



H. E. MARQUELING, MANAGER

**INSURANCE SERVICES OFFICE
OF OREGON**

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REC 1-7-77

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CITY OF TILLAMOOK



January 5, 1977

Mr. Richard C. Townsend
City Manager
City Hall
Tillamook OR 97141

Dear Mr. Townsend:

As requested during your phone conversation with Mr. Marqueling and also in your December 27th letter, we are enclosing a summary of grading points and improvement recommendations.

After you have had a chance to study the enclosures, we will be glad to arrange for a meeting.

Very truly yours,

INSURANCE SERVICES OFFICE

D. F. Wagner

D. F. Wagner, Supervisor
Public Protection Department

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enclosures - as noted

INSURANCE SERVICES OFFICE

OREGON
STATE OFFICE

SUMMARY OF GRADING

GRADING SCHEDULE FOR MUNICIPAL FIRE PROTECTION
(1974 Edition)

Date Graded: October 1976 City or District: City of Tillamook
 Total Deficiency: 2,250 Points. Graded by: A. Nisbet Engineering Representative
 Protection Class 5

WATER SUPPLY

<u>Item</u>	<u>Assigned Points</u>
1. Adequacy of Supply Works	0
2. Reliability of Source Supply	15
3. Reliability of Pumping Capacity	0
4. Reliability of Power Supply	0
5. Condition, Arrangement, Operation, and Reliability of System Components	10
6. Adequacy of Mains	1.39
7. Reliability of Mains	18
8. Installation of Mains	13
9. Arrangement of Distribution System	6.7
10. Additional Factors and Conditions Relating to Supply and Distribution	20
11. Distribution of Hydrants	119
12. Hydrants - Size, Type and Installation	12
13. Hydrants - Inspection and Condition	5
14. Miscellaneous Factors and Conditions	15
Total	433

FIRE DEPARTMENT

1. Pumpers	23 + 7
2. Ladder Trucks	117
3. Distribution of Companies and Type of Apparatus	45
4. Pumper Capacity	17 + 50
5. Design, Maintenance, and Condition of Apparatus	29
6. Number of Officers	13
7. Department Manning	208
8. Engine and Ladder Company Unit Manning	118
9. Master and Special Stream Devices	14
10. Equipment for Pumpers and Ladder Trucks	16
11. Hose	1
12. Condition of Hose	0

<u>Item</u>	<u>Assigned Points</u>
13. Training	218
14. Response to Alarms	27
15. Fire Operation	191
16. Special Protection	0
17. Miscellaneous Factors and Conditions	36
Total	1103

FIRE SERVICE COMMUNICATIONS

1. Communication Center	20
2. Communication Center Equipment and Current Supply	91
3. Boxes	60
4. Alarm Circuits and Alarm Facilities Including Current Supply at Fire Stations	5
5. Material, Construction, Condition, and Protection of Circuits	7
6. Radio	4
7. Fire Department Telephone Service	6
8. Fire Alarm Operators	7
9. Conditions Adversely Affecting Use and Operation of Communication Facilities and the Handling of Alarms	8
10. Credit for Boxes Installed in Residential Districts	(-) 0
Total	208

FIRE SAFETY CONTROL

1. Flammable or Compressed Gases	19
2. Flammable or Combustible Liquids	86
3. Special Hazards	75
4. Miscellaneous Hazards	86
5. Supplemental Fire Prevention Activities	32
6. Building Laws	28
7. Electricity	20
8. Heating and Ventilating Installations	41
Total	387

ADDITIONAL DEFICIENCIES

1. Adverse Climatic Conditions	21
2. Other Adverse Conditions or Occurrences	30
3. Divergence Between Water Supply and Fire Department	68
Total	119

SUMMARY OF DEFICIENCY POINTS

WATER SUPPLY	433
FIRE DEPARTMENT	1103
FIRE SERVICE COMMUNICATIONS	208
FIRE SAFETY CONTROL	387
ADDITIONAL DEFICIENCIES	119
Total Deficiency	2250

RECOMMENDATIONS

The attached recommendations are offered to assist officials in planning improvements in the fire protection facilities. Since you have the final decision on any improvement program, we have listed several suggestions. We have not included every item for which a deficiency is charged but have attempted to cover the heaviest deficiency items.

We would like to emphasize that even a partial improvement in any of the items could provide a beneficial effect in the grading. It is possible to achieve a better protection class by partial improvement in many items or major improvement in a few important items.

If after reviewing these recommendations officials believe they can accomplish selected improvements, we can estimate the effect those improvements would have on the grading.

If work on these improvements is not started within one year, we reserve the right to review this information for conformity with standards in use at that time. These recommendations are made for fire insurance rating or grading considerations only and no representations or warranties of any kind are made or intended.

Public Protection Department
INSURANCE SERVICES OFFICE of Oregon

Material referenced in the recommendations may
be obtained from the following sources:

American Insurance Association

85 John Street
New York NY 10038

American Water Works Association

Publications Sales
6666 West Quincy Avenue
Denver CO 80235

Insurance Services Office

Municipal Survey Service
160 Water Street
New York NY 10038

National Fire Protection Association

Publications Service
470 Atlantic Avenue
Boston MA 02210

Tillamook Recommendations
Based on 1976 Grading

WATER SUPPLY:

1. That, in addition to the present records and plans, the following be added as part of the records system. All plans and vital records should be kept up to date, in duplicate and safely filed to avoid a total loss in event of a catastrophe.

MAINS: size, location, depth of bury, type of construction, date installed and fittings, leaks, breaks and important repairs. SUPPLY WORKS: plans and details of each feature. GATE VALVE BOOK: detail of size, tied-in location, construction, inspection and condition including valves closed and direction of rotation. CONSUMPTION: production (master meters, etc.), sales and losses, number of services-metered and otherwise. HYDRANTS: size, type, construction, branch details, inspection and condition.

The American Water Works Association's Manual 8, A Training Course In Water Distribution, is a good guide to use for a records system.

2. That arterial, lateral and gridiron mains be laid in proper locations and of adequate size to concentrate in any section of the City the fire flow recommended for that area. (See the fire flow test sheet for further details.)

That distribution mains which supply hydrants be 6-inch or larger, fully circulating and cross-connected at frequent intervals.

3. That additional hydrants be installed in those areas not properly protected as follows: (a) in high value districts, one hydrant for each 106,000 square feet; (b) in residential districts, one hydrant for each 160,000 square feet.

FIRE DEPARTMENT:

1. That 4 engine companies be provided with a total pumping capacity of 4,000 gpm. In addition, sufficient reserve capacity is recommended to maintain this total in the event the department's largest pumper is out of service.
2. That a ladder truck be provided, properly equipped and manned.
3. That a new modern fire station be built with adequate room for all apparatus, sleeping quarters, kitchen facilities, hose drier, tower and meeting room.

4. That additional manpower be provided.
5. That training facilities be provided. These should include training grounds, tower, smoke building, burn pits and other equipment.
6. That a regular drillmaster be appointed and a program started to include a minimum of two hours per day per man, multi-company drills, large fire training and extensive pre-planning for all large structures.

FIRE SERVICE COMMUNICATIONS:

1. That a new communications center and dispatch center be provided. The National Fire Protection Association's Pamphlet 73, Public Fire Service Communications, should be used as a guide in the construction and equipping of such a facility.

FIRE SAFETY CONTROL:

1. That the fire prevention program be continued with inspections of severe life hazard occupancy properties be made 4 times a year. Other commercial properties should be inspected at least 2 times each year.

January 1977

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