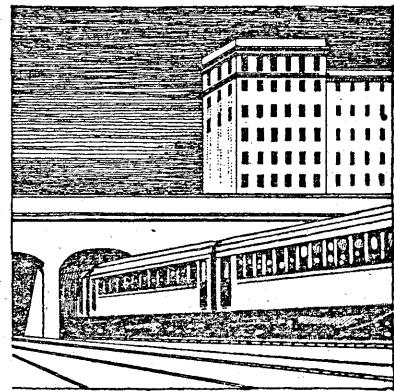
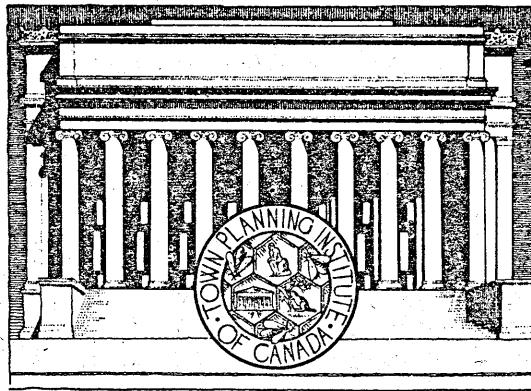


# TOWN PLANNING



## THE JOURNAL OF THE TOWN PLANNING INSTITUTE OF CANADA

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*Town planning may be defined as the scientific and orderly disposition of land and buildings in use and development with a view to obviating congestion and securing economic and social efficiency, health and well-being in urban and rural communities*

### NEWS AND NOTES

#### Signs of Progress in Canadian Town Planning

The most significant signs of progress in Canadian town planning to be reported this month are in British Columbia, where a Provincial Act has been passed; Ottawa, where a Zoning By-law has been submitted to the City Council, and Montreal, where a town planning "drive" is in progress which promises to convince the City Council of Montreal that something new has been born in the science of civic administration which is occupying the attention of the whole civilized world. The next issue of *Town Planning* will be largely devoted to the Montreal movement.

The passing of the British Columbia Act leaves Quebec as the only province in Canada without a Town Planning Act.

If Quebec could see its way to create a Provincial Regional Planning and Housing Commission on the lines of the New York State Commission of Housing and Regional Planning, to plan the whole province in the relation of one city to another and their intervening spaces, where local municipalities are either incapable of planning, or lack the necessary means,

Quebec might yet take the lead in Canadian planning. Some of the Canadian Provincial Town Planning Acts are dead letters, first, because they are mere recommendations to municipalities and, second, because they have no technical qualified staff to do the necessary educational and executive work involved. It was supposed to be a good step to get town planning acts of any sort on the provincial statute books, but the time is coming when we shall see, if not by our own experience, then by the experience of other countries, that a merely permissive act, without the compulsion of law and the driving machinery of a trained and enthusiastic technical staff, small advance is made by a Provincial act. Indeed it may do more harm than good if its deadness suggests that the whole thing is impractical. Already people are pointing to dead-letter Canadian acts with the cynical comment "What's the good of it?" It is, of course, little good as a permissive act without an educational organization to inform municipalities of its advantages and a technical staff, which believes in it, to do some illustrative work. Otherwise, the only chance of movement under a permissive act is a convinced public

demanding action. This has been attained in the United States. The Federal and State Governments are supplying and creating an army of trained town planners and the movement is advancing at the rate of about 100 cities a year under planning law.

The Canadian public is probably in advance of its officials in town planning thought, but it is not yet sufficiently strong to demand national action. Town planners are convinced that the reason for this is that there has been no real attempt to build up the necessary educational and technical staffs to do the pioneer work.

The other way of advance—the European—is by way of obligatory law, and it is the quicker. There is always some kicking at first on the part of individuals who want to do what they like with the face of the earth and the complexion of cities, regardless of the convenience of their neighbours and the general welfare. But this soon dies down, in the presence of a general good, and especially when the kickers themselves come to realize that they too are protected from the depredations of thoughtless and selfish neighbours.

#### Ottawa Zoning By-law

The Ottawa Town Planning Commission has submitted a Zoning By-law for the consideration of the City Council. Some time ago the City Council instructed the Commission to prepare a zoning by-law for that section of the city within the boundaries of Rideau Canal, Rideau River, Rideau Street and the western limit of the city at Bronson Avenue near Dow's Lake. The idea was that if the zoning of this section proved satisfactory, the by-law could then be applied to the whole city. If the by-law is passed the Ontario Railway and Municipal Board will then hold such public hearings as it may deem necessary to give interested parties opportunities to express their views before the Board sanctions the by-law with or without revisions. The City Council has arranged for a special meeting to consider the by-law.

The Council has deemed it wise to proceed with much caution in this matter, both with regard to expenditure and legislation. Since the movement was initiated, however, great strides have been taken in other countries in zoning activities. Great Britain and the United States have each about 400 towns and cities operating under zoning ordinances. France has 300. In Germany, zoning has become an ordinary part of civic administration and many other countries hitherto not considered in the first rank of civilization, have adopted this new method of arranging the civic organism for the better convenience, efficiency and economy of all parties concerned.

In Canada, not more than a half a dozen towns have yet begun seriously to consider the subject. It would seem fit, therefore, that the Capital City should take a lead in an important civic reform which may be considered to have passed the experimental stage. The object of the by-law is to establish desirable uses of

civic areas in definite districts with a view to promote greater healthfulness, efficiency, amenity, and to stabilize and preserve property values so often injured and depreciated by incongruous building. Accumulated applications to City Councils on the part of property holders to save them from the intrusion of undesirable building has led to the adoption of the zoning system nearly all over the world. It has been recognized as a solution of constantly arising difficulties, as a way out of much wastefulness of civic and private resources, and an excellent means of creating order and beauty which make the attractive city, and as a super-health act which prevents and reduces enormously the needless provocation of ill health and disease.

#### Hexagonal Planning

The theory of Hexagonal Planning, with Traffic Interceptor, has attracted lively interest in many parts of the United States, where city planning generally is in a much more advanced stage than in Canada. In an article entitled "A Substitute for the Gridiron," in *Housing Betterment*, Mr. Lawrence Veiller describes hexagonal planning as "a scheme fraught with great possibilities for the benefit of new communities," and introductory of "a radical, constructive and revolutionary change in both the art and science of city planning."

Mr. Noulan Cauchon was invited to address a joint meeting of the American City Planning Institute and the City Planning Division of the American Society of Civil Engineers in New York on January 22nd. The text of his address will be found on another page.

#### Vancouver Branch—Annual Meeting

The annual meeting of the Vancouver Branch of the Institute was held on December 10 at the University Club, Vancouver, preceded by a dinner. The following members were present: Mr. G. T. L. Sharp, in the chair, Messrs. J. W. Allan, W. E. Bland, G. S. Boulton, F. E. Buck, J. Davison, J. Elliot, H. McN. Fraser, W. B. Greig, T. Killin, E. W. C. Lamarque, R. McL. Martin, H. L. McPherson, W. H. Powell, N. F. Pullen, A. G. Smith, W. G. Swan, F. C. Underhill, J. A. Walker, A. S. Wooton, and Reeve J. A. Paton.

The Chairman gave a resume of the activities of the Branch during the past year, chief of which were the presentation of a memorial to the Vancouver City Council suggesting that a Vancouver Town Planning Commission be formed and the circularizing of the Councils of all the Municipalities of British Columbia and the members of the Provincial Legislature. The Planning Commission of Vancouver has been formed and is functioning and a Town Planning Bill has been passed into law. The Chairman also requested the members to take advantage of opportunity to become full members of the Institute by preparing these as soon as possible.

The Secretary reported an increase of adherents since the last annual meeting from 30 to 43 including

(Continued on page 24)

# BRITISH COLUMBIA TOWN PLANNING ACT

## As Passed December 18, 1925

### AN ACT RESPECTING TOWN PLANNING

#### Preamble

WHEREAS it has been realized that large municipal expenditures have become necessary owing to the fortuitous development of urban centres, and that it is advisable to make provision whereby the natural growth of cities and towns may be planned in a systematic and orderly way, so that adequate means of communication for an increasing population may be provided and congestion avoided, and that economies may be effected in the industrial and business activities of communities, and so that the serviceableness of business and property and the amenity of residential districts may be preserved and adequate areas may be provided for protecting the health of and providing recreation for the public:

Therefore, His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of British Columbia, enacts as follows:—

#### Short Title

1. This Act may be cited as the "Town Planning Act."

#### Interpretation

2. (1) In this Act, unless the context otherwise requires:—

"Assessed owner" means the person assessed as owner upon the last revised assessment roll of the municipality:

#### "Commission"

"Commission" or "Planning Commission" means the Town Planning Commission created by a municipality pursuant to this Act:

#### "Council"

"Council" means the Council of the municipality to which the context applies or the Board of Commissioners of any village municipality:

#### "Zoning by-law"

"Zoning by-law" means a by-law passed under the provisions of section 9, and includes all amendments of such by-law.

(2) The provisions of this Act shall apply to all municipalities, and shall also, mutatis mutandis, apply to village municipalities incorporated under the "Village Municipalities Act."

#### Town Planning and Official Town Plan

#### Power of Council

3. The Council shall have power:—

(a) To prepare, for the purpose of an official town plan, a comprehensive plan or set of plans for the future physical development and improvement of the municipality in a systematic and orderly manner, based prim-

arily upon public utility, convenience, and general welfare:

- (b) From time to time, as development progresses or changed conditions demand, to make additions and extensions to and alterations in the official town plan;
- (c) To prepare specific plans for public improvements consistent with the official town plan;
- (d) To prepare plans for the development of harbour and railway and rapid-transit and street-railway facilities, with a view to the correlation of such development with the official town plan, and to recommend plans so prepared to any Railway Board or public authority having jurisdiction in the matter, and to any railway or other company concerned therewith, and to use all lawful measures to secure the adoption of such plans and the due co-ordination of terminal, transportation, and other facilities of commerce and traffic within and about the municipality;
- (e) To prepare and designate the boundaries of the districts which the Council is hereinafter authorized to create, defining the use of the lands in such districts, the character of the buildings to be erected therein, the height of such buildings, and the density and space about them, and appropriate regulations to be enforced therein;
- (f) To consider any matters dealing with the physical development of the municipality which it may deem expedient.

#### Approval of Town Plan

4. Upon completion of any plan or set of plans prepared for the purpose of the official town plan, accompanied with such explanatory memoranda and specifications or books of reference as may serve to elucidate and clearly define the scope and objects of this plan or set of plans, which accompanying documents shall be read with and form a part of the plan or set of plans, the Council shall take same into consideration, and when found satisfactory shall approve the plan by resolution.

#### Plan to Bear Seal

5. Upon such approval the original and duplicate plans shall be impressed with the seal of the municipality and dated and signed by the Municipal Clerk, and the same shall then constitute and be known as the official town plan. The procedure set out in this and the last preceding section shall apply to any further plan prepared for the purpose of the official town plan and to any amendment of the official town plan, and all the plans so approved

from time to time, together with all amendments made thereto and approved, shall be read together, and constitute, and be known as the official town plan.

#### Town Plan Shall be Followed

6. The approval by the Council of any plan for the purpose of the official town plan shall not commit the Council to undertake any of the projects therein suggested or outlined, but the effect of the approval shall be to prevent the undertaking by the Council of any public improvements within the scope of the plan in any manner inconsistent or at variance with such plan, unless the variation from such plan is approved by a vote of two-thirds of the members of the Council, and unless the Council, in the event of a Town Planning Commission having been created pursuant to the provisions of this Act, first submits the plans to such Commission for its consideration and report.

#### "Public Improvements" Defined

7. The phrase "public improvements" as used in the last preceding section shall mean the opening, widening, enlarging, closing, or diverting of streets, lanes, or squares; the acquisition of parks, parkways, playgrounds, and school-sites; and any other improvements or works of a public nature which may for this purpose be specified or described as "public improvements" in a by-law of the Council.

#### Acquiring Additional Lands

8. (1) Where a project shown upon an official town plan has been or is about to be undertaken, the Council may, in addition to any lands the acquisition of which is essential to the carrying-out of the project, acquire other adjacent or neighbouring lands. Such additional lands may include:—

- (a) The remnants of parcels, portions of which are essential to carrying out the project:
- (b) Any lands which may be injuriously affected by the project:
- (c) Any lands which, if allowed to be built upon without restriction, might become the site of buildings or structures which would prejudicially affect the full enjoyment of any building forming part of the project or the architectural effect thereof:
- (d) Any lands which the Council is of the opinion could be conveniently and profitably resubdivided or rearranged and developed as part of the project.

(2) The Council shall have the same right to purchase or expropriate the additional lands as it has to purchase or expropriate the lands immediately necessary for the carrying out of the project under any general or special Act.

(3) The municipality may subdivide, rearrange and deal with the said lands as if it were a private owner, and may, by resolution or by-law, without submission to the ratepayers, dispose of the same on such terms and subject to such building and other restrictions or easements as the Council deems advisable.

(4) In lieu of acquiring title to any such lands, the Council may by agreement with the owners or by expropriation acquire the right to cause to be imposed upon the lands or to be created such building restrictions or easements as might have been imposed or created if the municipality had acquired the title.

(5) Any expenses incurred in acquiring additional lands or in imposing or creating building restrictions or easements shall be met as part of the project, and the proceeds of any sale or other disposition of the lands so acquired shall be applied, in so far as they are required, in reduction of the cost of carrying out the project.

#### Zoning

9. (1) The Council of every municipality may by by-law make regulations and divide the municipality into districts of such number, shape, and area as the Council considers best suited for any of the following purposes:—

- (a) For designating certain districts within which it shall be lawful and certain other districts within which it shall be unlawful to erect, construct, alter, reconstruct, repair or maintain certain buildings, or to carry certain business, trades or callings:
- (b) For designating certain districts within which the height and bulk of buildings thereafter erected, constructed, altered, reconstructed, or repaired, shall be limited, and for prescribing the limitations:
- (c) For prescribing building lines and the area of yards, courts and other open spaces to be maintained in any district:
- (d) For regulating, restricting and prohibiting in any district, the location of all or any classes of industries, businesses, trades or callings, the location of apartment or tenement houses, terraces, club houses, group residences, two-family dwellings, single-family dwellings, the location of the several classes of public and semi-public buildings, and the location of buildings or property designed for specified uses:
- (e) For prescribing as to any district the class of use of buildings or land that shall be excluded or subjected to special regulations, and designating the uses for which buildings may not be erected, constructed, altered, reconstructed, or repaired, or land used, or designating the class use of which only shall be permitted.

2. The regulations in one or more districts may differ from those in other districts, but the regulations as to the height and bulk of buildings and the area of yards, courts, and other open spaces shall be uniform in respect of each class of buildings throughout each district.

(3) In determining the regulations to be made under this section, the Council shall have due regard to the following considerations:

- (a) The promotion of public health, safety, convenience, and welfare;
- (b) The prevention of the overcrowding of land and the preservation of the amenity of residential districts;
- (c) The securing of adequate provisions for light, air, and reasonable access;
- (d) The value of the land and the nature of its use and occupancy;
- (e) The character of each district, the character of the buildings already erected, and the peculiar suitability of the district for particular uses;
- (f) The conservation of property values and the direction of building development.

10. Before passing a zoning by-law under section 9 the Council shall, if a Town Planning Commission has been constituted under the provisions of this Act, request such Planning Commission to recommend the boundaries of the districts and appropriate regulations and restrictions to be enforced therein, and the Commission shall proceed upon the principles laid down in that section for the guidance of the Council and shall make a report thereon. The Council shall not determine the boundaries of any district nor impose any regulations until after all persons who might be affected by the proposed by-law shall be afforded an opportunity to be heard on the matters covered therein before the Council at a time and place to be specified in a notice of hearing to be published by insertion in not less than two consecutive issues of a newspaper published or circulating in the municipality, so that the last of such insertions shall appear not less than three days nor more than ten days before the date fixed for the hearing.

11 (1) Any person desiring to secure the amendment or repeal of a zoning by-law shall make application therefor to the Council, and the Council shall, if a Town Planning Commission has been constituted under the provisions of this Act, refer such application to the Commission for consideration and report. Before approving any amendment or appeal the Council shall give notice thereof by publishing a notice of hearing in like manner as provided in section 10. Such notice shall state the time and place at which the Council shall meet to consider the proposed amendment or repeal.

(2) At the time and place thus appointed the Council shall meet, and all persons whose property would be affected by such amendment or repeal may appear in person or by attorney or by petition, and after hearing such persons the Council may confirm, amend, or repeal the zoning by-law in whole or in part.

(3) If a protest against the proposed amendment or repeal is presented in writing to the Municipal Clerk not less than two days prior to the hearing, duly signed by the assessed owners of at least twenty per cent. of the street frontage affected by the proposed amendment or repeal or by the assessed owners of at least twenty per cent. of the street frontage directly opposite the frontage so affected,

such amendment or repeal shall not be passed except by an affirmative vote of not less than three-fifths of the members of the Council.

12. Where the provisions of any zoning by-law impose requirements for a lower height of buildings, or a less percentage of a lot that may be occupied, or require larger or wider courts or deeper yards than are imposed or required by existing provision of statute or by-law, the provision of the zoning by-law shall govern; but where the provisions of the building code or other by-law or regulation of any municipality impose requirements for a lower height of buildings, or a less percentage of lot that may be occupied, or require wider or larger courts or deeper yards than are required by the zoning by-law, the provisions for such building code or other by-law shall govern.

13. (1) The provision of a zoning by-law shall not apply to any building lawfully under construction at the time of the passing of such by-law.

(2) The lawful use of premises existing at the time of the passing of a zoning by-law under the provisions of this Act, although such use does not conform to the provisions of the by-law, may be continued; but if such non-confirming use is discontinued, any future use of those premises shall be in conformity with the provisions of the zoning by-law.

(3) The lawful use of a building existing at the time of the passing of a zoning by-law under the provisions of this Act, although such use does not conform to the provisions of the zoning by-law, may be extended throughout the building, but no structural alterations, except those required by Statute or by-law, shall be made therein.

(4) Where no structural alterations are made in a building of a non-conforming use, such use may be changed to a use of a similar or higher classification, according to the provisions of the zoning by-law.

(5) A change of tenants or occupants of any premises or building shall not be deemed to affect the use of the premises or building within the meaning of this section.

14. Property shall not be deemed to be taken or injuriously affected by the passing of a zoning by-law under the provisions of section 9.

15. Prior to the passage of a zoning by-law the Council may for a period not exceeding two months withhold, or authorize its proper officer to withhold, a building permit for any building when the Council is of opinion that the construction of the building in question might interfere with the work of zoning, or the Council may impose such conditions on the granting of the building permit as may appear to the Council to be in the public interest: Provided, however, that if a zoning by-law applicable to the district in which the building permit is applied for shall not be passed within the period of two months aforesaid, the owner shall be entitled to compensation from damages arising from the withholding of such permit, in which event the provisions herein applicable to compensation for lands taken or injuriously affected shall apply.

16. (1) Appeal shall lie in the following cases:—

- (a) By any person who is dissatisfied with the decision of any official charged with the enforcement of a zoning by-law;
- (b) By any person desiring to obtain the benefit of any exception contained in a zoning by-law;
- (c) By any person claiming that owing to special conditions the literal enforcement of a zoning by-law would result in unnecessary hardship;
- (d) In any other cases where provision for appeal is made by a zoning by-law.

(2) Such appeals shall be heard and decided by a Board of three, one to be appointed by the Council concerned, one to be appointed by the Lieutenant-Governor in Council, and the third shall be appointed by the other appointees and shall act as chairman.

(3) In considering appeals the Board shall adhere to the spirit of the by-law, but make such relaxations as special cases call for and endeavor to see that substantial justice is done and that the interests of any individual are not unduly or unnecessarily sacrificed for the benefit of the community.

(4) Every zoning by-law shall provide for procedure in appeals to the Board.

(5) The decision in writing of all or of two members of the Board shall constitute the decision of the Board. No appeal shall be from the decision of the Board.

#### Town Planning Commissions

17. The Council of any municipality may by by-law create a Commission, to be known as ("Vancouver" or "Victoria," as the case may be) Town Planning Commission, to assist the Council in an advisory capacity in carrying out such of the powers and provisions of this Act as the by-law shall prescribe, and such by-law shall prescribe the procedure for dealing with such matters.

18. The Commission created by by-law shall be constituted as follows: In the City of Vancouver, of five ex-officio and nine appointed members; in the City of Victoria, of three ex-officio and nine appointed members; in other municipalities having a population by the last Dominion census of over five thousand, of three ex-officio and six appointed members; and in all other municipalities, of three ex-officio and three appointed members. The ex-officio members shall be the Mayor or Reeve, the Chairman of the board or committee charged with the administration of municipal parks, and the Chairman of the Board of School Trustees, if resident in municipality, or in case of a consolidated school district, a member of such Board residing within the municipality, nominated by such Board, and in the City of Vancouver shall also include the Chairman of the board charged with the administration of the "Vancouver and Districts Joint Sewerage and Drainage Act" and the Chairman of Vancouver Harbour Commissioners. The appointed members shall be appointed by the Council, and of those to be first appointed one-third shall be appointed for three years, one third for two

years and one-third for one year, and in each succeeding year the vacancies of those whose term of office expires shall be filled for a term of three years. All appointments to fill casual vacancies shall be for the unexpired term. All appointed members shall hold office until their successors are appointed. No person shall be appointed who holds any municipal office.

19. (1) No member of the Planning Commission shall receive any compensation for his services other than allowances for actual expenses necessarily incurred in the discharge of his official duties.

(2) The Council may include in its annual estimates of expenditure such sum of money as it considers necessary to cover expenses of the Planning Commission.

20. The Planning Commission shall be presided over by a Chairman to be chosen by itself annually from among the appointed members; and the Commission may adopt rules for its procedure, including the fixing of a quorum, and may from time to time vary such rules by the vote of a majority of the members of the Commission. The Commission shall cause proper records to be kept of its proceedings and may appoint a Secretary, and the expenditures of the Commission for all purposes shall be kept within the sum appropriated by the Council for the expense of the Commission.

21. Where a municipality in which a Planning Commission has been instituted has contiguous to its borders one or more municipalities also having a Planning Commission, it shall be competent for such Commissions to hold joint sessions for the consideration of any problems which may effect them jointly. Any conclusion reached at any such joint session shall receive the careful consideration of each Commission affected, but the liberty of action of each Commission and its individual responsibility shall not be restricted by the decision of the joint body, save to the extent that in making a report or recommendation to the Council upon any subject dealt with at the joint session a Planning Commission shall also report the recommendation of the joint session, and if its own report differs therefrom shall indicate the reasons therefor.

22. The powers conferred upon municipalities by this Act shall be in addition to all other powers conferred under any other general or special Act, and where the provisions of this Act conflict with the provisions of any general or special Act the provisions of this Act shall prevail.

#### Zoned Cities in U.S.A.—434

The United States Department of Commerce reports that since the issue of the January, 1925, list of zoned cities, then totalling 325, a further 109 cities in the United States have placed themselves under zoning law. A movement that will induce 109 cities, in the course of one year, to adopt an entirely new system of controlling the use of private land for building purposes must have some vitality and persuasive power.

# THE BRITISH COLUMBIA TOWN PLANNING ACT

By A. G. SMITH\*

## Review

In all human enterprises experience has shown the great advantage to be gained by calling a halt at a well chosen period in the practical execution of the project for the purpose of taking stock and ascertaining the position of affairs. It is then and by such means that men are able to form an opinion upon whether the rate of progress is disappointing or as is unfortunately often the case, whether the enterprise is on the high road to failure. This stock taking is absolutely necessary whatever the immediate showing may be, for if it is favourable it will act as a spur to continuing the policy which has been followed and if it is neutral or unfavourable the brains of the management will be put upon inquiry as to what lies at the bottom of the lack of success and they will be stimulated to effect such changes as may seem to afford hopes of a remedy.

You have been engaged now for several years in a public spirited enterprise which reached fruition during the last session of the Legislature when the "Town Planning Act" was passed. This Act was based upon a Bill which you had prepared and which you had hoped would be adopted, if not in absolute detail at any rate in principle, and your hopes were, I believe, justified for the reason that those of you who were professional men were from your several professions and from the experience gained in their practice well qualified to form an opinion upon the evils to be removed and the fitness of the remedy and those of you whose walks in life lay outside the professional orbit were members of this Association because you had gained experience in the matters within the scope of this organization. This alone would not be sufficient, as your judgment might possibly under certain circumstances be biased by your personal advantage; but a fair study of the subject will show beyond possibility of cavil that there was nothing in the constitution of this Association or in your relation to its objects or in the draft Bill which you prepared and recommended which could bring any material advantage to an individual member of this Association which would not be shared by every member of the community and your labours and the Bill which resulted can only be regarded as an offering of unselfish public service.

The Bill which resulted from these labours having now received the consideration of the Legislature the present would appear to be an opportune time for taking stock of your enterprise and for drawing up a Profit and Loss statement and striking a fair balance sheet and there are only two items which will enter into that balance sheet.

- (1) The state or public opinion upon the subject of Town Planning.
- (2) The "Town Planning Act."

\*Address to the Vancouver Branch of the Town Planning Institute, January 28, 1926.

On the first item I will only make passing comment as it is to the consideration of the second item that attention is proposed to be given on this occasion. It will be sufficient therefore to say that a large field is still open to you which will have to be diligently cultivated before we can say that the public or any considerable section of the public is reasonably cognizant of the many problems involved and of the progress which has been made in the last decade by professional Town Planners towards finding appropriate solutions for them separately or in the aggregate.

## The Act as Passed

Turning now to the subject of this evening's discussion we have to consider the "Town Planning Act" which has become Chapter 55 of the Statutes of B.C. 1925, and I propose to take it up in detail though perhaps not in the exact order of the Sections and to particularly ask your consideration of the question as to what contribution this Act makes to existing Municipal machinery for the solution of Town Planning Problems and as to the value of this contribution.

The preamble of the Act is adopted verbatim from what I will call our Bill and it admits that in the past the growth of urban centres has not been adequately directed and promises to make better provision for the future. It therefore becomes necessary to contrast the past without the Act with the promised future with the Act and this will lead to submitting the Act to the test of an examination to ascertain the alterations and additions made thereby to Municipal machinery.

All the matters dealt with in the Act come under three headings.

1st. Town Planning and Official Town Plan.

2nd. Zoning.

3rd. Town Planning Commissions.

These will be taken up seriatim and submitted to the test which is above proposed.

## TOWN PLANNING AND OFFICIAL TOWN PLAN

### Sections 3 - 8.

Under this heading the Council is authorized to

- (a) Prepare an Official Town Plan for the development of the City in a systematic and orderly way;
- (b) To amend the plan;
- (c) To prepare plans for Harbour, Railway and transportation facilities and to further such plans before the proper authority or corporation;
- (d) To consider matters dealing with the physical development of the city;
- (e) Specific plans of improvements;
- (f) Boundaries of Zoning Districts and regulations.

The Council after the preparation of plans is authorized to consider them (which seems rather a Husteron Proteron or placing the cart before the horse) and to approve the plans by resolution with the effect which will be mentioned shortly.

Submitting these provisions to our proposed acid test we have up to this stage in the form of increased power to the city the gracious permission of the Legislature to the city and its officials to use common business forethought and lay out a programme not merely for the moment but with a reasonable eye upon the future. Is this any new power which needs an Act of the Legislature to confer? Have past Councils been ready, willing and competent to lay out such a programme and is it by reason of a defect in their legal powers that the fortuitous development of urban centres has occurred accompanied by the evils referred to in the preamble? And has the Act made provision as promised in such preamble for removing these evils and planning the growth of the city in a systematic and orderly way?

There are two provisions and nothing more in this part of the Act which can be relied upon to support a claim that the Act has grappled with and disposed of this problem.

They are contained in Section 6 which requires that any departure from an official Town Plan approved by the Council shall be ratified by a 2/3rds vote of the Council and that the Town Planning Commission has been asked for and given its advice, but it is immaterial to the final result whether this advice supports or opposes the departure.

There is one further power given the city contained in Section 8 which gives the city in the execution of projects shown on the plan the power known in the U.S. as "excess condemnation" which is limited to the following:—

- (1) Remnants of parcels taken.
- (2) Lands injuriously affected.
- (3) Lands adjoining which might obstruct view, or an easement thereover.
- (4) Any lands which can be acquired and profitably resubdivided.

I will not enter into a discussion of the merits of the principle of excess condemnation except to state that it is to a certain extent a speculation and experiment in England, on the Continent of Europe and in America and shows that like every other speculation it may be profitable or the reverse. It is sufficient to point out that under Section 172 (26) of the City Charter the power is already possessed by the city but is limited in the occasion of its exercise to certain street improvements and in its scope to remnants, properly injuriously affected and to lands in the block *within which the work lies* which is a little indefinite as the work on a street is between two blocks.

The results therefore of a fair analysis of the provision under the head of Town Planning would appear to be that no extension of the powers of the city on this subject has been conferred and that the sole advantage gained by the community is that the attention of civic authorities has been called to the advisability of preparing a Town Plan of future development and that once a plan has been prepared and adopted a future Council cannot depart from it except by a 2/3rds majority.

## ZONING

Turning now to the provisions under this heading we find the greatest addition to the powers of the corporation which is given very extensive, complete and potentially beneficial. It is a matter of congratulation to your Association that where the Act is most beneficial is where it adheres most closely to your draft Bill. In view of the fact that you must now be fairly conversant with the Zoning suggestions, the provisions of the Act upon this subject will be sketched only in outline, attention being drawn to points in which the Act varies from the Bill.

In the first place Section 9 of the Act gives to the Council the same powers which were contained in the Bill but there is this essential difference. By the Bill the Commission had to settle the districts and the regulations. By the Act the Council prepares the boundaries of the districts (Sec. 3) (c) but then by Section 10 requests the Commission to recommend them. There may possibly be no conflict here but the equipment of the Commission, as will be later referred to, does not promise very effective work on the part of the Commission and Section 10 modified the procedure of the Commission in a manner which does not add to its efficiency. Three proposals of the Bill have been eliminated. The Bill proposed that with expert assistance the Commission should form Districts and draft regulations and should then make a tentative report. This report would be laid before the Districts affected at public meeting fixed by the Council and the Commission would make a final report after which the Council would pass a Zoning by-law. These proposals have been omitted with the result that it is greatly to be feared that any recommendations of the Commission would be largely perfunctory and their value would be greatly diminished by the circumstances which produced them.

The remainder of this portion of the Act follows closely the Bill and deals chiefly with the effect of regulations when made. The matter of amendment to the regulations is not however quite so satisfactory. Under the terms of the Bill Section 31 provided that amendment or repeal had to follow a certain course. This has been eliminated but the course to be followed by a person desiring to secure an amendment or repeal is retained. What the legal effect is upon the power of the Council is doubtful.

The report of the Planning Commission has no more effect than the same report in the case of an amendment to a Town Plan.

The only remaining point under this heading relates with the appeal from a Zoning By-law. This now lies with a Board of three which takes the place of the Central Bureau suggested by the Bill which has been eliminated from the Act.

## TOWN PLANNING COMMISSIONS

We come now to the third and last title of the Act and it is here that the greatest fears are felt for the effectiveness of the Act. This subject has

been approached with the greatest care and with the endeavour to secure freedom from any bias which might be natural to a person who has been concerned in crystallizing an ideal into a workable scheme. Whether such freedom from bias has been attained or not it will be for you to judge but the conclusion which has been reached is that the Town Planning Commission created under the Act with the equipment, powers and limitations with which it is endowed is but a feeble substitute for the Commission designed in the Bill and there is but one ray of hope for the future to which reference will be made after the constitution and powers of the Commission have been considered in the light of the results which the Bill attempted to derive from the Commission it proposed to constitute.

In order to reach a fair conclusion as to the fitness of a machine to function the first step in an inquiry directed to that end is to gather all data as conditions under which the machine would have to operate. If all or any portion of the work has been hitherto performed by another machine it would be logically necessary to examine the work of that machine in order to ascertain what it was in the nature of the work or in the conditions under which the old machine operated which rendered it advisable to design new machinery.

Returning therefore to the text contained in the preamble to the Act we find an admission that the development of cities had been fortuitous and that the public had suffered and the remedy is suggested, and a new machine designed. Two questions then present themselves.

1st. What was the old machine and what the conditions under which it operated ?

2nd. What is the new machine and how is it designed to meet or avoid the conditions ?

1st. The answer to the first question is that the old machine was a City Council constituted practically as at present and it operated under the conditions which at present surround and impose their limitations upon City Government.

At the outset I wish to emphasize the fact that no unfair criticism is to be launched against City Councils or City Officials. There is a great deal of cheap claptrap current in regard to the work of those charged with the administration of city affairs and while the results achieved are not ideal and we have the solemn opinion of the Legislature that they can be improved such improvement cannot be attained by belittling the work and the actions of the City Council or of the individual members thereof. The root of the matter lies far deeper and is to be found in the constitution of the Council, the manner of appointment and tenure of office of civic officials and the duties which these two branches of City Government are expected to perform.

To place the matter in a nut-shell a City Council is expected with the help of a city staff which it finds ready made to cope with a mass of civic business, both legislative and executive, which is sufficient to absorb their whole attention and time and

they are expected to do this in the time which a business man can spare from his personal affairs. The remuneration allowed is sufficient to justify some sacrifice of these affairs or to secure some extra assistance in their performance but not sufficient, in view of the uncertain tenure of office to justify their complete abandonment.

With this volume of work before them is it reasonable to expect that the members of the Council will be able to dispose of it so as to leave them sufficient time to study the future needs of the city ? Is not the most urgent business of an Alderman that which is pressed upon him by the demands of the residents of his district or of the city as a whole ?

The position of a member of the City Council might be less unsatisfactory if there lay before him when he took office a well considered programme of development. But by whom is this to be prepared ? If an alderman is busy with present day needs what is the position of the City Engineer who would have to design future developments of the Financial Adviser of the city who would have to devise ways and means and of the various other officers who should collaborate in preparing a programme or in other words a "Town Plan." These officials are more concerned with the immediate execution of a petty detail not because they are so by choice but because such detail is forced upon them by conditions and they have no time or opportunity nor can they ever be in the frame of mind to give to the future development of the city the concentrated and detached attention which such a subject demands. It is therefore necessary that a new machine should be designed and a reference to the Bill as drafted will show that the above matters were given due consideration and a Commission was constituted which should be charged with the duty of preparing a City Plan. In constituting this Commission it was recognized that certain conditions had to be met. Firstly there had to be continuity and this was provided for in the Bill and the Act retains this feature. Secondly, the Commission should be in touch with public opinion and work in harmony and co-ordinately with the City Council. There were in the Bill special provisions which required that the Commission should keep in touch with the public and the clauses designed to secure co-operation between the Commission and the Council and its officers seemed to fully effect this desideratum. While at the same time they allotted to the Commission a field of action which it was eminently qualified to fill.

This end so far as harmony is concerned has been attained in the Act by severing from the Commission all its powers of disseminating information and of getting in touch with public opinion leaving only to the Commission the bare function of advising the city upon the matters within the scope of the Act, the initiative in which is placed in the city where it always has been without any Act. Unanimity by fascism.

It is convenient at this stage to point out that

the only difference between the two acts, but a fundamental one, is that depriving the Commission of its initiative, for the draft Bill recognized that the final decision rested with the City Council and the electors.

Thirdly: Closely associated with this question of the initiative of the Commission is the parallel subject of the conditions and environment under which the respective Commissions would work. The Bill contemplated that there should be a staff attached to the Commission to assist them with their labours and that they should be entitled to receive advice and information from and the co-operation of Civic officials and departments. It needs but a fleeting glance at these provisions to see what the public through the Commission would gain by the close attention which the Commission would give to the collection of data and the preparation of a Town Plan. I can visualize the educative effect of a study of present conditions and future needs of the City upon a body of public spirited men chosen by the City Council from those who while shunning the publicity of an electoral contest were willing to devote a large portion of their time to public affairs. They would start off on an even basis with a newly elected alderman but while he would be distracted by executive details they would be devoting their attention to the larger and more comprehensive features of the situation and in the course of three or four years would have ready for the City Council studies of various aspects of future development which would be of invaluable assistance to them.

Under the Act all this opportunity for self development and its effect is lost and it seems to be expected that the mere appointment of a man as a member of the Commission will qualify him to render valuable advice to the Council in respect of a Town Plan in the preparation of which he has not been concerned.

If the above criticism is questioned it is but fair to ask a question:—

How would the Commission be qualified to express an opinion upon a Zoning By-law drafted by the City Staff and coming to the Commission as a completed scheme? In order to express an opinion it would be necessary to go over the whole ground already covered by the City Staff and thus duplicate the work, and this begs the question that the City Staff can without direction or consultation and in addition to their present duties prepare an adequate Zoning By-law.

It may be thrown up to us that Town Planning therefore is an expensive luxury if it is necessary that a separate technical staff be employed to carry it out. The answer is that a Town Plan properly prepared will repay many times the cost of preparation in the saving that is made by an adequate survey of present conditions and future requirements.

Having now taken stock of the present position of Town Planning as was proposed at the outset and having found that our brightest hopes are not to be realized at any rate in the immediate present the

question arises as to what our attitude should be and as to where we are to seek the ray of hope to which earlier reference was made.

Section 17 of the Act authorizes the creation of a Commission "to assist the Council in an advisory capacity "in carrying out such of the powers and "provisions of this Act as the by-law shall prescribe, "and such by-law shall prescribe the procedure for "dealing with such matters."

It is announced that a by-law is in course of preparation and it is to the provisions of such by-law that we have to look for the future success or failure of Town Planning under the present Act.

I have a supreme confidence in the ultimate triumph of a great idea and it is well to remember that a by-law can always be amended and improved. It is vain to hope that the first by-law will be perfect but the appointment of a Commission will be one step in the right direction and let the Commission only by the soundness of its advice and the wisdom of its recommendations secure the confidence of the City Council and of the citizens and you will see that the principles embodied in your Bill will gradually by their inherent strength assert themselves and that in a very few years you will find a Commission constituted and functioning as you designed. Your present line of action as in the past should be directed to educate the public on the principles of the Bill and to lend a helping hand to the Commission in its efforts to afford public service.

#### McGill Town Planning Lectures

In connection with the Montreal Town Planning "drive" McGill University, which is taking an active and honorable part in the movement, arranged a series of public town planning lectures. The following constitutes the programme:

"The Growth of Montreal and Town Planning Effort Here in Recent Years," by Dr. W. D. Light-hall, President Civic Improvement League; "The Planning of Some European Capitals," by Professor R. Traquair, Dept. of Architecture; "The City as an Organism," by Dr. C. A. Dawson, Associate Professor of Sociology; "Unplanned Wastages and Planned Economies," by Dr. J. P. Day, Associate Professor of Economics; "Planning for Public Health," by Dr. A. G. Fleming; "Traffic Control by Regulation and Design," by Professor R. deL. French, Dept. of Civic Engineering; "Corrective Methods in Town Planning," by James Ewing, Vice-President Town Planning Institute of Canada; "Zoning," by John M. Kitchen; "The Ethical Aspects of Town Planning," and "Traffic and Terminal Problems," by Noulan Cauchon; "Co-partnership and other Systems of Land Development," by Alfred Buckley, M.A., Editor of *Town Planning*; "A Subdivision Problem on the Island of Montreal," and "The Grand Manner in St. Petersburg and in Chicago," by Percy E. Nobbs, M.A.; "The Modern Citizen and the Town Plan," by Clinton Rogers Woodruff, Chairman, Civil Service Commission, Philadelphia.

# MEMORANDUM AND DIAGRAMS re HEXAGONAL PLANNING TRAFFIC INTERCEPTER AND ORBIT

By NOULAN CAUCHON

President Town Planning Institute of Canada

Joint Meeting of American City Planning Institute and City Planning Division, American Society of Civil Engineers. New York, 22nd January, 1926

(A Further Development of Theme Submitted at International Convention, New York, 20th April, 1925)

## *Our Problem: Congestion*

*Our Aim: Elimination and Obviation of Congestion, the "Key" plague in living conditions and in communications*

## *Causes of Congestion*

Congestion comes of ill proportioned functions and inadequate services, nearly all variables from lack of definite purpose. Congestion comes of the lack of functional, organic Town Planning, defined as "the scientific and orderly disposition of land and buildings in use and development, with a view to obviating congestion and securing economic and social efficiency, health and well-being in urban and rural communities." Congestion comes of inadequacy of living conditions, due to shape and disposition of blocks, to over density of population; of the scheme of streets and arteries being ill proportioned in width, length, direction and capacity.

Congestion comes of lack of comprehensive zoning for "use and development," for meeting occupational requirements of spacing, height and bulk of buildings. Congestion comes of lack of zoning the density of population. An organic plan of streets and arteries should be calculated in dimensions and correlated to the *fluid* ebb and flow of population and traffic within the population-shed.

## *Desiderata*

An organic correlation of use, density and dimensions that will afford a normal interval of *time-distance* between home and work; that will afford health, efficiency and well-being. This implies design to purpose in function and limitation; our problem, if it is to remain all variables, will as such remain insoluble.

We must, therefore, seek to determine self-contained urban units of balanced functional ratios and the most efficient and desirable assembly and interrelation of these.

## *Forces*

The forces of urban development are radial and circular and, seemingly, solution should be sought in approximation of the properties of circles—not in those of squares, the traditional attempt to fit square plugs into round holes.

The principle of Hexagonal Planning, Traffic Interceptor and Orbit is submitted as affording a correlation of traffic that will obviate congestion and adjust environment to its human purpose, survival.

## *Forms*

The circle is the most economic boundary (or street) to any given area, as a unit. Circular areas as units do not however assemble economically—they leave waste interstices. Allowing for flexibility and a measure of compression will, in practice, eliminate the wasteful interstices and develop the hexagon form in nearest approximation of the subdivision virtues of circles, yet free from their structural disabilities as streets. Below ground, sewers, mains, conduits, etc., must be built in straight sections, of operating necessity. Above ground, buildings, rectangular walls, etc., are more economic and advantageous to build in straight sections than curves.

A system of subdivision demands a pattern of units susceptible of continuous and indefinite contiguity without interstitial areas wasteful of local improvements and public services.

## *Three Main Conditions*

To obviate congestion of traffic, and the many evils that come of it, there are three main conditions to be solved:—

1. The distribution of population in its homes, for which hexagonal planning is submitted as being most advantageous.
2. Transportation between home and work, for which the Interceptor affords the optimum time-distance.
3. Routing the process of "work", for which consider a correlated traffic orbit.

## THE HEXAGON

### *The Hexagon*

The hexagon unit block in hexagon pattern seems to best meet the requirements of a basic system and general pattern; viewing the major area of cities as residential hexagons; with ample latitude for specialized differential and rectangular design to purpose of business, commerce and industry.

Advantageous properties of the hexagonal residential block are:—

- A. *Health*, North pointed get universal access of sunshine and afford safety, rest, recreation and amenities for child, adult and community life.
- B. *Traffic*, Safety and acceleration, three-way wide angle of vision, street junction of three-collision points vs. sixteen in rectangular limited visibility crossings; collectively, total of eighteen to sixty-four collision points. Further, the street length around the equivalent rectan-

gular block is 1,420 feet, i.e., an average collision point for every 22.19 feet, whilst the length around the hexagonal block is 1,284 feet, i.e., an average collision point only every 71.33 feet of street length. Besides this there is *ten per cent less street length* in the hexagonal street planning system.

**C. Economy**, fewer and shorter streets, less capitalization.

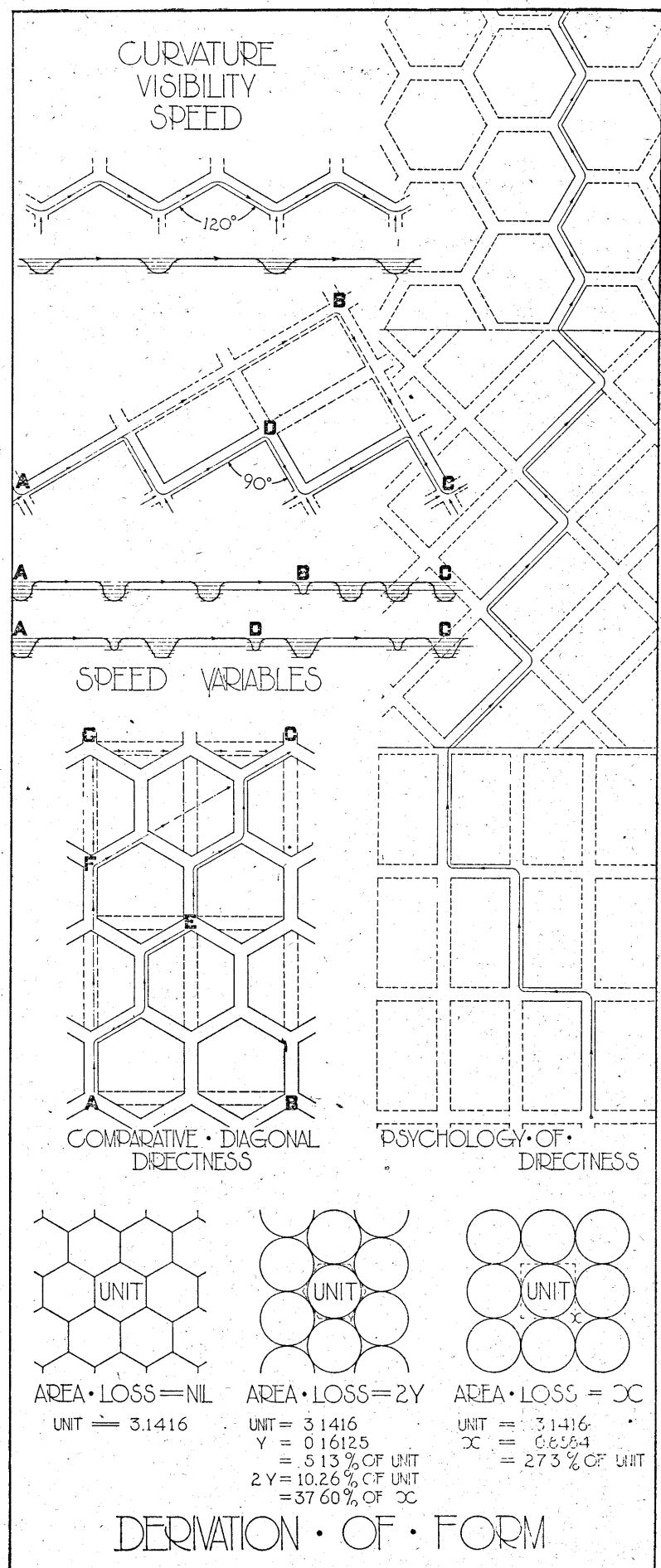
The psychological and actual properties of hexagonal planning may perhaps best be judged from the accompanying diagrams and their indications, noting correlated content and directness.

The Dominion postal authorities, at Ottawa, have kindly given consideration and thought to the effects which hexagonal planning would have upon the delivery of mail, by letter carrier, upon post box collection by motor cycle and upon parcel delivery by truck. I am advised that the opinion of the men in these different services is that they would find no difficulty in adapting their "bump of locality" to the hexagonal system of subdivision.

**Previous Use of Hexagon Block**

Mueller in Germany, about 1910 (?), advocated hexagon blocks assembled so as to leave all sides as continuous straight streets; but this left triangular interstices which were economically wasteful of bounding streets and public services.

A. R. Sennett in England, in 1905 published a two volume work on town planning in which he advocated absolutely the rectangular circulatory system, even objecting strongly to the introduction of diagonals. He, however, advocated the subdivision of the rectangular blocks into lots on a hexagonal pattern, i.e., three rows of lots between streets, the centre row being small hexagons off centre to the street fronting lots, the object of this disposition being to allow of equal frontage ownership coupled with a choice of additional rear yard area for those who wished to take such allotments.

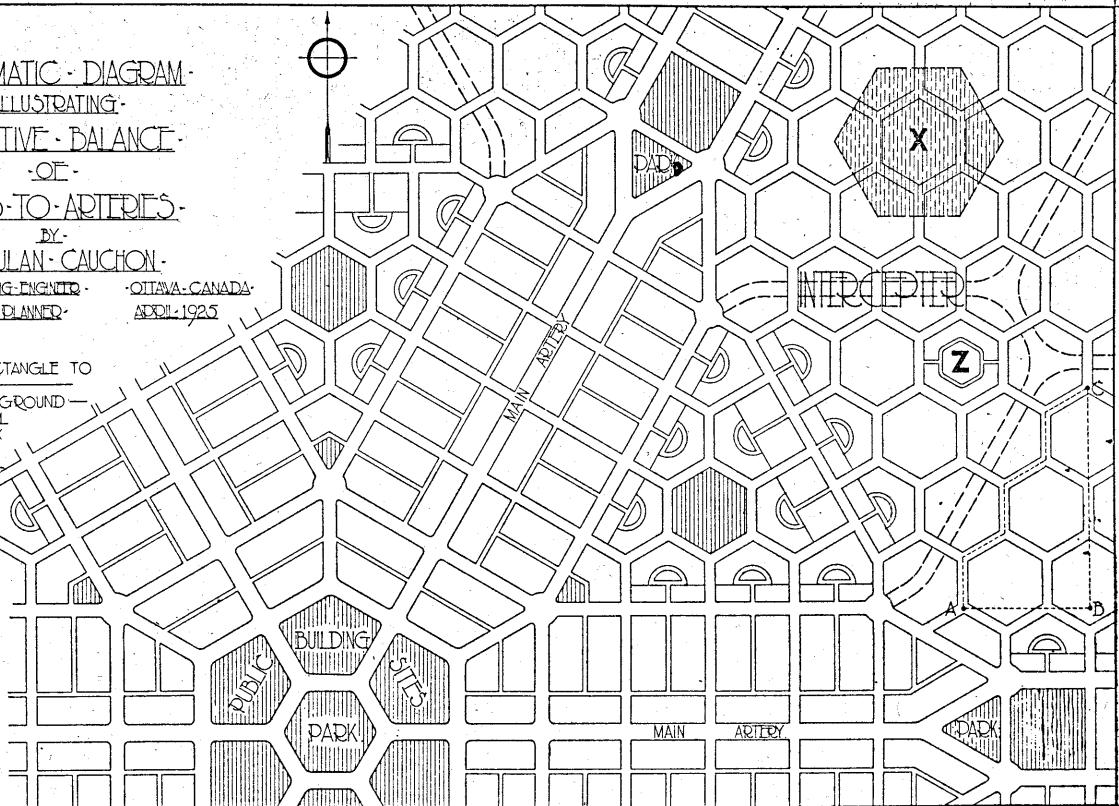


SCHEMATIC - DIAGRAM  
ILLUSTRATING  
RELATIVE - BALANCE  
OF  
CELLS - TO - ARTERIES  
BY  
NOULAN - CAUCHON

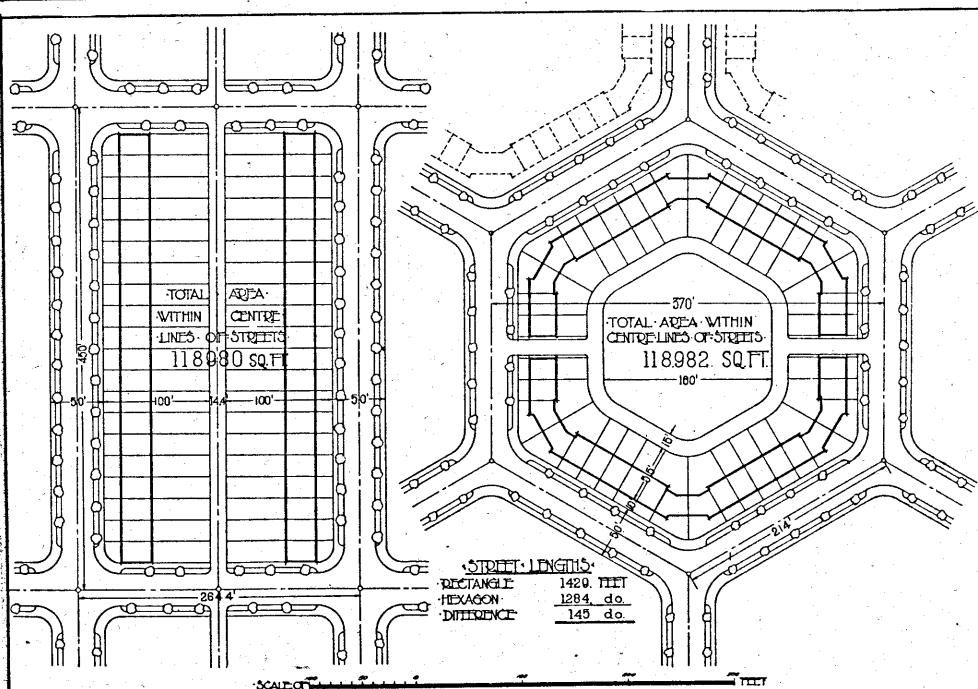
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NOTE —  
RATIO OF BUSINESS RECTANGLE TO  
RESIDENTIAL HEXAGON —  
7 HEXAGON CELL PLAYGROUND —  
X NON-TAXABLE USE — ALL  
STREET FRONTAGES TAX  
BEARING —  
INTERCUTTING ARTERIES —  
HALF MILE INTERVAL  
ADITS AND EXITS —  
TRAFFIC CONVERGENCE  
DIFFUSED BY 'BAFFLING'  
OVER CENTRAL AREA  
NO CONGESTION AT A  
CENTRAL POINT —

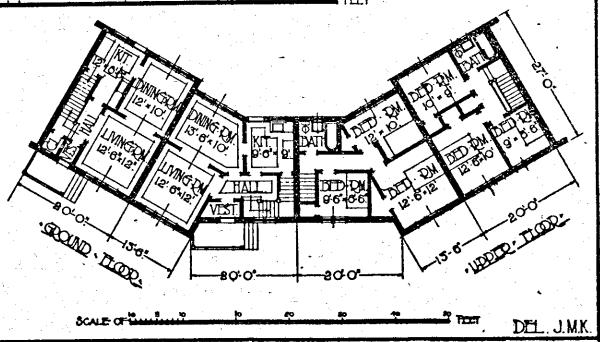


DET. J. M. K.



COMPARATIVE  
LAND DEVELOPMENT  
TOP  
COMMUNITY HOUSING  
BY  
WILLIAM HUGHES

**NOULAN-CAUCHON**  
CONSULTING ENGINEER  
& TOWN PLANNER  
• OTTAWA  
• CANADA  
APRIL 1925.



There are examples in Europe and in America, the hexagonal system of major arteries of the 1807 Governor's Plan of Detroit is our best example. The individual blocks in this Detroit plan are not hexagonal, they are rectangular and irregular and without any relation to advantageous orientation. But even with its limitations it had many advantages over the then existing plans. Its abandonment was a great loss to progressive planning.

The adoption of a hexagonal block in basic pattern favours, though not necessarily nor exclusively, the development of a hexagonal system of major arteries, both surface and interceper.

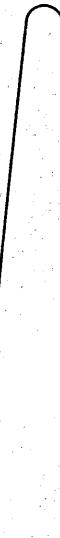
### THE INTERCEPTER

The requirements of communication demand of a plan system and pattern that it offers the minimum average interval in time distance over a maximum area between home and work and within the sum of objectives. That is to say, that the streets, arteries and through transits should be so correlated that the tide of population and traffic may ebb and flow freely without congestion over the greatest possible area for a normal given time-distance of about one half hour, or so much more as psychology and circumstances may demark as the turning point of amenity in free attraction, competitive areas and inducement to spread.

Our present arterial provisions are inadequate for expansion because they ultimately become choked by cumulative local traffic. Arteries calculated for an initial purpose cannot be widened from generation to generation as the process will eventuate in the logical absurdity of continually reducing the economic proportionate dimension and area of the business lot upon a thoroughfare of ever-increasing importance. *Some new principle must be evolved for dealing more efficiently with the conditions of expansion which have come with modern civilization in greater speeds and vaster accumulations. That principle, I submit, is the Interceptor.*

The intercepting artery is one which carries through traffic free from cumulative local traffic; it is an artery upon which no opening and traffic from facing property is allowed, and whilst denying accumulative access along its frontage, nevertheless contributes open spaces for sunshine and air to the windows of that frontage. The adits and exits of such an intercepting artery should be placed at relatively long distances apart, as are stations upon a railway. It is recommended that the distances between the adits and exits of an intercepting artery be about one-half mile apart. A correlated system of environment can only be designed scientifically for given purpose and capacity. Accrétion (*laissez faire* policy) beyond the designed given organic

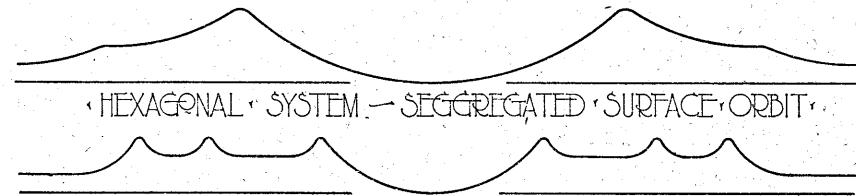
### OBVIATION OF TRAFFIC CONGESTION COMPARATIVE TRAFFIC SECTIONS



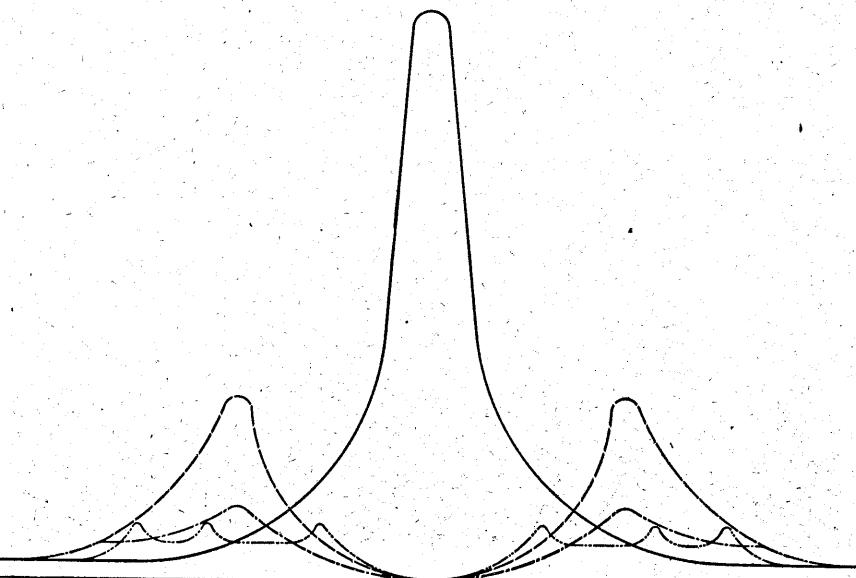
RECTANGULAR SYSTEM — FOCAL SURGE



HEXAGONAL SYSTEM — ORBIT



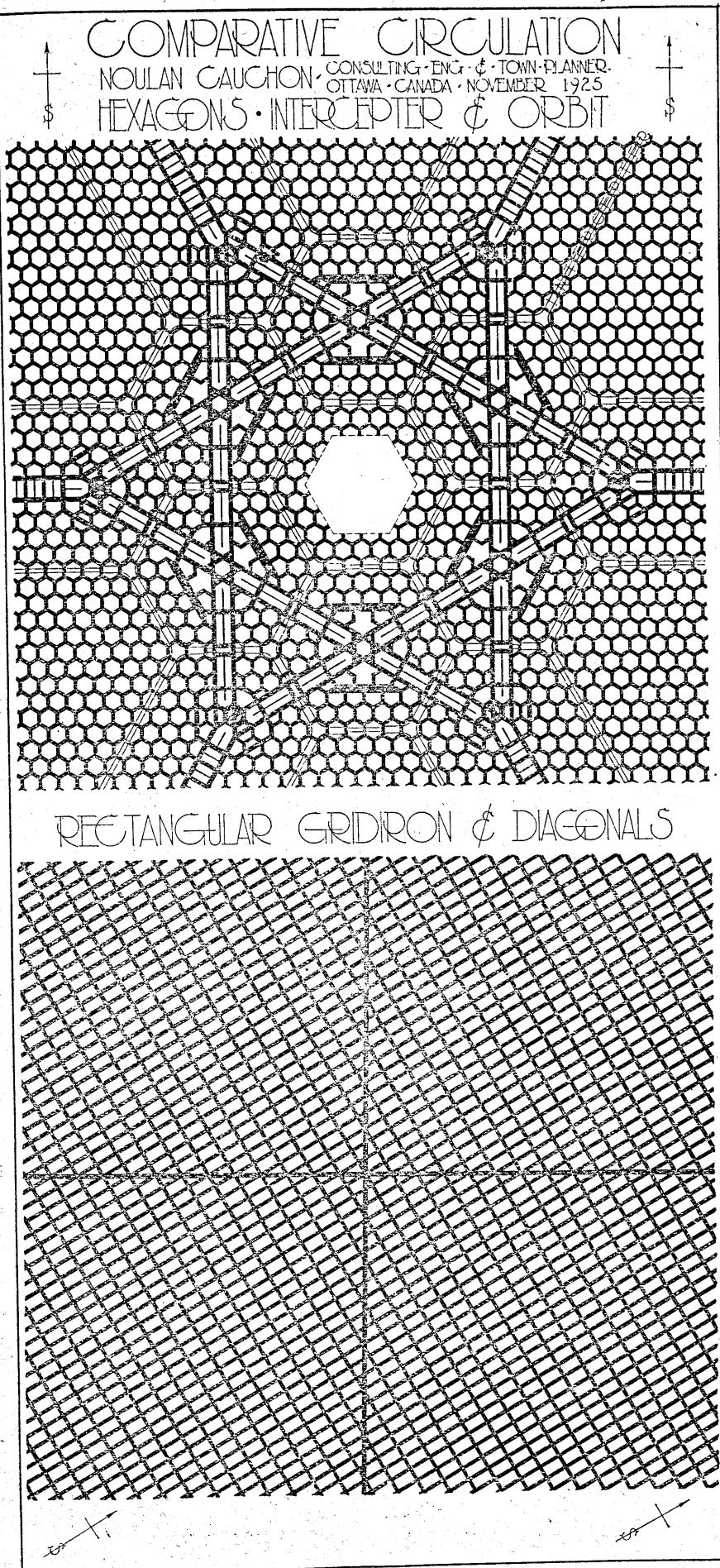
HEXAGONAL SYSTEM — SEGREGATED SURFACE ORBIT



COMPARATIVE CROSS-SECTIONS

NOULAN CAUCHON CONSULTING ENG & TOWN PLANNER

OTTAWA CANADA NOVEMBER 1925



entity of correlated parts and functions (ratios of forms and communications) will cause congestion and its disintegrating processes. Organic expansion beyond the initially designed capacity of the civic machine should be taken care of on the principle of satellite sub-centres. Inter-relations between the central area of attraction and its satellite sub-centres *should be provided for by Interceptors, i.e., rapid highways free from the accretions of local frontage access.*

The factors of population density, as determined by zoning (use and bulk), and as provided for in capacity of width and cumulative length of streets and arteries with index of speed at which the population-shed can mobilize its fluid content, determine the time-distance radii of a normal civic entity. This should be the limit of the self-contained civic entity if it is to attain and retain the optimum in human, social and economic efficiency of the individual, in city and state.

Average straightness between the total of objectives may be summed up as general directness. Directness is also conditioned by visibility accelerating speed.

Further, there are factors of psychology in directness; the appearance vs. the reality. **Relief vs. Congestion**

The question of the cost of land required for Interceptors and the cost of their construction is in principle answered by comparison, on its merits, in given circumstances, with the cost of congestion, where lack of width and freedom develop it. To relieve congestion by widenings, subways, viaducts, etc., makes it prohibitive as a general process.

Where the relief by widening, etc., is only local it frequently merely defeats its own ends by inducing a diversion of traffic to itself and renewing congestion, but to a more intense degree.

Individual surface diagonals by their more outstanding directness, where not part of an organic system, are also apt to develop congestion and contingent disabilities, though they are the lesser of two evils.

### The Gridiron

The gridiron street system is a relic of primitive two-dimensional thinking, merely length and breadth, developing the illusion that from any street intersection in any area there is a straight way to all other objective points within the area.

Whereas, the gridiron favours straight ways in merely two directions, whilst opposing the long way round of the two sides of a triangle to all others, the great majority of destinations.

The illusion of general directness in the gridiron has been fostered by the coincidence that city maps are conventionally made heading to the north, by which the apparent mass of streets is leading freely out and away from the observer; the eye seems more inclined to sweep the vertical plane and with less effort than the horizontal.

When we study a gridiron plan at an angle of 45 degrees, cornerways, for traffic relief, the indirectness of routing arouses an almost instinctive longing for diagonal directness.

The thoughtless license given to population density by heights abnormal to the channels of communication awakened engineers to a third dimension, volume, and very soon to recognize time, time-distance in speed and safety, as the fourth and the limiting one of capacity.

We must now seek a balanced correlation of forms and contents, of channels and speeds, the norm of entities and interrelations that will afford freedom from congestion; for congestion is the cancer of community progress.

### ORBIT

In an accompanying schematic diagram a field of hexagonal residential blocks and streets is shown served by a twin system of surface arteries for local distribution and diffusion, circumscribing a large open central area. The mobilization of traffic throughout the population-shed is compensated and accelerated at Vortex contacts between the local arteries and the through traffic Interceptors.

\*Compare comparative cross-sections of focal surge peak vs. gravitational orbit.

This Diagram of Comparative Circulation is to illustrate a theory that major arteries in converging, as they should, towards a central area, yet ought to diffuse far short of a central point; and that there should be a relatively large park-like inner central and pivotal area of low pressure; further that there would be engendered by a design of this nature a constant disposition to division and deflection of incoming and outgoing movements, establishing balanced centripetal and centrifugal mass movements of traffic that would set up a form of gravitational attraction swaying and converting the inevitable peaking of the focal surge of traffic into rotation on a well balanced orbit.\*

### THE COMMON GOOD

#### The Instinct of Survival

The instinct of racial survival has engendered a dominant sense of community welfare justifying the view that "private rights should cease when they become public wrongs"—formula of liberty under which we should operate—all government being but synthetic organization for the maintenance of life.

Research is required to determine the "norm" of adjustment for our survival within the municipal machines we live in—if the bearings be expected to run smoothly and the fly wheel of progression to be kept from disaster.

The civic problem, on the *laissez faire* method of indefinite variables, is evidently unsolvable.

The basis of planning must be a healthy maximum relative density of occupational living conditions. And, as a principle of racial survival the point of permissible saturation must not exceed that of social well-being. In the ultimate higher economics of Ruskin, "There is no wealth but life,"—anything less is but a measure of commercial cannibalism.

"Reform delayed," said Edmund Burke, "is revolution begun."

Now get your public suffused with four-dimensional consciousness — and thinking — and "we're off!"

## OTTAWA ZONING BY-LAW

### TOWN PLANNING COMMISSION. Report No. 1 January, 1926

To the Mayor and Council  
of the Corporation of the City of Ottawa.

Gentlemen:

#### Zoning By-Law

The Town Planning Commission submits herewith the Zoning By-law for the City of Ottawa.

Accompanying the By-law are descriptions by metes and bounds of the various areas within the bounds of the Rideau Canal, the Rideau River, Rideau Street and the western limit of the City at Bronson

Avenue (near Dow's Lake), to which the terms of the Zoning By-law as to classification should, in the opinion of the Commission, be applied; this being the section of the City that City Council designated for the initial application of Zoning.

Upon the passing of this By-law by Council, the Ontario Railway and Municipal Board will hold such public hearings as it may deem necessary to give the interested parties opportunities to express their views before the Board sanctions the By-law with or without revision as to it may seem just and wise.

Zoning is primarily based upon the biological de-

mands for an environment that will maintain health and efficiency.

The By-law regulations for the different classifications have been drafted with much technical care with a view to the preservation of health and human life in providing necessary light and air to the measure of occupational requirements. The spaces demanded around buildings of various functional purpose are mainly calculated upon the angles necessary for the access of sunshine to walls and windows for light and sanitation, also for such necessary distances between buildings as will allow a sufficient circulation of air to guarantee its renewal in freshness and oxygen content, again a necessity of health and efficiency.

The conditions arising from the application of the health and efficiency regulations will develop also great amenities in the surroundings of home and business, which will add undisputed desirability to each by protecting it from the encroachment of the other and thus stabilize amenities and negotiable values.

The object of the By-law is to stabilize desirable purposes, healthfulness, efficiency, amenity and values, not to crystalize conditions.

The Municipal Act provides ample opportunity and machinery for revision and for appeal—ample flexibility to meet any justifiable contingency.

The technical provisions of the By-law are the result of a searching and wide investigation into the zoning provisions of other cities and of original and simplified adjustments to local conditions.

The By-law had the subsequent advantage of exhaustive revision with the co-operation and criticism of the City Solicitor, Mr. F. B. Proctor, as to its legal compass and wording. Following upon this it has been discussed and adjusted, clause by clause, with the representative of the Dominion Department of Health through their supervising architect, Mr. B. Evans Parry, by Mr. John Lyons, a public spirited citizen, from the point of view of the building contractors, by Mr. J. Moffat Ross as the official representative of the Real Estate Board, and by a committee of architects (generally from five to ten in attendance) appointed officially by the Ottawa Chapter of the Ontario Association of Architects. Altogether there have been held twenty-one meetings with these various interests, each meeting on an average of from two to three hours duration.

The technical field having been thus thoroughly canvassed, the drafted By-law was then submitted to the three trust companies, the Capital Trust Company, the Royal Trust Company and the Toronto General Trust Company, to pass upon its provisions as a measure for the protection of the values of property and of the margins of security involved in loans. These three trust companies have expressed their "unqualified" approval of the draft By-law and look to its enactment.

Though zoning was only initially proposed for that section of the city lying east of the Rideau Canal in St. George's Ward, and those parts of Central and

Capital Wards so situated, record sheets, tracings, showing all buildings and property for the entire City, are now prepared, and for that area originally initiated the status of such buildings and premises, i.e., the use to which they are at present put, is designated thereon.

Your Commission recommends that Council authorize the City Solicitor to assemble this By-law in legal form and that it be printed and passed by Council.

Following upon this, the Ontario Railway and Municipal Board can proceed with its consideration and the City with the application of the By-law to the area which Council laid down in its initial request.

When the area between the Rideau Canal and the Rideau River has been dealt with by Council, there need be very little delay in applying the By-law to the remainder of the City, as the technical provisions now available will apply throughout.

#### Memorandum of Zoning

The zoning of Ottawa and the records of same have been so far carried out in application of certain principles, rules and symbolisms, as per extracts following herewith, and as submitted by Mr. Noulan Cauchon in the September, 1923 issue of the Journal of the Town Planning Institute of Canada, for the guidance and use of Planning authorities in the work of zoning and the preparation of official records and charts, to which may be referred by-laws necessary for their enforcement.

#### Town Planning

The Town Planning Institute of Canada has decreed that: "Town Planning may be defined as the scientific and orderly disposition of land and buildings in use and development, with a view to obviating congestion and securing economic and social efficiency, health and well-being, in urban and rural communities."

Town Planning is, therefore, the technique of social and economic efficiency.

#### Zoning

Zoning is that function of Town Planning which determines the relative disposition of structure to site, detailing uses, areas, heights, intervals and the occupancy of structures with a view to securing adequate access of air and the rays of the sun to buildings to the measure of their occupational requirements, and to ensuring health, efficiency and amenity to human beings. To the measure of their deficiency these factors of zoning shadow the birth rate and the death rate.

Andrew Wright Crawford, in the American Civic Association pamphlet "Zoning", says:

The whole purpose of zoning is to encourage the erection of the right building in the right place. It protects the man who develops his property along proper lines against the man

who develops his property along improper lines. Rightly understood, zoning means the substitution of an economic, scientific, efficient community programme of city building for wasteful inefficient, haphazard growth.

Edward M. Bassett, in the *National Municipal Review* supplement on "Zoning" expresses a reciprocal relation when he says:

The truth is that no man can make the best use of his own unless his neighbors are required to make such use of their own as not to injure others

Zoning is the application of common sense and fairness to the public regulations governing the use of private real estate. It is a painstaking effort to provide each district or neighborhood within a city, as nearly as practicable, with *just such protection*, and *just such liberty*, as are sensible in *that particular district*.

Zoning regulations differ in different districts according to the determined uses of the land for residence, business, or manufacturing, and according to the advisable heights and ground areas. But these differing regulations are *the same for all districts of the same type*. They treat all men alike.

Zoning is part of the general planning problem. It relates to the transportation system, including streets, street railways, and other local passenger transportation, railroad freight and passenger service, and water-borne commerce, if any. It relates also to public works and utilities, to parks, schools and many special public and private undertakings.

There is frequently confusion in the public mind between the functions of a building by-law and a zoning by-law. A building code deals with the technique of structure, while a zoning code deals with the technique of conditions under which structure should be permitted. It has regard, not merely to the physical safety of the occupants but to the outside conditions which affect the health of the occupants.

#### Justification for Zoning

The scientific and sociological basis for zoning is provision for adequate access of sunshine and of air as indispensable sustenance of health and efficiency of welfare.

Solar rays display inherent properties of heat, light and chemical action, which bring glowing comfort, preserve and stimulate efficiency of sight and also foster health by dispelling bacteria and disease; in contradistinction to artificial light which affords merely illumination.

Air is essential to human nutrition, mainly by reason of its oxygen content, which, through bodily combustion, brings heat and numberless chemical reactions that fan the flame of life.

The lungs are the firebox of the body.

Mr. Barry Parker, the eminent architect of Letchworth, England, says:

The tenant, probably, does not know that a typhoid fever germ will live for two years in a place where sunlight never penetrates, but cannot live for one hour in the sunlight. He,

or she, has probably never realized the significance of the fact that a laboratory used for the cultivation of disease germs must have a north aspect. The tenant probably does not know that even in tropical climates, where, in the past, the aim has been to exclude sunlight from living rooms (with a view to keeping them cool), it has been found necessary to pass legislation, making it impossible for a wall to be built in such a way that it prevents the rays of the sun from reaching the base of another wall, for at least a minimum of two hours a day. It has been learned that in tropical climates in particular it is those places to which the purifying rays of the sun never penetrate where disease germinates and flourishes. It is not a question, merely, of comfort, but of healthiness and unhealthiness: briefly, the fact is, that any room into which the sun never finds its way, is an unhealthy room.

Professor East, of Harvard University, in his book "Mankind at the Crossroads," says, with reference to slum conditions:

A most instructive study on this score was made by Miss Emma Duke at Johnstown, Pennsylvania, for the Children's Bureau of the United States Department of Labour. It is typical of several studies made in this bureau under the direction of Miss Julia Lathrop."

Where housing conditions were good and the home was clean and dry, the infant mortality was 105; where similar clean houses were damp it rose to 127. In moderately clean and dry houses it rose to 158: In moderately clean and damp houses it was 171. Where houses were dirty but dry, it was 162: where they were dirty and damp it was 204. Similarly, when the houses were classified on the basis of the water supply being inside or outside, the rates were 118 and 189 respectively.

and further:

Ventilation played a star role in the Johnstown studies. Where it was good, the rate was 28; where it was fair, 92; and where it was poor, 169.

Justification for regulating the proportionate area of a lot which may be built upon and of the angles and dimensions within which construction may arise thereon lies, therefore, in the vital necessity of providing access of sunshine and air to the interior thereof, for the preservation of health and efficiency and for the maintenance of life.

Differences in the nature, density, intensity and duration of occupancy, or of work, determine the variations in restrictions towards the purpose of obtaining resultant health, efficiency and amenity.

As penetration of sunshine and air is the objective, its attainment involves a sufficiency of open intervals of dimensions increasing in ratio to heights.

To regulate the disposition and size of structures to right purpose, the angle of indispensable minimum light penetration should be determined and enforced.

This scientific view of the question, when recognized, will dispel the popular illusion that zoning, with its regulations for obtaining access of air and solar rays to human dwellings, is an aesthetic whim. When men come to realize that such regulations are really means to the maintenance of healthy human life, all opposition to them will surely disappear, and they will be welcome as we welcome today the ordinary sanitary regulations, which a generation ago were looked upon as the artistic whims of cleanliness.

The haphazard manner in which cities have been allowed to grow and develop, without order or direction, has been repeatedly brought home to us through the ever increasing number of representations being made to our civic officials on behalf of citizens for restrictions against encroachments.

These encroachments, either threatening or established, take many forms. Stores, factories, garages, invade residential districts, apartment houses have sprung up amongst our most select homes and in many cases, are built up to the street and side lot lines, where the adjoining owners of residences have observed setback lines and preserved ample front and side yard areas.

Such disregard to the welfare of community interests is manifestly wrong and socially unjust.

It is this stupid, wasteful jumble which zoning will prevent and gradually correct.

#### Legal Provisions for Zoning

Existence resolves itself into the living conditions of Home and Work. Home districts seem to reveal their physical attributes and social significance most clearly by degrees of density; Work districts by degrees of intensity.

Density of population and intensity of work conditions may be best controlled by building restrictions of use, areas, heights and intervals, i.e., zoning, the legal provisions for accomplishing which vary in the different provinces, and in some are quite inadequate for the purpose.

Much can be attained by skilful recourse to Municipal, Health, Factory, Registry and to planning and Development Acts where such exist.

It is anticipated that self-contained planning and development acts fully providing for zoning will be everywhere forthcoming in due course. These will simplify procedure and enable the general public more easily to grasp the purpose and results of urban and rural planning, inter-planning and zoning.

#### Classification of Uses

The use and development of land should be zoned into two broad fundamental classifications, Home Districts, subdivided by degrees of density, and Work districts, subdivided by degrees of intensity.

From the minimum, mediate and maximum zoning standards of limitation in bulk congestion of structures, there devolves a coterminous per capita cubical content restriction of relative occupational congestion under Health and Factory Acts.

This is the most effective method of obviating congestion in density or intensity.

#### Home Districts-Density

Zoning functions to preserve desirable living conditions and to rehabilitate those which are deficient in affording health, efficiency and amenity.

The term Home is used to indicate what the ethics of shelter demand as the ultimate aim in conditioning residential districts and housing.

The domicile, "Be it ever so humble," must fulfil the civilized ideal of a home, as a place where family life may thrive.

The relative congestion of dwellings and of their occupancy, their density, is the main measure of their healthfulness, efficiency, and of the amenity afforded the occupants; this degree of density reveals their sociological import.

The use of land and buildings, as existing and permissible within Home Districts, should be zoned under three minor classifications, Minimum, Mediate and Maximum, respectively according to the relative degree of density, thus:

#### HOME DISTRICTS

##### Minimum Density Districts

Individual detached single family dwellings with accessories on individual lots.

##### Mediate Density Districts

Semi detached dwellings, duplex houses, multiple dwellings.

##### Maximum Intensity Districts

Apartment houses, flats, tenements, boarding and rooming houses.

Such restrictions may permit of the Minimum Density conditions obtaining within the designated Mediate, and likewise of the Mediate within the permissible Maximum, but never inversely, except as a non-conformity.

##### Work Districts-Intensity

Making a living is work in kind and degree. The term Work Districts seems therefore more generic and is susceptible of simple differentiation in degree of intensity.

As, therefore, Work Districts display their activities to advantage by degrees of intensity, the use of land and buildings, as existing and permissible within work districts, should be zoned under three minor classifications, Minimum, Mediate and Maximum, respectively, according to the relative degree of intensity, thus:

#### WORK DISTRICTS

##### Minimum Intensity Districts

(Distribution)

Offices, stores, stores and offices over, stores and proportionate light industry, hotels.

##### Mediate Intensity Districts

(Storage)

Warehouses, light industry, motor service stations, public garages, repair garages, livery stables.

##### Maximum Intensity Districts

(Production)

Industrial plants, mills, factories, fabrication industries, lumber yards, storage yards.

The restrictions should permit of the minimum intensity obtaining within the mediate and of the Mediate within the Maximum. Home Densities, likewise, may be permitted within Minimum and Mediate intensity Work Districts, but should in themselves, conform to restriction of area, height and also of the exterior air and sunshine provisions inherent in their relative classifications.

As dwelling within industrial areas is not healthy and involves in consequence a further needless limitation of certain industrial processes, the inclusion of a home density should be prohibited in a Maximum Intensity Work District, although exception may be made to the extent of accommodation necessary for caretakers.

A Mediate Intensity which is a related light industry accessory to a Minimum Intensity should be permissible therein, but should not be in excess of one-quarter of the floor space of the area of the building occupied by such Minimum Intensity.

#### **Institutions-Disturbance**

Institutions are those organizations which function to promote, fulfil or express the abstract or the material cultural ideals of the race.

The relation of institutions to living conditions may be well interpreted by degrees of disturbance.

The plan authority should determine any thing, erection, construction or activity, as existing or as where proposed, to be an institution, relatively as such in a minimum, mediate or maximum degree of disturbance, gauging the effect of its proximity or activity on the inherent or negotiable value and also upon the health, amenity or general character of the surroundings.

Institutions in a Home District should be subject to the building restrictions of area, height, intervals and also of exterior air and sunshine provisions, of the relative classification within which they may be situated.

Institutions in a Work District should in themselves conform to the restrictions of area, height, intervals and also of the exterior air and sunshine provisions inherent in their purpose.

#### **Noxiousness-Deterioration**

Noxiousness in zoning is a thing, erection, construction, condition, activity or danger disquieting, offensive or harmful to mind or body through the senses, or which in the nature of things or through the properties of matter or from aversion lessens values, health, efficiency or amenity.

Noxiousness is not a classification per se but is a consequence of incompatibility in relation to environment.

A thing, erection, construction, activity or danger which is acceptable in one district may be noxious in another; a public garage which is normal in a Mediate Work District would be noxious in a Home District.

Determination of the degree of noxiousness of a given thing, structure, activity or danger should be

by gauging the effects of its proximity on the inherent or negotiable value or on the healthfulness, efficiency, amenity or general character of the surroundings.

#### **Advertising**

In the Minimum Density (single family) Home District only non-conspicuous notices should be allowed to be displayed advertising sale, rental or professional services and exclusively as accessory to residence.

In the Mediate and Maximum Home Districts only non-conspicuous notices should be allowed to be displayed advertising sale, rental, rooming, boarding or professional services exclusively as accessory to residence.

In the Minimum, Mediate and Maximum Work Intensity Districts bill-board advertising may be allowed to be displayed as and where permitted and subject to the structural and other by-laws of the municipality.

#### **Height Restrictions**

Height and area regulations should be coterminous with the various use classifications. Primarily, the immediate vertical elevation of the outer front wall of any structure should be limited to a height equivalent to the width of the street upon which it fronts, with the reservation that the erection may go higher if it or the other part thereof is set back within a receding angle formed from the centre of the street allowance to the permissible coping height of such outer wall. This rule is taken to approximate a normal balance of public services being afforded the population which can be healthily sheltered in such structures, to its receiving adequate air and light, also to insuring it sufficient circulation and transportation by such streets. This general rule is taken as the one best qualified to obviate congestion and relate equitably the use and development of the city lands to health, efficiency and amenity.

Height limitations in their control of size enable also design to ultimate purpose, in adequate capacity and flow, of the sewers and mains below the surface.

Height limitations should be further restricted in residential districts, that of single family homes being restricted to a height equivalent to the width of the lot upon which the structure is located, but not exceeding forty feet, duplex and terraced houses to maximum height of forty feet, and apartment houses to a height of sixty-five feet.

Rear and side elevation heights and the height of court yard walls should be limited, respectively, by the depth of the rear or side yard and by the least dimension of the court, although all height regulations should be subject to the receding angle reservation.

#### **Area and Interval Restrictions**

Restrictions of the proportionate area of a lot which may be built upon and of the intervals within and without the structures thereon should be based upon affording adequate sunshine, light and air to ensure health and efficiency in living and working as

may be conditioned for the permissible use of the structure. Details of areas and intervals should be stipulated in relative percentage and where possible in measurement and angles in relation to heights.

Minimum rear and side yard areas and dimension regulations should be imposed upon all conditions where light is essential to use and the control of the location of windows inside walls facing on side yards should be reserved under regulation, in order that there should be assurance of light penetrating where and as originally intended.

#### Non-Conforming Uses

Non-conformity is a relative status of lesser restriction in density, intensity, institution or noxiousness obtaining within a greater restriction in permissibility. It may obtain by reason of preexistence to zoning, as nominally indefinite, or as subject to opportunity, and persists largely by reason that laws are rarely retroactive.

Non-conformity should, in general, be restricted in permanency by limiting, to once only, structural renewals to 50 per cent. of the building values, exclusive of foundations, and by limiting conversion or enlargement of use to one of conformity.

Where a non-conforming status is detrimental to the general welfare of its surroundings, it should not be allowed to extend, enlarge, become aggravated or be renewed, for, where things, erections, constructions, activities or dangers of a non-conforming condition or use are of a degree detrimental to the general permissible character of a district, they constitute a species of noxiousness.

Non-conforming condition, use or activity should not be altered, enlarged, renewed or converted to other condition, use or activity at the expense or to the detriment of a conforming condition, use or activity.

#### Procedure in the Preparation of a Zoning By-Law

(1) The first step towards zoning is to make an official record upon charts of the status of living conditions governing homes and work as existing at date.

For the purpose of simplicity, co-ordination and visualization certain symbols and colorings should be conventionalized and used in the manner hereafter set forth to allow easy expression of the existing conditions and of such progression and combination of circumstances as may be expected and allowed to develop.

Zoning regulations are not devised to be retroactive.

(2) The second step is for the planning authority, in consideration of the status revealed, to adopt zoning regulations of permissibility that will restore Health, Efficiency and Amenity in so far as may be to existing relations and guarantee it in future development.

The restrictions as to the area of a lot that may be built upon, the intervals within and without the structures, the heights to which these may be built in whole or in part, the nature of and the uses to which structures may be put and the density and character of occupancy thereof should be prescribed in official

regulations and be displayed in so far as may be upon the official charts.

The aim should be, as far as possible, to make the regulations and restrictions of area, heights, intervals and the disposition of cubage (bulk) coterminous within the several home and work district classifications. This procedure eliminates the necessity of providing and preparing height and area symbols and charts, the symbols designating permissibility likewise designating the coterminous regulations governing heights and areas.

A consideration in determining permissible use of localities and structures is the adequacy of the public services as to:

- (a) The location, curvature, grades and terminal adequacy of railways.
- (b) The direction, grade, width, surface and general carrying capacity of streets, thoroughfares and arterial highways.
- (c) The capacity, frequency and speed of street railways.
- (d) The size, character, capacity and pressure of water mains.
- (e) The size, character, capacity and flow of sewers.
- (f) The capacity of light, heat and power mains.

The official charts of status are the forecast upon which will be based future permissibility and the by-laws necessary for the enforcement thereof.

(3) Thirdly, the charts and proposed regulations designating future permissibility should then be exhibited at public meetings for the perusal and attainment of the views and co-operation of interested parties, thus enabling considered revision by the plan authority towards amplification or elimination as the circumstances revealed may warrant.

The property owners collectively, should, in so far as possible, be allowed, subject to the adequacy of the public services, to determine the permissible use of their related areas.

(4) Fourthly, when final approval has been given the determining charts and regulations, the by-laws should be enacted by legal authority.

Provision should be made for future appeal in respect of such revisions and alterations as the changing circumstances of time and development may warrant.

It is not the desire or the intention of the zoning authority to restrict districts without regard to the opinions or desires of owners of property located therein or affected thereby, but rather to control future permissibility as far as possible from the status of existing home and work conditions as delineated on the charts, they being considered a forecast upon which to base future permissibility.

It is obvious from the nature of the case that, even if a zoning ordinance were drawn with superhuman perfection, time and the natural growth of the community might show the need of modification. The purpose of a zoning ordinance is not to stifle growth but only to insure that instead of taking place

sporadically and wastefully it shall go on in an orderly way, in response to generally recognized needs and with due notice to all concerned.

### Symbols

To enable the easy recording and recognition on zoning charts of the status and the permissibility in the use and development of land, a constructive system of basic classification symbolism was, after much study, prepared and adopted. This system, in general use and for comparative analysis, is of such simplicity as to be easily comprehended by the most inexperienced, and its adoption has proved particularly successful and has expedited the field work to an extent beyond expectations. Its simplicity is such that written notes are practically eliminated from field work, the six basic symbols forming the system, in the hands of an intelligent individual, being such as to cater to almost every condition arising in the field.

The symbols used are a constructive multiple of a simple stroke, those denoting Home Density or permissibility consisting of a single line, or a multiple thereof, according to the relative degree of density, and drawn diagonally downwards from right to left, are comprised of a similar simple line series, having the same relative multiplicity but drawn down-while those denoting Work Intensity or permissibility are composed of a similar simple line series having the same relation multiplicity but drawn downwards from left to right. The distance between the line groupings may be varied to suit the scale of the chart, upon which all symbols are superimposed normal to its horizontal plane, thus avoiding any confusion liable to arise from possible distortion of the plane of the symbol with reference to the chart.

The status of land and buildings as actually developed is indicated on the charts by applying the relative symbols to the interior portions of the lots, the permissible classification for future development being indicated by the application of the relative symbols on the outer borders of such lots..

The symbols retain their definition under a wide range of scale and reduction and further permit of easy reproduction in black and white.

Non-conformity may be recognized where symbols on charts show a lesser restriction in status within a higher restriction in permissibility.

In addition to the line symbols, there has been adopted for use in the case of small scale maps a colour scheme graduated in co-ordination with the six basic home and work classification symbols, the colors of the solar spectrum being used for the purpose. This allows of the amplification of the chart symbols at a minimum of cost, as three of the six colours, being combinations of two of the basic spectrum colours, the six colours can be reproduced in three printings.

The nature of things and the inherent properties of each grouping are indicated in colours and symbols as follows:

HOME DISTRICTS		
Symbol	Colour	
Minimum Density		Spectrum Red
Mediate Density		Spectrum Orange
Maximum Density		Spectrum Yellow

WORK DISTRICTS		
Symbol	Colour	
Minimum Intensity		Spectrum Green
Mediate Intensity		Spectrum Blue
Maximum Intensity		Spectrum Violet

### What Zoning Accomplishes

Zoning gives everyone who lives or does business in a community a chance for the reasonable enjoyment of his rights. At the same time it protects him from unreasonable injury by neighbors who would seek private gain at his expense.

Zoning will prevent an apartment house from becoming a giant airless hive, housing human beings like crowded bees. It provides that buildings may not be so high and so close that men and women must work and live in rooms never freshened by sunshine or lighted from the open sky. Zoning secures a healthy relation between living conditions in the home and at work.

Zoning will allow no one to put up a large apartment house overshadowing your home, stealing the sunshine and spoiling the investment of years of labour and saving. Nor is anyone at liberty to erect a noisy, malodorous public garage to keep you awake nights and to drive you to sell out for half of what you put into your home. Zoning stabilizes amenity as due in social equity. Zoning amenitizes.

By zoning, millions of waste from the scrapping of buildings in "blighted districts" may be eliminated. Zoning stabilizes efficiency and values as due in economic equity. If a town or city is zoned, property values become more stable, mortgage companies are more ready to lend money, and more houses can be built.

Zoning avoids the error of trying to apply exactly the same building regulations to every part of a city regardless of whether it is a suburban residence section, or a factory district, or a business or financial centre. It fosters civic spirit by creating confidence in the justice and stability of the protection afforded. Zoning regulations differ in different districts, according to the determined use of the land for residence, business or manufacture. Industry will be more efficient, as well as homes more wholesome, if kept generally separate. Separation may not mean great distances for the workers to travel. Concentration of uses and a fair apportioning of districts should reduce the amount of all transportation and secure economies

not only directly for the worker, but indirectly in the costs of production and marketing of goods.

Zoning is an elemental factor in obviating the congestion of buildings and concurrently of population and of traffic.

Again, miles of streets and sewers and other utilities, such as are ordinarily built when land is subdivided for dwellings, need never be constructed if we know that these areas will be devoted mainly to large factories.

Altogether, zoning will assure orderly growth and permanence in the development of a city, enhance the amenities of and ensure healthy and sani-

tary homes for its citizens, prevent congestion both in home and commercial districts, maintain the negotiable value of land and buildings, and eliminate the problematical installation of public utilities, such as sewer and water services, which, under haphazard development, are constructed on a basis of probable demand, the ultimate demands likely to be made upon them being commensurate with indefinite future development.

It therefore necessarily follows, that where extensive town planning is contemplated of either a corrective or comprehensive nature it is indispensable that the conditions upon which the efficacy of town planning depends be first stabilized by zoning.

## THE ECONOMIC CASE FOR ZONING

By NOULAN CAUCHON

President of the Town Planning Institute of Canada

We all plan our private undertakings, we plan our houses, our business offices and our factories; the interests which lend money for financing these undertakings—loans on residences, office buildings, stores and on factories—pre-suppose their proper planning and efficiency as a collateral security for the realization of the sums loaned.

Does it not seem strange that we abandon these wise methods just on the threshold of the greatest undertaking of all, the collective correlation of all these individual factors into an organic community?

Surely if it be logical to plan our individual concerns we should realize that it is a still greater necessity to plan and correlate our collective activities if only for the reason that the lack of planning in the larger undertaking so often destroys the fruit of planning in the smaller and more individual concerns. If the city is planned correctly an individual aberration does not put the city out of gear, but however well the individual effort may be planned the machine will not function properly as a whole if these individual efforts are not collectively correlated to function together organically. Your hand may be maimed, and still your body may function by reason of its general organic efficiency but our present cities are very much like a body composed of quite well-designed parts and limbs without a collected nervous and muscular system under brain control.

We must guard against the idea that a city will grow "naturally" or that the law of supply and demand will adjust the proper relations to these things. The term *growth* is a biological term which implies a control in the development of part and function balanced by the inherent virtues of the life force. The city is not a biological organism, it is a mechanical contraption and, therefore, requires as a machine does, to have a "governor" or artificial control, which will prevent this mechanism from running wild and being helplessly subject to alternative choking congestion or to bursting of its fly wheel.

One of the first elements to control in civic development is the density of population under home living conditions and also the intensity of distribution of its productive activities. It is only when these conditions are satisfactorily determined and controlled that the factors for their maintenance can be calculated in accordance with the necessary demands; that is, it is only when an engineer knows the areas and their uses and densities that he can say with any approximation to accuracy, how wide and how many and in what direction the necessary streets should exist and that the size and capacity and general scheme of sewers, water mains and gas mains and all the other public services can be efficiently and economically established.

For the stabilization of conditions, both as to their amenity and as to the preservation of their negotiable values, there must be what is popularly known as zoning, that is, living areas must be protected by law from the haphazard incursion of other purposes, such as stores, laundries, public garages, etc., in fact of any incongruous feature which disturbs and depresses the quiet and peacefulness so much desired and needed for the home atmosphere. The reverse of the matter is that in so far as commercial activities are permitted to wander from the business streets into residential districts they not only destroy the residential values but they subtract from the value of the commercial streets by withdrawing a measure of their exclusive advantage as places of business, thereby diminishing the assessable and negotiable values on business streets.

It is important to realize that under our modern economic system, undertakings, from the building of a home to that of stores, offices and factories are of necessity and progressive advantage financed by some capitalist, trust and loan company or other monied interest. The development of a city depends in measure upon the ease with which the individual, the merchant and the manufacturer can get money for his purposes:

Zoning, which means determining the use and development of land and protecting it from unwarranted intrusion and disabilities thus protects the owner in his peaceful possession to best purpose enabling financial assistance for development on the collateral security of stability in purpose and development.

As an example, take an ordinary individual of modest means—and he is the majority—who has saved say, \$5,000; he wishes to establish a home on the basis of a \$10,000 property. He borrows half the value of that property. The loaning agency has a security of 50-50. No sooner is his home built in an *unzoned* city than a garage or a laundry, or a pioneer store is opened up on the adjoining lot. Immediately the value of the home becomes depreciated by at least 25 per cent in its negotiable value. Thereby the city loses an assessable value, the loan company has lost half its margin of security and should the house be sold the owner has lost half of his life's savings. This is a quite common injustice of circumstance in any or in every city which is not zoned.

Now let us multiply the case of the individual just mentioned throughout the city and it will easily be seen that about a quarter of the total value of a city which is not zoned is in constant jeopardy of needless and aimless depreciation.

It should be easily realized that in a zoned city it will be easier for the individual to borrow money for the building of his home or business because of the stabilized security behind a loan and also, it will be more desirable and more attractive for the loan company to lend money in zoned cities where their margins of securities are protected. In the larger fields of civic borrowings loan companies and all the great interests which underwrite bond issues will inevitably come to view with more favor those cities which can offer the collective stability of zoning behind their civic loans.

Beyond these business considerations zoning is primarily based upon the biological demand for an environment that will maintain health and efficiency. The object of zoning is to stabilize desirable purposes and healthfulness, efficiency, amenity and values, not to crystallize conditions.

#### NEWS AND NOTES

(Continued from page 2)

those whose applications had just passed the local Executive. There are now on the roll the following:—1 Honorary Member and 37 Corporate Members made up of 6 Members, 27 Associate Members and 4 Legal Associates: 4 Honorary Associate Members or Affiliates and 1 Student Member. In addition to this the Vancouver Branch has been instrumental in sponsoring 4 applications for membership from the city of Victoria. During the year eight general meeting and eight meetings of the Executive Council were held.

The result of the election of officers of the Branch

for 1926 is as follows:—Chairman, John Elliot; Vice Chairman, Frank E. Buck; Secretary-Treasurer, J. Alexander Walker; Directors, Messrs. John W. Allan and Arthur G. Smith.

Mr. A. G. Harvey, Solicitor for the District of Point Grey, a guest of the Branch, gave an account of what had happened to date in Victoria, relative to the passage of the Town Planning Act. Mr. Harvey, along with Mr. J. B. Williams, Vancouver City Solicitor, assisted in presenting the Bill to the Municipal Committee of the Legislature and helped to redraft certain sections.

Mr. A. G. Smith contributed a humorous sketch illustrating the vicissitudes of the Town Planning Bill. His story of the evolution of the "Super-Duck" attempted by the people of "Quackville-on-the-Creek" was greatly appreciated.

Mr. W. G. Swan gave a brief address on "Harbor Approaches," covering the various methods of grade separation in obtaining access to harbor works from the city streets.

Mr. John Elliot read an excellent short paper on "Town Planning and the Surveyor."

One of the members stated he had been given to understand that the Provincial Department of Education was considering the publication of a textbook on elementary Town Planning for use in the Public Schools of British Columbia. The Secretary was instructed to communicate with the Superintendent of Education offering the services of the Branch in this respect.

At this meeting the fate of the Town Planning Bill was still uncertain. The meeting, however, decided that should the Bill be rejected, the Branch would begin a new campaign of publicity and education among the general public and the dissenting legislators. However, the Bill was passed, but with such serious excisions and alterations that much of the work of the Branch has been rendered abortive.

The reported intention of the Department of Education to prepare a school book on Town Planning is greatly interesting. That would be a wise and statesman-like move. Chicago has shown how immensely valuable "Wacker's Manual" was in preparing public opinion for the Plan of Chicago.

#### The British Columbia Act

Unfortunately the anticipated rejoicing among town planning enthusiasts in the passing of the British Columbia Act is splashed with sad disappointment. The Bill, as drawn up by the British Columbia Branch of the Town Planning Institute, has been largely disembowelled in its passage into law and can no longer be described as either one of the best acts in Canada or in the town planning world.

Members who know something of the voluntary toil and public service involved in the formulation of so humane and politically sound a Bill as the Vancouver Branch turned out will not be sparing in their sympathy with these discouraged pioneers.

Mr. A. G. Smith, to whose political and sociological genius the original Bill was largely due, per-

mits us to print in this issue a considered and high-restrained criticism of the Bill as passed. It has turned clear, logical, scientific and beneficent procedure into a miasma of confusion, apparently in the supposed interests of City Council prerogatives, though every intelligent City Council knows that it is no more qualified, as a body, to direct the science of town planning than it is to direct the science of education or engineering. A modern City Council needs groups of trained men to deal with scientific problems. It is wisely content if it has the final "say" and the control of finance and general administration. Sometimes it spares a little appreciation for the splendid men who know how to do things, in virtue of their training, as the owner of a motor car pays tribute to the specialist knowledge of the mechanic. The City Council require the scientist to be "on tap." It sees to it that he is not "on top." The framers of the original Bill knew quite well the psychology of the situation and made no attack upon the citadel of City Council prerogatives. But they made provision for a group of specialist students of a definite scientific problem, professional and voluntary, who would have been the centre of educational and executive reference and thus would have saved the Council's time and energy and wasteful duplication of effort. Moreover they would have been the source of initiative, founded upon specialist knowledge and scientific and social enthusiasm, which a necessarily conservative and popularly elected city council never is. All this valuable civic energy is cut out in the act as passed.

The Branch will now have to spend years of time and effort in making possible the undoing of the mischief that has been wrought in the disembowelling of their Bill. There is still a chance that the Vancouver City By-law may restore some of the effectiveness of the original Bill. The Branch is clinging to this hope. Mr. Smith points out that a by-law may be amended and revised. The trouble with a by-law, however, as compared with a provincial Act, is that it may be too easily amended and revised, at the bidding of private interests, till it is no use for the service and protection of the community. If the British Town Planning Act had been at the mercy of civic by-law there would not now have been 300 towns and cities under town planning law. As it is, there is a permanent body of specialists who have done necessary work once for all and thus saved endless duplication and multiplication of research and study.

The only comfort we can offer to the members who have toiled so hard and unselfishly to save the spoliation of their beautiful province, and have had their work so largely eviscerated, is to remind them that Campanella, author of "The City of the Sun" and one of the first town planners, was seven times tortured during twenty-seven years of imprisonment.

We print the Act as passed on another page. Members will be able to compare it with the original

draft of the Vancouver Branch by referring to our issue of January, 1925. There they will find "The Light that Failed." The curse of Canadian planning is the indisposition of authorities to appoint qualified men to do the job in the best and quickest way.

Meanwhile our Canadian planners are obliged to expatriate themselves to find opportunities for the exercise of their talents; one to Mexico, another to Venezuela and now two of our Ottawa members have won the first place in the plan competition for a Watertown area, U.S.A.

#### When Jumble Building Touches the Pocket

Then the zoning idea becomes really alive—even if it does not know how to express itself and calls itself "Building Restrictions."

The following letter to the *Vancouver Sun* is quoted, not because of the breadth of its social philosophy, or appreciation of the fact that poor people are robbed of sunlight and air and the amenities of home surroundings by the absence of zoning regulations but because it illustrates admirably the crude awakening of the property interest to the fact that zoning really does preserve and "stabilize" property values. The letter is headed: "Declares Lack of Building Restrictions is Frightening Investors from the City;" and the paper asks its readers: "What is your opinion?" Vancouver has now a zoning ordinance, in virtue of the new provincial Act, but this correspondent does not know of it and only sees one thing—*property values are suffering in Vancouver from lack of zoning*.

That is much to the good. Next he may see that lack of zoning has *something* to do with the health, welfare, efficiency and happiness of poor people who are robbed of light, air and sunshine by lack of zoning.

Some of the worst examples of jumble building he deplores are in Granville street near to the fine town-planned area of the Canadian Pacific Railway at Shaughnessy Heights.

Here is the letter. It may be called a first lesson in zoning for business men:

"Apropos of the recent discussion in your City Council regarding building permits being granted to persons desiring to erect apartment houses, etc., in residential districts.

"I am a recent arrival in this city from the prairies and had come here with the express intention of investing, not only in a home for myself and family, but also in some other desirable residences on Tenth avenue west in the 1600 and 1700 blocks, with a view to speculating in the future prosperity of the city. As I was informed by a friend living near there that apparently there were no building restrictions: that the very house which I was considering to purchase and make my own home in, was shortly to be overshadowed by an unsightly apartment dwelling, I made some inquiries and found it was true. Needless to say, the deal I had in mind

fell through in regard to this particular house, and I might add that I have decided not to make any investments in this district at all, until such times as I am assured that proper building restrictions are placed that would be a protection to myself and others who have in mind plans to purchase or build homes in bona fide residential areas.

"To cite the circumstances surrounding this particular case in the 1600 Block on Tenth avenue west, I would say that there was a vacant lot about the middle of the block on the south side, bounded on either side by homes occupied by the owners themselves. After much discussion in the City Council chambers, in which several of the aldermen appeared to take a personal interest, a building permit was granted to erect an apartment building on this vacant lot, costing \$22,000 and containing six apartments. The residential owners in the 1600 block, I understand, all signed a petition to the City Council requesting the latter to refrain from granting permission to build this apartment, but they were informed that the Council was powerless to do otherwise. Many of the residents have been living in and owning these homes for upwards of twelve years, and consequently have contributed a goodly sum in the way of taxes to the city coffers.

"Suffice to say, the apartment dwelling has gone up and instead of even conforming to the general front line of the houses in the block on that side of the street, it comes forward quite a few feet with the result that the view up and down the street on either side of the apartment block, is completely cut off. The building permit also granted the builder of the apartment dwelling to build the full width of the lot, which is 50 feet wide, thereby naturally destroying any opportunity that the adjoining residents might have had in cultivating pretty hedges and flower gardens.

"The point that I would like to bring forward is this: The valuation of these residences I have referred to has necessarily decreased, and for the sake of an extra three or four hundred dollars, which the city will get in the shape of property taxes on the apartment building, it would appear that the city is willing to sacrifice the valuation of the bona fide residences in the block, as it cannot be said that they are worth as much now from a residential point of view as they were prior to the time the apartment block was erected, to say nothing to the discomfort of the resident owners, who are apparently powerless to help themselves. Surely in a city the size of Vancouver, better protection can be given those who are willing and able to spend their money in making homes for themselves and others that should be a credit to any community."

#### The Vienna International Conference

The next International Conference on Housing and Town Planning will be held in Vienna, September next. For the information of members who may not have received an intimation of the nature of the conference we quote the preliminary announcement:

"We beg to inform you that the next International Conference will be held in Vienna in accordance with the decisions taken at the Amsterdam (1924) and New York (1925) Conferences, and in response to the invitations of the Mayor and City Council of Vienna, supported by the Austrian Government and the Austrian Housing and Town Planning organizations.

The principal subjects for discussion will be:

(a) Examination of the conditions of land tenure in each country and of how far they permit practical results respecting town and regional planning.

(b) The rational distribution of cottage and tenement houses.

Under the first heading will be discussed land ownership and leases and the uses to which land may be dedicated in town and regional plans, the acquisition of land (whether by private treaty or compulsory powers) where necessary for the plan, the exchange of sites and all the land problems that it is necessary to solve so that the plans that are drawn up may be actually achieved. It also involves the study of regional and town planning in relation to existing and potential land values, a study which is made the more necessary by the recent growth of regional planning and the larger areas that are now envisaged.

The second subject will provide for comparisons between the two types of housing development, their appropriateness under varying conditions, their respective costs and their social advantages and disadvantages. It also involves consideration of the place in regional and town plans of both types of building and the relating of housing to town and regional planning.

The list of Papers and Special Reports on these subjects will be announced later. The Papers and Reports will be sent to delegates before the Conference.

Vienna is in itself of much interest from the point of view of town planning and housing. It is the centre of an important region and has the status not only of a city but of a state of the Austrian Republic. The city has had a zoning plan since 1893 and a general plan since 1894. It has its large belt of forest and meadow amounting in all to 11,000 acres. A new town planning scheme is being prepared for the large town area on the left bank of the Danube.

During the difficult after-war conditions the city council were responsible for building over 3,500 houses between 1919 and 1923. A five-year programme of building was started in the autumn of 1923 to provide 25,000 dwellings. So far the actual building is ahead of the schedule, for 6,700 dwellings were built in 1924, and 8,800 in 1925. The greatest part of the programme will be completed by the end of 1926. The one-family house for the poorer classes was unknown before the war, but of the above dwellings built since then 3,000 are of the cottage type."

Obviously the conference—which will probably comprise thirty or forty nations—intends to bring to the surface the land factor in the immense problem of the housing of working families and to face the monstrous evil of inflated land values, created by the enterprise of the community and collected everywhere by land speculators. The garden city movement has shown that the way out here is public ownership of land with long and practically perpetual leases of land set apart for homes. It has pointed the way to a reconsecration of the home idea, after the depredation and spoliation of the industrial era. More than one hundred years ago Goethe laid down his famous dictum "A town is prosperous through the land which it possesses more than through any other consideration. The last token of a good administration is that a town is going on buying land." Later we find the Prussian Government urging the towns to continue and extend their policy of land purchase. The British *Town Planning Journal* for January states that in forty-five German towns, with a population exceeding 100,000, the average ownership of the civic area is 25.2 per cent. In forty-seven, with a population between 50 and 100,000, the figure is 27.6 per cent. One town of 70,000 population has gradually acquired 84.3 of its area for public ownership. Everywhere the consciousness is dawning that traffic in land values, publicly created and privately reaped, is at the root of the immense national and international problem of the housing of the people.

There will be some plain speaking on this matter at the forthcoming conference.

#### A Great Statesman

We reproduce with much satisfaction two short articles from *The American City*. One shows that Governor Smith of New York State is recommending legislation for the provision of public credit at low rates of interest to limited dividend housing companies, after the British method of "Public Utility" housing, to facilitate decent housing for working families in New York State. The document shows that "the incentive of gain" in land speculation, building materials, and the use of money, have brought the Nemesis of killing the market for homes because working families can no longer afford to pay the price for decent housing.

In all parts of Europe the housing of working families has become a national concern. Private enterprise has left the whole matter in such a sordid mess of profiteering incompetency that new methods have had to be adopted in the interests of public health and national efficiency. In the investigation literature such phrases as "untold misery" occur again and again. The new methods involve the redemption of the land from speculative greed and traffic in publicly created land values, the use of national credit at low rates of interest, the restoration of the one-family home, the provision and preservation of room to live and the protection of home areas by town planning methods. All this is foreshadowed in Governor Smith's courageous proposals

and there is no doubt they forecast a radical departure from American traditional methods, as they indicate the leavening thought of a finely humanistic group of city planners and social reformers who care profoundly for the welfare of families "under \$2,500 a year."

The civilized mind of the world, turning from the ghastly waste of war and exalted by the hope that the humanistic leaders of the League of Nations will put an end to the insanity of war, is turning to the new-making and re-shaping of towns and cities, where most men and women pass their lives, and is determined to create a greater chance of happiness for the average person and especially for the multitude who do the work of the world in misery and despair. The new social philosophy is that the purpose of life in towns is not to provide the opportunity for a few persons to make more money than they knew how to spend and a dreary, ugly subsistence for the rest, but "to produce finer and finer types of civilization and civility—to build beautiful cities and to live in them beautifully."

A few weeks ago Mr Charles M. Schwab, President of the Bethlehem Steel Co., stated that America was the workshop of the world "and we are bringing health and happiness and a spirit of right living to all." Unfortunately, a State document, published last year, gives figures to prove that two-thirds of the population of New York are indecently housed, and that "the housing conditions for people of low and moderate income are worse than they have ever been in the past." The past comprised areas where 600 people were crowded on to one acre and Lawrence Veiller tells us there were 10,000 murders in America in 1923 and 11,000 in 1924, and that Chicago and other cities "beat the world at murder."

The humane and honest Governor of New York State believes that the greater statesmanship, as well as the nobler decency, is to face the truth, as the only chance of improving the home conditions of working families. The civilized mind is getting sick of boasting and boasting and demanding the decency of truth.

The second document shows that the American movement for national recreation, inaugurated two years ago by President Coolidge, is getting under way. Ten million dollars for the acquisition of new land for public recreation should bring some awakening to the Ottawa aldermen who wish to abolish the unpaid and finely public-spirited Playground Commission of Ottawa.

#### TO SIMULATE LOW-COST HOUSING

#### A Proposal for Limited Dividend Housing Corporations Aided by Public Credit and with Power of Condemnation.

*From the Annual Message to the New York Legislature, presented January 6, 1926.*

By Governor Alfred E. Smith.

Investigations and studies made by every type

of agency force us to the realization that the construction of certain types of homes for wage-earners of moderate income is unprofitable. The building of homes has been looked upon as an enterprise conducted like any other business in which the element of speculative profit has been operative. So long as this point of view is maintained it has been proved to be impossible to construct the homes we need or to rebuild the tenement areas, whether in New York City or elsewhere, which continue throughout the years to be a menace to the health and morals of the community.

One of the elements that has undoubtedly proved an obstacle to private capital for this class of housing has been the cost of borrowing money, and another is the slow and expensive process of acquiring sufficient land to conduct a profitable building operation on a large scale, and such building operations cannot be profitable except on a large scale.

If the state of New York is to maintain its position in the front rank of the progressive commonwealths of the country, after having taken the lead in enacting during the last twenty years progressive legislation along almost every other humane line, we cannot overlook the all-important problem of having the state lend its aid to the improvement of the living conditions of its people. Nothing that I can think of will go further to promote the health, comfort and morals of our people than wholesome and sanitary housing.

I have become convinced that if there is to be any satisfactory and reasonably speedy solution of the problem, the state must revise its laws to meet the situation. There are two prime essentials to the solution. The first is to provide for the borrowing of money at low rates of interest; the second is the use of the power of condemnation in order that large parcels of land may be acquired at reasonable prices.

To achieve these essentials, the state should provide by law for the incorporation of limited dividend corporations clothed with the power of condemnation, in order that the corporation may be in a position to construct modern dwelling houses upon square blocks at one time.

Power should be given to the respective municipalities to issue tax-exempt bonds the proceeds of which may be loaned to these limited dividend corporations. The extension of public credit is predicated upon the theory that these corporations are to perform a quasi-public service and are to submit to the regulation of the sovereign power as to the character of construction of buildings and amount to be charged as rent.

#### A State Housing Bank as an Alternative Plan

An alternative plan may be the creation of a State Housing Bank similar to the Federal Land Bank which was organized for the relief of farmers

suffering from much the same difficulties that our wage-earners are. While I am not familiar with the operation of the Federal land banks, I am given to understand that similar state banks could be organized to finance construction of family dwellings much after the plan adopted by the Federal Government for the relief of farmers.

Many competent lawyers are of the opinion that these results may be obtained without constitutional amendment but in order to leave no question about it, considering the importance of the step to be taken it might be well to provide the necessary amendments to the fundamental law that would leave the plan finally adopted beyond any possible pale of constitutional objection. I advise the enactment of such proposed amendments and the necessary legislation to accomplish these purposes.

—*American City.*

#### AN INSPIRATION AND A WARNING

Cities which have not yet attained metropolitan size may well be stimulated to increased activity in the acquisition of lands for park and playground development by what is now happening in New York City. A movement is under way for an appropriation by the city of \$30,000,000 for land alone, in the five boroughs of New York, for new parks and playgrounds. Of this imposing total, \$20,000,000 would be expended for major parks and parkway areas and \$10,000,000 for playground sites.

The proposal has the backing of the Metropolitan Conference of City and State Park authorities, organized "to advise as to connections and relations between state and local parks in the metropolitan region" and of an Advisory Committee of prominent citizens.

At a meeting in advocacy of this \$20,000,000 project, held at the City Club of New York on January 9, the importance of prompt and favorable action was forcibly presented by Robert Moses, Chairman of the State Council of Parks and by Jay Downer, Chief Engineer of the Westchester County Park Commission. Unless the areas and rights of way be acquired in the very near future, it was pointed out by Mr. Moses, their acquisition will be entirely impossible because of real estate speculation, building plans and other developments which already involve a considerable part of the areas under consideration.

Emphasis was given by Mr. Downer to the folly of the plans—or lack of plans—so common in American cities, whereby park development lags behind rapid transit extension, thus making the acquisition of lands for recreation purposes much more difficult and vastly more expensive than if undertaken at an earlier period of the city's history.

—*American City.*