS (610 & TABLE 12)

UNITS OF EXIT WIDTH REQ'D.

	DOORS (CAP/UNIT)	STAIRS (CAP/UNIT)
BASEMENT		
1ST FLOOR		
2ND FLOOR		
____FLOOR		
____FLOOR		
____FLOOR		

NUMBER OF EXITWAYS (611)

	REQ'D	SHOWN
BASEMENT		
1ST FLOOR		
2ND FLOOR		
____FLOOR		
____FLOOR		
____FLOOR		

USE & OCCUPANCY REQUIREMENTS (603)	O.K.
AIR CONDITIONED BUILDINGS (605)	NO
TYPES & LOCATION OF EXITWAYS (609)	O.K.
EXITWAY ACCESS TRAVEL DISTANCE (604, 609 & Tab. 11)	O.K.
EXITWAY ACCESS CORRIDORS (612)	Better
GRADE EXITWAY PASSAGEWAYS (613)	O.K.
MEANS OF EGRESS DOORWAYS (614)	O.K.
REVOLVING EXITWAY DOORS (615)	NONE
HORIZONTAL EXITS (616)	O.K.
EXITWAY RAMPS (617)	NONE
INTERIOR EXITWAY STAIRWAYS (618)	O.K.
ACCESS TO ROOF (619)	NO
SMOKE PROOF ENCLOSURES (620)	NO
EXTERIOR EXITWAY STAIRWAYS (621)	NONE
FIRE ESCAPES (623)	NONE
SLIDESCAPES (624)	NONE
EXIT SIGNS (625)	O.K.
MEANS OF EGRESS LIGHTING (626)	O.K.
ELEVATOR EXITWAY RESTRICTIONS (1611)	NO
MOVING STAIRWAYS (1621)	NO

FIRE PROTECTION

(ARTICLES 9 & 12, TABLE 5)

REQUIRED FIRE GRADING _____ (TABLE 16)

(Compliance with Table 5 & Art. 9)

EXT. WALLS (906)

	*North	East	West	South
Bearing	2	2	2	2
Non-bearing	0	0	0	0

INTERIOR BEARING WALLS	2	& BRICK
FIRE WALLS (907)	2	NONE
FIRE DIVISIONS (907)	1½	NONE
EXITWAY ENCLOSURES (909)	2	O.K.
OTHER SHAFTS (911)	2	NONE
EXITWAY ACCESS HALLWAYS (910)	3/4	
TENANT SEPARATIONS (910)	O.K.	NON-COM
NON-BEARING PARTITIONS	O.K.	NON-COM
COLUMNS, GIRDERS, TRUSSES (914)	1½	Protected
STRUCTURAL WALL SUPPORTS (912)	1½	Protected
FLOOR CONSTRUCTION (913)	1½	
ROOF CONSTRUCTION (915)	O.K.	

☐ *INDICATES REQUIRED RATING IN HOURS
NC indicates non combustible where no rating is required.

ROOF COVERINGS	(903.5, 928 & 305.2)	
SPECIAL FIRE RESISTIVE REQUIREMENTS	(905)	
EXTERIOR OPENING PROTECTIVES	(916)	
OTHER OPENING PROTECTIVES	(908, 917, 918, 919 & 1614)	
FIRE STOPPING	(921)	
INTERIOR FINISH	(904, 922, 923 & 925)	NOT APP
EXTERIOR TRIM RESTRICTIONS	(926)	NOT APP
ROOF STRUCTURES	(927)	
SPRINKLERS	(1204)	ENTIRE
STANDPIPES	(1205)	FIRE DEPT.
CO_2 & DRY CHEMICAL EXTINGUISHING SYSTEMS	(1207)	" "
FIRE DETECTION	(1209)	" "
FIRE ALARMS	(1210)	" "
CENTRAL STATION	(1211)	" "

SPECIAL OCCUPANCY REQUIREMENTS

(ARTICLE 4)

- ☐ Explosion hazard, 402.0
- ☐ Volatile flammable, 403.0
- ☐ LP gases, 407.0
- ☐ Pyroxylin plastics, 408.0
- ☐ Flammable film, 409.0
- ☐ Combustible fibers, 410.0
- ☐ Combustible dusts/grain, 411.0
- ☐ Paint spraying, 412.0
- ☐ Dry cleaning, 413.0
- ☐ Private garages, 414.0
- ☐ Public garages, 415.0
- ☐ Service stations, 416.0
- ☐ Auto repair shops, 417.0
- ☐ Public assembly, 418.0 & 419.0
- ☐ Amusement parks, 420.0
- ☐ Stadiums & grandstands, 421.0
- ☐ Drive-in theater, 422.0
- ☐ Tents & temporary structs., 423.0
- ☐ Parking lots, 424.0
- ☐ Mobile homes, 425.0
- ☐ Motels, 426.0
- ☐ Radio & TV towers, 427.0 & 428.0
- ☐ Swimming pools, 429.0
- ☐ Open parking structs., 430.0

LIGHT & VENTILATION

(ARTICLE 5)

HABITABLE SPACES	NOT APP (501)	OPERATION OF MECHANICAL VENTILATING SYSTEMS	O.K. (505)
BASEMENT & CELLARS	NOT APP (509)	ALCOVE ROOMS	NOT APP (508.1)
BUSINESS & WORKROOMS	NOT APP (510 & 515.1)	ATTIC SPACES	NOT APP (508.2)
ASSEMBLY AREAS	O.K. (511 & 515)	CRAWL SPACES	NOT APP (508.3)
INSTITUTIONAL SPACES	NOT APP (512 & 515)	VERTICAL SHAFTS	" (516, 911 & 1610)
BATH & TOILET ROOMS	O.K. (513)	UNPIERCED BUILDINGS	" (517)
STAIRWAYS & EXITWAYS	O.K. (514 & 515.9)	FIRE VENTING	" (521)
KITCHENS	NOT APP (515.8 & TABLE 9A)	OPEN WELLS	" (522)
LIVING & BEDROOMS	NOT APP (507 & TABLE 9A)		

MECHANICAL SYSTEMS

(ARTICLES 10, 11 & 18)

HEATING EQUIPMENT TYPE AND LISTING _____ (1100, 1107, 1108, 1115, 1129 & 1130)

TYPE OF ENERGY: GAS _____ (1129) OIL _____ (1130) ELECTRIC _____ (1500)

CHIMNEYS _____ (1003–1005) BOILER ROOM _____ (1115) COMBUSTION AIR _____ (1115.4)

VENTS	(1003 & 1011)	UNFIRED PRESSURE VESSELS	(1126)
FIREPLACES	(1013)	OIL BURNING & FUEL TANKS	(1130 & 1131)
INCINERATORS	(1015)	REFUSE CHUTES	(1136)
DUCT AND PIPE SHAFTS	(1018)	REFUSE VAULTS	(1137)
DUCT CONSTRUCTION	(1019)	SPECIAL SYSTEMS	(1114, 1132 & 1139)
FIRE DAMPERS	(1812)	PLUMBING & WATER CONNECTIONS	(1811)

BDB

HEIGHT & AREA COMPUTATIONS

(ARTICLES 2 & 3 & TABLE 6)

USE GROUP CLASSIFICATION: F – 1 (202–213)

ACTUAL BLDG. HT.: 3 Story / 38 Feet

ALLOW. BLDG. HT.: 5 Story / 65 Feet

MIN. TYPE OF CONST. BASED ON HT. & AREA: 2 – A (214–218)

ALLOW. TAB. AREA (TBL.)	34200	S.F.
REDUCTION FOR HT. (307.3)		S.F.
REDUCED ALLOW. AREA →		S.F.
FRONTAGE INCR. (308.1)	51,300	S.F.
SPRINKLER INCR. (308.2)		S.F.
TOTAL AREA INCREASES →	85,500	S.F.

OPEN SPACE (308.1): 30 North / 30 East / 30 West / 30 South

PERIMETER 680 Ft. OPEN PERIM. 680 Ft.

% OPEN PERIMETER = 100 % (OPEN PERIM./PERIM.)

% TAB. AREA INCREASE (308.1) = 2 (100 – 25) 150 (2 x (% Open Perim. – 25%))

ALLOW. AREA PER FLOOR 119,300 S.F.

ACTUAL BLDG. AREA PER FLOOR 24000 S.F.

Caution: Max. area may not exceed 3½ times the tab area (308.3).

NOTES: N.R. – Not required
N.A. – Not applicable

UNLIMITED AREA BUILDINGS

(309)

USE GROUP CLASSIFICATION _____ (309.1)

TYPE OF CONST. REQ'D. _____ (309.1)

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AUTOMATIC SPRINKLERS _____ (1204.20)

ROOF VENTS _____ (309.3)

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-1-

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1ST FLOOR	( )	÷ ( )	= ( )
2ND FLOOR	( )	÷ ( )	= ( )
____FLOOR	( )	÷ ( )	= ( )
____FLOOR	( )	÷ ( )	= ( )
____FLOOR	( )	÷ ( )	= ( )

CAPACITY OF EXITWAYS (610 & TABLE 12)

UNITS OF EXIT WIDTH REQ'D.

	DOORS (CAP/UNIT)	STAIRS (CAP/UNIT)
BASEMENT		
1ST FLOOR		
2ND FLOOR		
____FLOOR		
____FLOOR		
____FLOOR		

NUMBER OF EXITWAYS (611)

	REQ'D	SHOWN
BASEMENT		
1ST FLOOR		
2ND FLOOR		
____FLOOR		
____FLOOR		
____FLOOR		

USE & OCCUPANCY REQUIREMENTS (603)	O.K.
AIR CONDITIONED BUILDINGS (605)	NO
TYPES & LOCATION OF EXITWAYS (609)	O.K.
EXITWAY ACCESS TRAVEL DISTANCE (604, 609 & Tab. 11)	O.K.
EXITWAY ACCESS CORRIDORS (612)	[illegible]
GRADE EXITWAY PASSAGEWAYS (613)	O.K.
MEANS OF EGRESS DOORWAYS (614)	O.K.
REVOLVING EXITWAY DOORS (615)	NO
HORIZONTAL EXITS (616)	NO
EXITWAY RAMPS (617)	NO
INTERIOR EXITWAY STAIRWAYS (618)	O.K.
ACCESS TO ROOF (619)	NO
SMOKE PROOF ENCLOSURES (620)	NO
EXTERIOR EXITWAY STAIRWAYS (621)	NO
FIRE ESCAPES (623)	NO
SLIDESCAPES (624)	NO
EXIT SIGNS (625)	O.K.
MEANS OF EGRESS LIGHTING (626)	O.K.
ELEVATOR EXITWAY RESTRICTIONS (1611)	NO
MOVING STAIRWAYS (1621)	NO

FIRE PROTECTION

(ARTICLES 9 & 12, TABLE 5)

REQUIRED FIRE GRADING _____ (TABLE 16)

(Compliance with Table 5 & Art. 9)

EXT. WALLS (906)

	*North	East	West	South
Bearing	2	2	2	1
Non-bearing	0	0	0	0

INTERIOR BEARING WALLS	2	8" BRICK
FIRE WALLS (907)	2	none
FIRE DIVISIONS (907)	1½	none
EXITWAY ENCLOSURES (909)	2	
OTHER SHAFTS (911)	2	
EXITWAY ACCESS HALLWAYS (910)	2	
TENANT SEPARATIONS (910)	OK	NON-COM
NON-BEARING PARTITIONS	O.K.	NON-COM
COLUMNS, GIRDERS, TRUSSES (914)	1½	Protected
STRUCTURAL WALL SUPPORTS (912)	1½	
FLOOR CONSTRUCTION (913)	1½	
ROOF CONSTRUCTION (915)	O.K.	

☐ *INDICATES REQUIRED RATING IN HOURS
NC indicates non combustible where no rating is required.

ROOF COVERINGS O.K. (903.5, 928 & 305.2)

SPECIAL FIRE RESISTIVE REQUIREMENTS O.K. (905)

EXTERIOR OPENING PROTECTIVES O.K. (916)

OTHER OPENING PROTECTIVES O.K. (908, 917, 918, 919 & 1614)

FIRE STOPPING O.K. (921)

INTERIOR FINISH O.K. (904, 922, 923 & 925)

EXTERIOR TRIM RESTRICTIONS O.K. (926)

ROOF STRUCTURES NONE (927)

SPRINKLERS all Sprinkled (1204)

STANDPIPES Fire Dept (1205)

CO_2 & DRY CHEMICAL EXTINGUISHING SYSTEMS _____ (1207)

FIRE DETECTION _____ (1209)

FIRE ALARMS _____ (1210)

CENTRAL STATION _____ (1211)

SPECIAL OCCUPANCY REQUIREMENTS

(ARTICLE 4)

- ☐ Explosion hazard, 402.0
- ☐ Volatile flammable, 403.0
- ☐ LP gases, 407.0
- ☐ Pyroxylin plastics, 408.0
- ☐ Flammable film, 409.0
- ☐ Combustible fibers, 410.0
- ☐ Combustible dusts/grain, 411.0
- ☐ Paint spraying, 412.0
- ☐ Dry cleaning, 413.0
- ☐ Private garages, 414.0
- ☐ Public garages, 415.0
- ☐ Service stations, 416.0
- ☐ Auto repair shops, 417.0
- ☐ Public assembly, 418.0 & 419.0
- ☐ Amusement parks, 420.0
- ☐ Stadiums & grandstands, 421.0
- ☐ Drive-in theater, 422.0
- ☐ Tents & temporary structs., 423.0
- ☐ Parking lots, 424.0
- ☐ Mobile homes, 425.0
- ☐ Motels, 426.0
- ☐ Radio & TV towers, 427.0 & 428.0
- ☐ Swimming pools, 429.0
- ☐ Open parking structs., 430.0

LIGHT & VENTILATION

(ARTICLE 5)

HABITABLE SPACES	NOT APP. (501)	OPERATION OF MECHANICAL VENTILATING SYSTEMS	O.K (505)
BASEMENT & CELLARS	NOT APP. (509)	ALCOVE ROOMS	NOT APP (508.1)
BUSINESS & WORKROOMS	NOT APP (510 & 515.1)	ATTIC SPACES	NOT APP (508.2)
ASSEMBLY AREAS	O.K. (511 & 515)	CRAWL SPACES	NOT APP (508.3)
INSTITUTIONAL SPACES	— (512 & 515)	VERTICAL SHAFTS	" " (516, 911 & 1610)
BATH & TOILET ROOMS	O.K. (513)	UNPIERCED BUILDINGS	" " (517)
STAIRWAYS & EXITWAYS	O.K. (514 & 515.9)	FIRE VENTING	" " (521)
KITCHENS	NOT APP. ~~3 cubic feet~~ (515.8 & TABLE 9A)	OPEN WELLS	" " (522)
LIVING & BEDROOMS	NOT APP (507 & TABLE 9A)		

MECHANICAL SYSTEMS

(ARTICLES 10, 11 & 18)

HEATING EQUIPMENT TYPE AND LISTING _____ (1100, 1107, 1108, 1115, 1129 & 1130)

TYPE OF ENERGY: GAS _____ (1129) OIL _____ (1130) ELECTRIC _____ (1500)

CHIMNEYS _____ (1003–1005) BOILER ROOM _____ (1115) COMBUSTION AIR _____ (1115.4)

VENTS	(1003 & 1011)	UNFIRED PRESSURE VESSELS	(1126)
FIREPLACES	(1013)	OIL BURNING & FUEL TANKS	(1130 & 1131)
INCINERATORS	(1015)	REFUSE CHUTES	(1136)
DUCT AND PIPE SHAFTS	(1018)	REFUSE VAULTS	(1137)
DUCT CONSTRUCTION	(1019)	SPECIAL SYSTEMS	(1114, 1132 & 1139)
FIRE DAMPERS	(1812)	PLUMBING & WATER CONNECTIONS	(1811)

Allen Avenue Vocational School

July 18, 1974

Wilbur R. Ingalls, Jr.
45 Exchange Street

Dear Mr. Ingalls:

A check of the above plans against the requirements of the BOCA Building Code reveals several items which appear to be in non-compliance therewith.

Please bear in mind this is not a complete check because we have not heard from the Fire Department or the Public Works, but we thought the following items might help you in preparing for bids.

The kitchen area in Building A is required to be partitioned off with 3/4 hour fire resistant material with fire doors in the openings leading thereto. (See Sec.419.4)

Please classify rated assemblies of columns, girder or trusses along with structural wall supports showing a minimum of 1½ hour fire rating.

Please submit data (computations) showing boiler room will receive enough air for combustion also the rate of exhausted air. *See letter from Mr. Eng.*

All corridors partitions (exitway access corridors) are required to be 3/4 hour fire resistant and the classroom doors are required to be Class C fire doors with closers. (See Sec. 917.21) Please be guided by Sec.919.4 as to limit of wireglass panels.

PLUMBING

The sanitary sewer is required to be cast iron from the building to the first manhole in each instance where it leaves the building, then from manholes it is permissible to use RC or transito to the City sewer.

All wall hydrants and hose bibbs must have back flow preventors or vacuum valves installed on them.

What provisions are made for: oil and gas catch basins from auto mechanics and service area?

Mechanical and electrical check not included.

Very truly yours,

Earle S. Smith, Plan Examiner

172-210 Allen Avenue

Re: Vocational School

August 22, 1974

Wilbur R. Ingalls, Jr. AIA
43 Exchange Street

Dear Mr. Ingalls:

The electrical riser diagrams, Sheet E-11 is numbered 3,4, 13,16,18,19 and 23 to the transformers without an over current device on the secondary side of the transformer to conform with N.E.C. Art.#240-15, titled Overcurrent Protection. This article states that "Overcurrent devices shall be located at the point where the conductor receives its supply." In this case the supply is the transformer and in no way will any of the exceptions apply.

Very truly yours,

Earle S. Smith
Plan Examiner

ESS:m

P.S. If you have any questions concerning the above please contact Mr. Richard Libby, Electrical Inspector for the City of Portland.

Cable

8-22-77

CRYTC

Sheet E-11

Electrical Riser Diagrams

On feeders #3-4-13-16-18-19-23 to transformers, there must be a main over-current device on the secondary side of the transformer to conform with N.E.C. Art. #240-15 — Overcurrent protection. This article states that "Overcurrent devices shall be located at the point where the conductor receives its supply." In this case the supply is the transformer and in no way can any of the exceptions apply.

Rick

CITY OF PORTLAND, MAINE
FIRE DEPARTMENT

JOSEPH R. CREMO
CHIEF

FIRE PREVENTION BUREAU
380 CONGRESS STREET
PORTLAND, MAINE

September 18, 1974

Re: Allen Avenue Vocational School

The permit to proceed with the construction of the proposed Vocational Training School on Allen Avenue is approved by this office with the understanding that the stipulations in Captain Herbert P. Miller's letter to Mr. Wilbur Ingalls dated July 23, 1974 be included. A copy of that letter is attached for your convenience.

Vincent L. Marcisso
Vincent L. Marcisso
Lieutenant - Fire Prevention Bureau

Enclosure

RECEIVED
SEP 19 1974
DEPT. OF BLDG. INSP.
CITY OF PORTLAND

23 July 1974

Mr. Wilbur Ingalls
45 Exchange Street
Portland, Maine

Re: Proposed Vocational Training School - Allen Avenue.

Dear Sir:

A review of the plans of the proposed Vocational Training School finds the following requirements missing on the plans:

1. 2" conduit pipe feeding from the power pole, 25-E, to the boiler room. This is for the alarm cables to be run in to the building.

2. Two master alarm boxes are needed instead of one. One in each building.

3. Separate alarm systems are needed for each building, to be tied into separate master boxes. These systems are to have zoned indicator panels.

4. An automatic alarm system covering the entire basement, cellar, sub cellar if any, all hallways, corriders, class rooms and hazardous areas with heat and or smoke detectors tied in with the manual pull stations and sprinkler system will be required.

Respectfully,

Herbert P. Miller, Captain
Fire Prevention Bureau

HPM/t

23 July 1974

Mr. Wilbur Ingalls
45 Exchange Street
Portland, Maine

Re: Proposed Vocational Training School - Allen Avenue.

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Respectfully,

Herbert P. Miller, Captain
Fire Prevention Bureau

HPM/f

CITY OF PORTLAND, MAINE
PLANNING DEPARTMENT
(207) 775-5451

DONALD E. MEGATHLIN, JR.
PLANNING DIRECTOR

July 18, 1974

Mr. Wilbur Ingalls
45 Exchange Street
Portland, Maine

Dear Mr. Ingalls:

Last week the Planning and Public Works Departments received revised final site plan drawings which meets many of the requirements of the Public Works and Planning Departments. Several of the requirements by Public Works - notably those dealing with drainage and roadway construction details and widths - have not been satisfied in the revised site plan drawings nor has all of the required data been submitted. In addition, the following Planning Department requirements have not been met:

1. Provision of two 20 foot roadways and a median strip of 21 feet in width, along the entrance boulevard, with final curb cut design subject to approval by the Director of Public Works. As the enclosed memo shows, however, the Public Works Director is requiring a different curb cut design, which is legally binding and is therefore the one that should be adhered to.

2. Provision of at least 245 parking spaces.

3. Delineation of the location, number, and dimensions of all proposed loading berths.

In view of the fact, however, that many - though not all - of the requirements have been met, and in view of the need to expedite this project, the Planning Board at its meeting of July 9, 1974, approved the final site plan, contingent upon all legal requirements for site plan approval and building permit issuance having been met, as set forth in the City's Site Plan Ordinance, a copy of which is enclosed. In accordance with that ordinance, a building permit can be issued within seven days after receipt of the remaining applicable component plans and accompanying statements - i.e., further plan changes and additional data as stipulated by the Public Works and Planning Departments, pursuant to the City's Site Plan Ordinance. See

attached marked copy of memo for these remaining items to be submitted or complied with. Also, pursuant to the site plan ordinance, it will be necessary for four copies of any additional drawings and statements to be submitted to the Building and Inspection Services Department as part of the final City review process that's required and which is now underway.

Sincerely,

Gerald A. Holtenhoff
Assistant Planning Director

GAH/jk
Enclosures

cc: Harry E. Cummings, Chairman, Planning Board
Donald E. Megathlin, Jr., Planning Director
R. Lovell Brown, Director of Building & Inspection Services
John Chesebro, Public Works
John Murphy, Public Works
Richard Barman, Morrison and Cary