

BUILDING CONTROL **PROCEDURES**

THE REGIONAL MUNICIPALITY OF SUDBURY

Procedures and Bldg Code Interpretation

1

1



Interoffice Correspondence

November 15, 1991

TO: INSPECTORS

FROM: B. A. FRANSEN

SUBJECT: BUILDING PERMIT ISSUANCE PROCEDURES

GUIDELINES

Clarification of work that is deemed not to be construction as defined in the Building Code Act and is exempt from the requirements to obtain a permit.

SCOPE

A building permit is not required for the following:

1. Wooden decks, with no roof, where the finished deck level is 600 mm (24") or less above finished grade.
2. Sky lights, provided not more than one rafter, joist, or other similar structure member is cut or removed.
3. Non-combustible cladding, excluding brick veneer.
4. Window and door replacement.
5. Add-on cooling systems, air cleaners, plenum heaters and in-line humidifiers.

....cont'd





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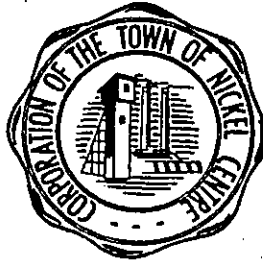
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....cont'd



190 CHURCH STREET
P.O. BOX 70
GARSON, ONT. P0M 1V0



PHONE 693-2771
FAX 693-2710



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CORPORATION OF THE TOWN OF NICKEL CENTRE

April 11, 1991

The Regional Municipality of Sudbury,
Bag 3700,
Station 'A',
Sudbury, Ontario.
P3A 5W5

Attention: Mr. Bernie Fransen,
Chief Building Inspector.

Dear Sir:

Please find listed below comments which will now be on all "Roads and Drainage Applications" by Nickel Centre for all new homes in subdivisions or where lot grading plans are part of the overall scheme.

"The builders shall contact a qualified or subdivision engineer to provide an acceptable written document regarding the basements and lot grading elevations"

"The Town of Nickel Centre also requires, as soon as basements are complete and back-filling can be done so as not to damage concrete work, rough lot grading to within 9" of final lot grade. Written approval from Nickel Centre is required to waive this provision. No other work beyond the basements completion should be allowed to commence without the above requirements being satisfied".

I trust you agree and can enforce these provisions and await your reply.

Yours truly,

Robt. J. Henderson
Robt. J. Henderson,
Project Superintendent.

1991.04.17.
C.C. Inspectors
Roger
Hi:
PROCEDURES
Bonus

APR 11 1991
4



DEVELOPMENT CHARGES CERTIFICATE

Pursuant to Subsection 10(5) of The Development Charges Act, S.O. 1989, Chapter 58

TO: The Treasurer of the _____

RE: Building Permit Application Number: _____

for the Construction of: _____

for the following property:

? { Municipal Address: _____

Street Address: _____

Roll No.: _____

Applicant's Name: _____

THIS IS TO CERTIFY THAT ALL APPLICABLE LAW WITHIN THE MEANING OF THE BUILDING CODE ACT, EXCEPT THE PAYMENT OF DEVELOPMENT CHARGES, HAS BEEN COMPLIED WITH FOR THE ABOVE BUILDING PERMIT. WE WILL BE IN A POSITION TO ISSUE THE PERMIT UPON RECEIPT OF YOUR CERTIFICATE THAT ALL REQUIRED PAYMENTS TO YOUR MUNICIPALITY FOR DEVELOPMENT CHARGES HAVE BEEN MADE.

DATE:

CHIEF BUILDING OFFICIAL
THE REGIONAL MUNICIPALITY OF SUDBURY

TO: THE CHIEF BUILDING OFFICIAL
THE REGIONAL MUNICIPALITY OF SUDBURY

THIS IS TO CERTIFY THAT ALL APPLICABLE DEVELOPMENT CHARGES FOR THE MUNICIPALITY AND FOR THE BOARDS OF EDUCATION HAVE BEEN RECEIVED AND IT WOULD NOW BE IN ORDER FOR THE ABOVE BUILDING PERMIT TO ^{Be} ISSUED.

DATE:

AREA MUNICIPAL TREASURER



Interoffice Correspondence

July 29, 1991

TO: ALL STAFF
FROM: B. A. FRANSEN
SUBJECT: CALCULATION OF BUILDING PERMIT FEES

As you are aware, Building Permit fees depend on the cost to construct a building.

For your information, the cost will include all of the expenditures to develop the property from the bottom of the footings to the completion of the building.

The cost that will not be included in the calculation of the Building Permit fee, include as follows:

1. Cost of the land
2. Cost of earth work
3. Cost of landscaping

All other work will be included in the calculation of the cost to construct.

B. A. FRANSEN, P. ENG.,
DIRECTOR, BUILDING CONTROLS,
BAF/dn



Interoffice Correspondence

July 29, 1991

TO: BUILDING INSPECTORS ✓
PLANS EXAMINER
JIM WILKIN

FROM: B. A. FRANSEN

SUBJECT: COMMENTS RESPECTING MOVING BUILDINGS
ONTO EXISTING PROPERTIES

Persons should be advised that a Building Permit is required before they move a building onto an existing/vacant property. There are a number of approvals that have to be acquired before the building can be moved and these may include the requirements of the Sudbury & District Health Unit.

The Ontario Building Code reads as follows:

2.1.1.7 EXISTING BUILDINGS

- (1) Except as provided in Part 11, where an existing building is extended or subject to material alteration or repair, the Code is applicable only to the design and construction of the extensions and those parts of the building that are subject to the material alteration or repair.
- (2) Where an existing previously occupied building is moved from the original location to be installed elsewhere, or is dismantled at the original location and moved to be reconstituted elsewhere, the Code applies only to changes to the design and construction of the building required as a result of moving the building.

By virtue of the aforementioned Code requirements, each of the projects involving existing buildings will be dealt with on its own merit.

cont'd....

CONCLUSION:

Inspectors should be advising applicants that they may move buildings onto vacant existing lots only after they have acquired a Building Permit.



B. A. FRANSEN, P. ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/dn
cc: R. O'Malley



City of Sudbury
Ville de Sudbury

SAG/SAC 5000, STATIONS/SUCCURSALE "A", 200 RUE BRADY STREET, SUDBURY, ONTARIO P3A 5P3

(705) 674-3141

FAX: (705) 673-3096

1991-07-11

Mr. Bernie Fransen
Regional Building Controls Dept.
Regional Municipality of Sudbury

Dear Sir:

Re: Development Charges By-law 91-150
City of Sudbury

Attached for your information is a certified copy of By-law 91-150 regarding development charges which By-law was passed by City Council at its meeting of July 10th, 1991.

Yours truly,

W.F. Dean
City Solicitor

WFD/dmd
Attach.

RECEIVED

JUL 12 1991

BUILDING CONTROLS
DEPARTMENT

BY-LAW 91-150

**BEING A BY-LAW OF THE CORPORATION OF THE CITY OF SUDBURY
RESPECTING DEVELOPMENT CHARGES**

WHEREAS the City of Sudbury has and will continue to experience growth through Development;

AND WHEREAS Development requires the provision of physical and other services by the City;

AND WHEREAS Council desires to ensure that the Capital Cost of meeting the growth related demands for, or the burden on municipal services does not place a financial burden on the City or its existing taxpayers while, at the same time, ensuring new taxpayers contribute no more than the Net Capital Cost attributable to providing the current level of municipal services;

AND WHEREAS the Development Charges Act, 1989, S.O. 1989, c. 58 permits Councils to pass by-laws for the imposition of Development Charges if Development of land within the City is for uses which would increase the need for municipal services and any one or more of the actions set out in sub-section 3(1) of the Act as required for such Development;

AND WHEREAS the City has undertaken a study of, among other matters, services, expected growth, growth related facilities and the costs thereof;

AND WHEREAS Council had before it a report entitled the "Development Charges Study, City of Sudbury Draft Final Report" submitted by Morehouse Economic Planning Consultants (a division of MEPC Consultants Inc. and hereinafter referred to as "Morehouse") dated March, 1990, (the "Study");

AND WHEREAS the Study was disseminated to the public and Council gave notice to the public and held a meeting pursuant to Section 4 of the Act on May 1st, 1990, at which information was provided to the public concerning the Development Charges proposal of the City and Council heard comments and representations from the public (the "First Public Meeting");

AND WHEREAS following the First Public Meeting, Morehouse reconsidered the Study in light of the public representations among other matters;

AND WHEREAS Council had before it a further report from Morehouse dated May, 1991 (the "Report");

AND WHEREAS Council gave to the public an opportunity to review the Report and also give notice to the public in accordance with Section 4 of the Act of its intention to consider the Report and, if thought appropriate, enact a by-law under Section 3 of the said Act (the "Second Public Meeting");

AND WHEREAS Council held the Second Public Meeting on May 28, 1991, and Council received the comments and representations of the public concerning the Report and the proposed by-law to be enacted under the Act;

AND WHEREAS Council gave to the public a further opportunity to review the Report and also gave notice to the public in accordance with Section 4 of the Act of its intention to consider the Report and, if thought appropriate, enact a by-law under Section 3 of the said Act (the "Third Public Meeting");

AND WHEREAS Council held the Third Public Meeting on June 25, 1991, and Council received the comments and representations of the public concerning the Report and the proposed by-law to be enacted under the Act;

AND WHEREAS Council enacted the following resolution:

"THAT the City Solicitor be authorized to prepare a Development Charges By-law incorporating the recommendations of the Morehouse Report and the recommendations of the report dated June 18th, 1991, from the Commissioner of Finance and Administration, and further that this by-law be presented for approval at the Council meeting of July 10th, 1991, with the by-law becoming effective August 1, 1991";

AND WHEREAS Morehouse updated the Report to incorporate the changes authorized by Council, which "Final Report" is dated June, 1991;

NOW THE COUNCIL OF THE CORPORATION OF THE CITY OF SUDBURY HEREBY ENACTS AS FOLLOWS:

1. In this by-law, and including the recitals, capitalized words have the following meaning:

- (a) "Act" means the Development Charges Act, 1989, S.O. 1989, c. 58;
- (b) "Board of Education" has the same meaning as that specified in sub-section 29(1) of the Act;
- (c) "Building Code Act" means the Building Code Act, R.S.O. 1980, c. 51, as amended;
- (d) "Capital Cost" means costs incurred or proposed to be incurred by the City or a local board thereof directly or under an agreement,
 - (i) to acquire land or an interest in land,
 - (ii) to improve land,
 - (iii) to acquire, construct or improve buildings and structures;

- (iv) to acquire, construct or improve facilities including,
 - (A) rolling stock, furniture and equipment, and
 - (B) materials acquired for circulation, reference or information purposes by a library board as defined in the Public Libraries Act, 1984 S.O. 1984, c. 57, and
- (v) to undertake studies in connection with any matter under the Act and any of the matters in clauses (i) to (iv),

required for the provision of services designated in this by-law within or outside the City, including interest on borrowing for those expenditures under clauses (i), (ii), (iii) and (iv) that are growth-related;

- (e) "City" means The Corporation of the City of Sudbury;
- (f) "Council" means the Council of the City;
- (g) "Development" includes redevelopment;
- (h) "Development Charge" means a charge imposed with respect to Net Growth Related Capital Costs against land in the City under this by-law;
- (i) "Dwelling Unit" means any part of a building or structure used, designed or intended to be used as a domestic establishment in which one or more persons may sleep and prepare and serve meals;
- (j) "Education Development Charge" means a development charge imposed under a by-law passed under Section 30 of the Act respecting growth related net education capital costs incurred or proposed to be incurred by a Board of Education;
- (k) "First Intensity Residential" means those lands on which are or will be constructed one- or two-unit dwellings or one or two Dwelling Units;
- (l) "Front Ending Agreement" means an Agreement made under Section 21 of the Act;
- (m) "Gross Floor Area" means the total area of all floors above grade of a Dwelling Unit measured between the outside surfaces or exterior walls or between the outside surfaces of exterior walls and the centre line of party walls dividing the Dwelling Unit from another Dwelling Unit or other portion of a building;
- (n) "Growth Related Net Capital Cost" means the portion of the Net Capital Cost of services that is reasonably attributable to the need for such Net Capital Cost that results or will result from Development in all or a defined part of the City;

- (o) "Local Services" means those services, facilities or things which are under the jurisdiction of the City and are within the boundaries of, abut or are necessary to connect lands to Services and an application has been made in respect of the lands under Sections 40, 50 or 52 of the Planning Act;
- (p) "Net Capital Cost" means the Capital Cost, less capital grants, subsidies and other contributions made to the City or that the Council of the City anticipates will be made, including conveyances or payments under Sections 41, 50 and 52 of the Planning Act in respect of the Capital Cost;
- (q) "Official Plan" means the Official Plan of The Regional Municipality of Sudbury for the City of Sudbury Planning Area and any amendments thereto;
- (r) "Owner" means the owner of land or a person who has made application for an approval for the Development of land upon which a Development Charge is imposed;
- (s) "Planning Act" means the Planning Act, 1983, S.O. 1983, c. 1, as amended;
- (t) "Rate" means the interest rate established weekly by the Bank of Canada for Treasury Bills having a term of 30 days;
- (u) "Region" means The Regional Municipality of Sudbury;
- (v) "Regulation" means any regulation made pursuant to the Act;
- (w) "Residential Use" means land or buildings or structures of any kind whatsoever used, designed or intended to be used as living accommodations for one or more individuals;
- (x) "Second Intensity Residential" means those lands on which are or will be constructed three-, four-, five-, or six-unit dwellings or three, four, five or six Dwelling Units;
- (y) "Semi-Detached Dwelling" or "Row Dwelling" means a residential building consisting of one Dwelling Unit having one or two vertical walls, but no other parts, attached to another structure;
- (z) "Senior Citizens' Housing Units" means any Residential Use declared by resolution of Council to be senior citizens' housing;
- (aa) "Services" means those services designated in Schedule "A" to this by-law or specified in an agreement made under Section 21 of the Act;

- (ab) "Servicing Agreement" means a servicing agreement, subdivision agreement, condominium agreement or other similar agreement entered into between an Owner and the City before this By-law was enacted;
- (ac) "Single Detached Dwelling Unit" means a residential building consisting of one dwelling unit and not attached to another structure;
- (ad) "Subsidized Housing Units" means any Residential Use declared by resolution of Council to be subsidized housing;
- (ae) "Third Intensity Residential" means those lands on which are or will be constructed more than six-unit dwellings or six Dwelling Units;

2. (a) This by-law applies to all lands in the City of Sudbury, whether or not the land or use thereof is exempt from taxation under Section 3 of the Assessment Act, R.S.O. 1980, c. 31 except that this by-law does not apply to those areas described in Schedule "C" to this by-law.

(b) Notwithstanding subsection 2(a) above, this by-law does not apply to the Development of land that is owned by and used for the purposes of:

- (i) a Board of Education;
- (ii) the City or any local board thereof; and
- (iii) the Region or any local board thereof.

3. (a) Subject to subsection 3(b), Council hereby determines that the Development of land, buildings or structures for a Residential Use have required or will require the provision, enlargement, expansion or improvement of the Services.

(b) Subject to subsections 3(c) and (d) below, no Development Charge is payable where the Development:

- (i) is an enlargement of an existing Dwelling Unit,
- (ii) creates one or two additional Dwelling Units in an existing Single Detached Dwelling, or
- (iii) creates one additional Dwelling Unit in any existing residential building other than a Single Detached Dwelling.

(c) Notwithstanding subsection 3(b) above, a Development Charge shall be imposed where:

- (i) the total Gross Floor Area of the additional one or two Dwelling Units exceeds the Gross Floor Area of the existing Single Detached Dwelling, and
- (ii) in determining the Gross Floor Area of the existing Single Detached Dwelling, the Gross Floor Area shall be the maximum Gross Floor Area in the three years preceding an application for a building permit in respect of the additional one or two Dwelling Units.

(d) Notwithstanding subsection 3(b) above, a Development Charge shall be imposed if the additional Dwelling Unit has a Gross Floor Area greater than:

- (i) in the case of the Semi-Detached or Row Dwelling, the Gross Floor Area of the existing Dwelling Unit, and
- (ii) in the case of any other residential building, the Gross Floor Area of the smallest Dwelling Unit contained in the residential building; and
- (iii) in determining the Gross Floor Area of the Semi-Detached or Row Dwelling or of the smallest Dwelling Unit in a residential building, the Gross Floor Area shall be the maximum Gross Floor Area in the three years preceding the application for a building permit in respect of the one additional Dwelling Unit.

(e) Subject to subsection 3(f) below, and to any other terms and conditions imposed by Council, Development of land for either Subsidized Housing Units or Senior Citizens' Housing Units shall be required to pay fifty percent (50%) of the Development Charge imposed on such Development by this by-law for so long as the principal use of the land remains Subsidized Housing Units or Senior Citizens' Housing Units or both. Combined Seniors and Subsidized Housing Units shall be entitled to only one reduction of fifty percent (50%).

(f) The Treasurer shall not accept payment of a Development Charge reduced under subsection 3(e) unless the Owner has agreed, in an agreement made under Sections 40, 50 or 52 of the Planning Act that if the land for which the reduction was made under subsection 3(e) is used in the future for a purpose other than Subsidized Housing Units or Senior Citizens' Housing Units, then the Owner, before any approval is given for such change in use, shall pay:

- (i) the balance of the Development Charge that otherwise would have been payable but for subsection 3(e); and
- (ii) the difference between the aggregate of the Development Charge paid under subsection 3(e) and clause 3(f)(i) and any Development Charge applicable at the time of such change in use.

(g) Notwithstanding subsection 3(e) above, where the Development of land includes a mix of market and Seniors or Subsidized Housing Units, that portion of the Development not composed of Subsidized Housing Units or Senior Citizens' Housing Units shall be subject to one hundred percent (100%) of the Development Charge imposed by Section 4, and subsection 3(e) shall apply to that portion of the Development comprised of Subsidized Housing Units or Senior Citizens' Housing Units or both.

4. To defray the Growth Related Net Capital Cost of providing, enlarging or expanding the services shown in Schedule "A", Council hereby imposes Development Charges upon the following Categories of Residential Uses of land, buildings and structures:

First Intensity Residential:	\$4,360.00
Second Intensity Residential:	\$3,343.00
Third Intensity Residential:	\$2,633.00

5. (a) The Development Charge shall be calculated as of the date a building permit under the Building Code Act is issued in respect of the building or structure for the use to which the Development Charge applies.

(b) If the Treasurer of the City has received a certificate from the Chief Building Official of the Region that the building or structure for which a Development Charge is payable under subsection 5(a) complies with all applicable law within the meaning of the Building Code Act, then, provided the Treasurer has received payment of any Development Charge of the Region and the City and any Education Development Charge as may be applicable, the Treasurer shall certify to the said Chief Building Official that the Development Charge has been paid.

(c) If a Development requires more than one of the actions mentioned in clauses 3(1)(a) to (g) of the Act and a Development Charge has been paid in respect of one such action, a further Development Charge shall be payable in respect of the subsequent action where the subsequent action has the effect of increasing the need for Services.

(d) Notwithstanding subsection 5(a) above, where a Development requires an approval mentioned in clauses 3(1)(a) to (f) inclusive of the Act, after the issuance of a Building Permit and no Development Charge has been paid, then the Development Charge shall be paid prior to the approval required by clauses 3(1)(a) to (f).

6. Nothing in this by-law prevents Council from requiring, as a condition of approval under Section 40, 50 or 52 of the Planning Act that the Owner, at his or her own expense, install such Local Services as Council may require or that local connections to storm drainage facilities be installed at the Owner's expense.

7. Notwithstanding Section 4, the Development Charge payable shall be in accordance with Schedule "B".

8. (a) Council, by written agreement, may permit an Owner to commute all or part of the Development Charge by the provision of one or more services in lieu, provided such services in lieu are at a standard that is equal to but not greater than the standard for the equivalent Service for which a Development Charge is payable hereunder. Such agreement shall provide further for a credit equal to the reasonable cost to the Owner of providing the service in lieu, provided that the credit shall not exceed the amount determined when the Development Charge is multiplied by the applicable percentage in subsection 10(c).

- (b) Council, by written agreement, also may permit an Owner to:
 - (i) provide Local Services;
 - (ii) construct Services in advance of otherwise being required; or
 - (iii) construct Services of a greater size or capacity than would be required otherwise.

Such an agreement shall provide further for a credit to the Owner who provided such Local Services or advanced or oversized Services equal to the reasonable cost to the Owner of providing such Local Services or advanced or oversized Services, provided the credit shall not exceed the amount determined when the Development Charge is multiplied by the applicable percentage in subsection 10(c) and provided further the Owner owns the land to which the Development Charge is applicable on the date each building permit is sought.

(c) Any dispute as to the reasonable cost of providing the services in lieu under subsection 8(a) or the services mentioned in subsection 8(b) shall be referred to Council whose decision shall be final and binding.

9. A copy of this by-law shall be registered in the by-law register in the Land Registry Office against all lands in the City.

10. (a) This by-law shall be administered by the Treasurer and the Director of Development, Property and Traffic Services of the City.

(b) Council directs the Treasurer to create a reserve fund separate from the other reserve funds of the municipality. The Treasurer shall deposit the Development Charges paid under this by-law into the appropriate subaccount of the reserve fund created by subsection 10(c) and shall pay from the appropriate subaccount any amounts necessary to defray the Net Capital Cost of the Services.

(c) Council further directs the Treasurer to divide the reserve fund created hereunder into the following separate subaccounts to which Development Charge payments and interest earned thereon shall be credited in the percentages shown opposite the name of the subaccount:

<u>Account Name</u>	<u>Percentage</u> (%)
Parks	8.8
Recreation	44.9
Library Services	8.7
Fire Protection	1.3
Transit	7.6
Roads and Sidewalks	20.4
Storm Drainage	5.6
Public Works	
Building	2.7

(d) The amounts contained in the reserve fund established under Section 10 of this by-law shall be invested in accordance with subsection 165(2) of the Municipal Act, R.S.O. 1980, c. 302, as amended, and any income received from such investment shall be credited to the subaccounts in the said reserve fund in the proportions provided for in subsection 10(c) of this by-law.

(e) Any costs incurred by virtue of clause 1(d)(v) shall be charged to the subaccounts in the said reserve in the proportions provided for in sub-section 10(c) of this by-law.

(f) The Treasurer of the City shall furnish to Council, in each year on or before the 31st day of March, a statement in respect of the reserve fund established hereunder containing the information required under the Regulation.

11. If, before the coming into force of this by-law, an Owner or former Owner, pursuant to a Servicing Agreement:

- (a) has paid a charge related to a Development of land within an area to which this by-law applies; or
- (b) has provided services in lieu of payment of all or part of a charge in relation to a Development of land within an area to which this by-law applies;

then the Owner or former Owner shall be given a credit against the Development Charge payable hereunder equal to the amount paid in subsection 11(a) or the reasonable cost of the services in lieu in subsection 11(b) as the case may be, provided such credit shall not exceed the Development Charge payable for the development.

12. (a) If this by-law is amended or repealed by Council or the Ontario Municipal Board, the Treasurer shall determine within 30 days of the amendment or repeal whether any Owner has overpaid in respect of the Development Charge payable hereunder immediately prior to the repeal or amendment of this by-law and if such an overpayment has been made, the Treasurer shall calculate the amount of such overpayment.

(b) Any overpayment determined under subsection 12(a), shall be paid to the Owner who made the payment or on whose behalf the payment was made within 30 days of the date of the repeal or amendment of this by-law.

(c) If the Owner cannot be found or the last address of the Owner is unknown then the repayment obligation under subsection 12(b) is at an end.

(d) The refund payable under subsection 12(b) shall be paid with interest calculated from the date upon which the overpayment was collected to the date on which the refund is made. Such interest shall be paid at the Rate in effect from time to time from the date of enactment of this by-law as adjusted in subsection 12(e).

(e) The Rate in effect on the date of enactment of this by-law shall be adjusted on the first business day of January, 1992, to the Rate to be applicable on that day and thereafter the Rate shall be adjusted four times each year on the first business days of April, July, October and January to the Rate applicable on the day of the adjustment.

13. (a) By-law 89-62 is hereby repealed effective on the date this by-law comes into force.


(b) Notwithstanding subsection 13(a), any agreement made under Section 50 or 52 of the Planning Act before the date this by-law comes into force shall remain in full force and effect and be enforceable according to its terms.

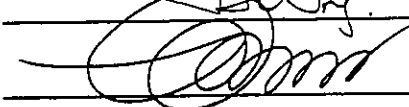
14. Council, from time to time and at any time, may enter into Front Ending Agreements under the Act.

15. This by-law shall continue in force and effect for a term not to exceed five (5) years from the date of its coming into force.

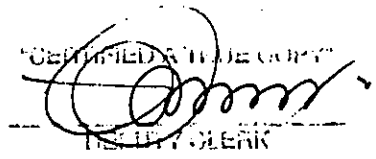
16. This by-law comes into force and takes effect on the 1st day of August, 1991.

READ THREE TIMES AND FINALLY ENACTED AND PASSED IN OPEN COUNCIL THIS 10TH DAY OF JULY, 1991.



Mayor


Clerk


"CERTIFIED TRUE COPY"

CLERK

SCHEDULE "A"

TO BY-LAW 91-150

SERVICE	% OF GROWTH IN SERVICES ATTRIBUTABLE TO RESIDENTIAL USE
FIRE PROTECTION SERVICES	
Kelly Lake Road/Lorne Street Fire Hall	69
STORM DRAINAGE	
Blyth/Colby Storm Sewer Phase 3	69
Hawthorne Dr. Claudia Court Outlet	69
Alder Street Area Sewer System (Phase 2)	69
Galway Court Sewer System	69
Berkley Court Storm Sewer	69
Blyth/Colby Storm Sewer Phase 4	69
Redfern St. Storm Sewer Phase 2	69
Marcel St. Storm Sewer	69
Lake Point Crt. Storm Sewer	69
Baycrest Area Storm Sewer System	69
Kaireen St. Storm Sewer	69
Nepahwin Ave. Storm Sewer Outlet	69
Mountain St./Leslie St. Storm Sewer Upgrading	69
Nolin St. Storm Sewer	69
Manor Rd. Storm Sewer Outlet	69
Fourth Avenue Storm Sewer	69
Blyth/Colby Storm Sewer Phase 5	69
Brenda Dr. Storm Sewer	69
North Shore Dr. Storm Sewer	69
Dublin St. Storm Sewer	69
Muriel Cres./Louisa Dr. Storm Sewer	69
Alexander Area Storm Sewer System (Phase 2)	69
Sable Street Area Storm Sewer	69
Harrison Dr. Area Sewer System	69
Blythe/Colby/Field Area Drainage System (Phase 1)	69
Alder Street Area Sewer System (Phase 1)	69
ROADS AND SIDEWALKS	
Churchill Ave. (Gemmell to Hawthorne) (Phase 2)	69
Holland Road Reconstruction	69
Lamothe St. Reconstruction	69
Hawthorne Dr. Reconstruction	69
Mountain St. Upgrading	69
Alexander St. Reconstruction	69
Algonquin Road Reconstruction (Phase 1)	69
Charlotte Street	69
McKim Street	69
Algonquin Road Reconstruction (Phase 2)	69
Attlee Ave. Upgrading	69
Hawthorne Drive Upgrading Phase 1	69
South Bay Road Upgrading	69
Lauzon Ave. Reconstruction	69
Hudson St. Reconstruction	69
Wilfred St. Reconstruction	69
Third Ave. Reconstruction	69
Kirkwood Dr./Ramsey Lake Rd. Upgrading	69
Hawthorne Dr. Upgrading Phase 2	69
Sunnyside Rd. Upgrading	69
South Shore Road Upgrading	69

Schedule "A" to By-law 91-150 cont'd

SERVICE	% OF GROWTH IN SERVICES ATTRIBUTABLE TO RESIDENTIAL USE
Riverside Upgrading	69
Wembley Dr. Upgrading - Phase 1	69
Nepahwin Ave. Reconstruction	69
Weller St. Reconstruction	69
Mooney St. Reconstruction	69
Neelon Ave. Reconstruction	69
Mildred St. Reconstruction	69
South Bay Rd. Upgrading	69
Huntington/Courtland Upgrading	69
Hunter St. Reconstruction	69
Fourth Ave. Reconstruction	69
Armstrong St. Reconstruction	69
Lansing Ave. Upgrading	69
Algonquin - Phase 3	69
Brenda Dr. Reconstruction	69
Wembley Dr. Upgrading - Phase 2	69
Douglas St. Upgrading (Regent to Albinson)	69
Soloy Drive (Beatrice to Attlee)	69
Tanguay Ave. (Levis to South End)	69
Westmount Ave. (Barrydowne to Attlee)	69
Bancroft Dr. (Levesque to Moonlight)	69
Dublin St. Reconstruction	69
Attlee Ave. Reconstruction	69
Josephine St. Reconstruction	69
Carmelo Ave. Reconstruction	69
Grandview Blvd. Upgrading	69
Caron St. Road Improvement	69
Lavoie St. Reconstruction	69
Hawthorne St. Reconstruction	69
Agnes St. Bridge	69
Walford Road Reconstruction	69
Lillian Blvd. Reconstruction	69
Madelaine Ave. Reconstruction	69
Madison Ave. Reconstruction (Phase 1)	69
Sidewalks	
Grandview Blvd.	69
Kingsway	69
Paris St.	69
Regent (Martindale/Bouchard)	69
Bouchard St.	69
Falconbridge Rd. (Barrington to Auger)	69
Falconbridge Rd. (Extendicare to Barrington)	69
Lamothe St. (Lasalle Secondary to Prestige Place)	69
Ramsey View Court (Regent to Centennial)	69
Brady St. (Douglas St. to Northbury Hotel) (Phase 1)	69
Brady St. (Douglas St. to Riverside) (Phase 2)	69
Elm St. (Ethelbert to Brodie)	69
Falconbridge Rd. (Auger to Nickel District School)	69
Boland Ave. (Lambton to Paris)	69

SERVICES	% OF GROWTH IN SERVICES ATTRIBUTABLE TO RESIDENTIAL USE
Fieldhouses Community Centres Ball Diamonds Tennis Courts Outdoor Skating Rink Ski Hill Day Camp Soccer/Football Field Indoor Pools Wading Pools Beaches Playgrounds/ Tot Lots (56.5 acres) Park Offices (Kathleen St.) Floodlighting	100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100
PARKS Bell Park Upgrading & Waterfront Development Bell Park/Science North Pedestrian Walkway South End Passive Park Development North End Passive Park Development East End Passive Park Development Nepahwin Park Facility Parkland Acquisition Bell Grove Park Upgrade Bell Park City-Wide Parks Major (Fields) Minor (Fields) Passive Neighbourhood Tot Lot Total Parkland	100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100
LIBRARY SERVICES Needs Assessment Survey Library Facilities Expansion New Branch Library New Main Branch Main Copper Cliff Branch Books and Material	100 100 100 100 100 100 100

Handwritten signatures and initials.

SCHEDULE "B"

TO BY-LAW 91-150

Notwithstanding Section 4 of the By-law:

1. From the date this By-law comes into force, to and including the 31st day of December, 1991, the Development Charge payable hereunder for:

(i) First Intensity Residential shall be \$1,090.00 per unit;

(ii) Second Intensity Residential shall be \$1,090.00 per unit;

(iii) Third Intensity Residential shall be \$1,090.00 per unit.

2. From the 1st day of January, 1992, to the 31st day of December, 1993, the Development Charge payable hereunder for:

(i) First Intensity Residential shall be \$2,180.00 per unit;

(ii) Second Intensity Residential shall be \$1,670.00 per unit;

(iii) Third Intensity Residential shall be \$1,320.00 per unit.

3. From the 1st day of January, 1994, to the 31st day of December, 1994, the Development Charge payable hereunder for:

(i) First Intensity Residential shall be \$3,270.00 per unit;

(ii) Second Intensity Residential shall be \$2,510.00 per unit;

(iii) Third Intensity Residential shall be \$1,970.00 per unit.

4. From and after the 1st day of January, 1995, the Development Charge payable shall be as set out in Section 4 of the By-law.

91-150

*Barry
C. M. M.*

SCHEDULE "C"

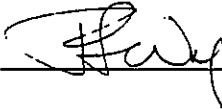
TO BY-LAW 91-150

The exemption provided for in Section 2(a) and this Schedule for the areas of the City described below is intended as an interim exemption for no more than five (5) years only and it is not intended to be continued in future by-laws.

1. All lands within Plan of Subdivision 53M-1195.
2. All lands within Plan of Subdivision 53M-1196.
3. All lands within Plan of Subdivision 53M-1197.
4. All lands within Plan of Subdivision M-998
5. All lands within Plan of Subdivision M-1014.
6. Lots 25 to 130 inclusive of Plan of Subdivision M-1003.
7. Lots 1 to 40 inclusive of Plan of Subdivision M-1061.

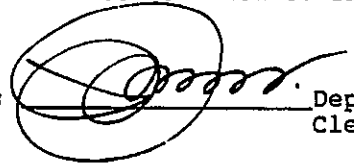
THIS IS SCHEDULE "C" to BY-LAW 91-150 OF THE CORPORATION OF THE CITY OF SUDBURY

Per: _____



Mayor

Per: _____

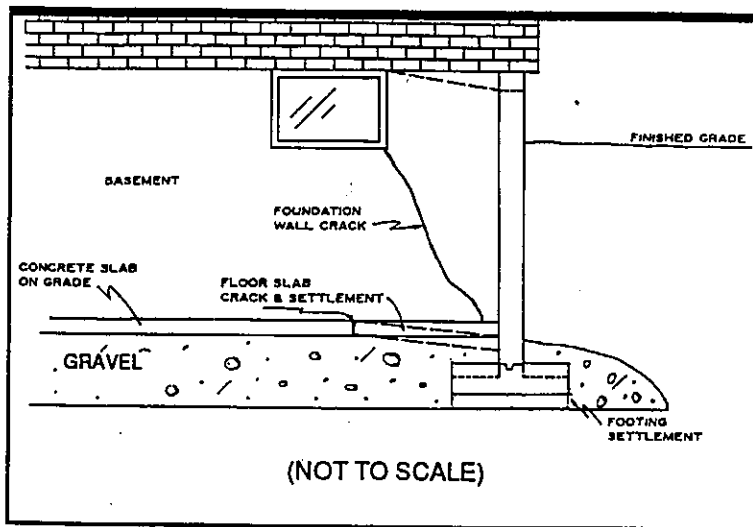


Deputy
Clerk

Building Smart

TECHNICAL ADVICE FOR THE BUILDING INDUSTRY

PROPER SOIL SUPPORT A VITAL CONSIDERATION BEFORE CONSTRUCTION



Soil settlement can severely damage houses after construction. Such damage is the result of very soft soil existing undetected at a depth below the house foundations.

These problems can be avoided by ensuring that house foundations are constructed on

soil capable of providing adequate support.

This issue of *Building Smart* looks at the bearing (support) capability of the soils in Ontario. Look for future issues on avoiding foundation drainage problems and frost damage. The foundation should be



ABOVE: Geological maps like this from Energy Mines and Resources Canada provide valuable information.

LEFT: Typical house foundation distress pattern caused by poor soil support.

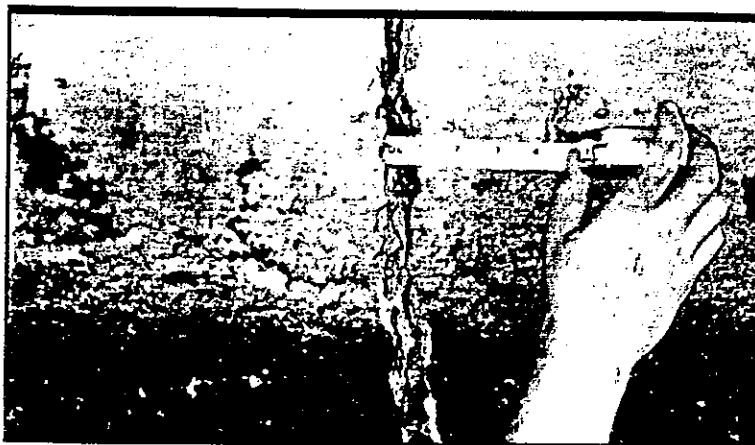
compatible with the soil at the construction site. Compatibility can be assured through a teamwork approach involving the builder, the building inspector, local consultants and the Ontario New Home Warranty Program.

Maps helpful

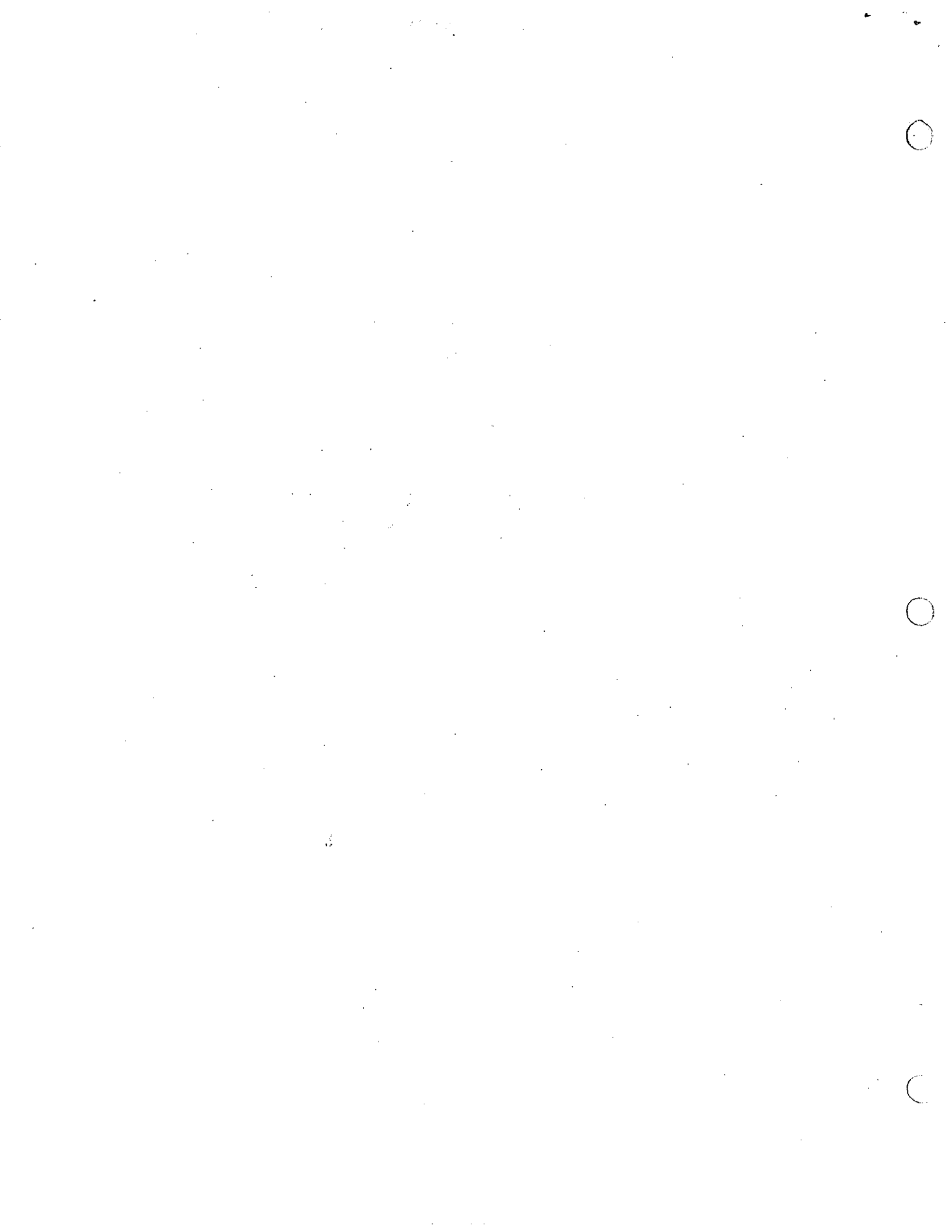
Some assistance in determining soil type and conditions at the site is available from Energy Mines and Resources Canada, which publishes maps of the surface geology for most urban centers and surrounding rural areas.

Information is also available from Agricultural Soils Maps, from your local building inspection department or from geotechnical consultants.

Another potential source of information is the soils investigation which may have been done for the servicing of the development. ▼



Consequence of soil settlement: Severe foundation damage.



Avoid potential problems

The plan of subdivision for potential housing should be prepared in conjunction with a soils investigation to identify:

- 1) Soil types;
- 2) Past land uses;
- 3) Possible constraints to the foundation design;
- 4) Possible constraints to the site grading.

size of the development, it's always prudent to have the foundation soil inspected by an experienced geotechnical person, prior to pouring the concrete.

This simple one- or two-visit inspection can be done for about \$350 in or near urban areas. That's a lot less expensive than repairing the damage that soil settlement can inflict on a completed house.

Surface tests such as the "thumb" test, the "pointed stake" test or the "heel" test can only assess the exposed surface soil. Since you need to know about

the soil at some depth below the foundation, a more penetrating test is needed.

To test soil at depth, excavate a test hole outside the area of influence of the house, or augur a test hole from within the house excavation by hand (photo, right).

Such test holes can be accompanied by soil strength measurements where weak soil is encountered or suspected.

On the next page are descriptions of significant soil types, together with an outline of some of the potential problems associated with each.



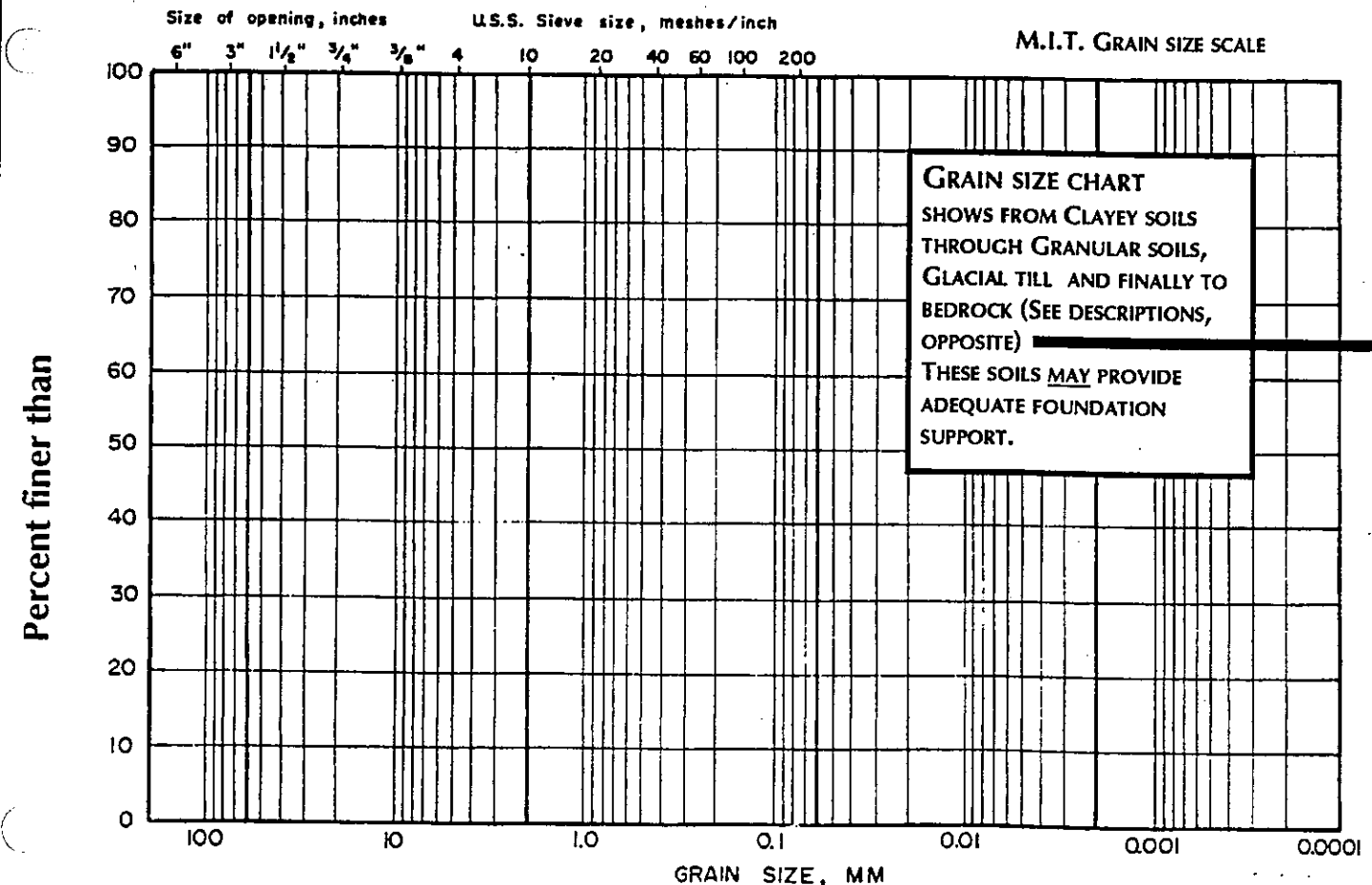
Auguring a test hole.

(The notes appear in the order of those which are most likely to cause problems.) ▼

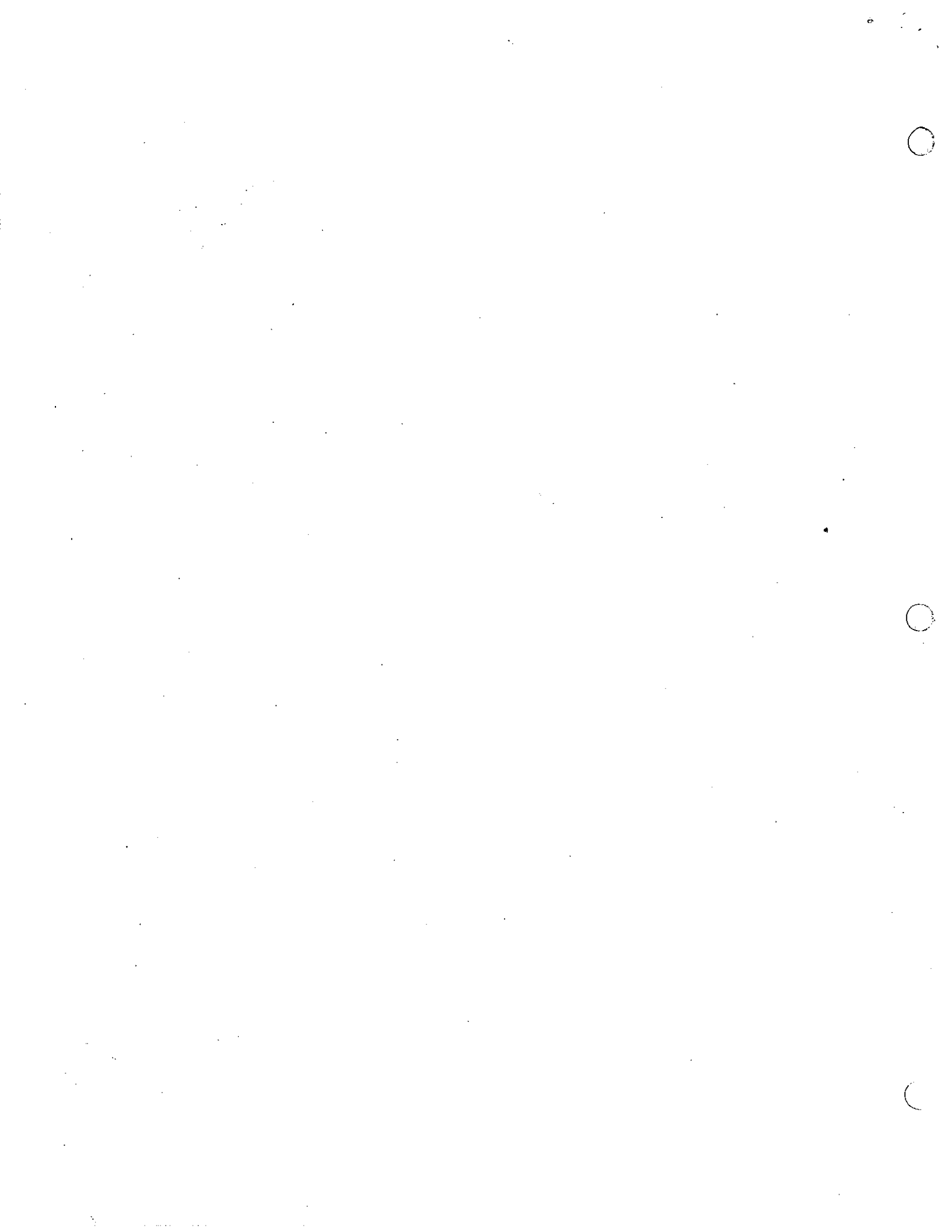
These investigations can be relatively simple and inexpensive — for example a series of backhoe-dug test holes, possibly with strength measurements.

Regardless of the location or

GRAIN SIZE DISTRIBUTION



COBBLE SIZE	COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE	SILT SIZE	CLAY SIZE
	GRAVEL SIZE			SAND SIZE			FINE GRAINED	



Know the soils in your area

Fill

Fill is any soil that has been moved to where it is. It usually relates to previous uses of the site. Fill materials are variable, have unknown origins, and have usually been placed without control.



Potential problems:

- Loose and variable — generally not suitable for support.
- Response under footing loads is variable and unpredictable.
- Identification difficult; may be contaminated environmentally.

Fill should not be placed below footings without guidance from a consultant. Its suitability cannot be assessed after it has been placed. An alternative is to fill overexcavated areas with concrete.

Organic Soils (Topsoil, Peat, Alluvium)

These soils generally exist at the surface of natural deposits and may contain elements of the soil underneath (in the case of topsoil and alluvium) as well as organic constituents.

Potential problems:

- Generally soft, loose and compressible
- Compression under load is irregular
- The soil's ability to support weight is reduced as the soil collapses to fill the voids created by the decay of its organic material.
- Combustible gases may form as the organic material decays.

Clayey Soils (Silty Clay, Clayey Silt)

These soils may range widely in both sensitivity and strength, which may be very much reduced once disturbed by excavation. Most clay deposits have an upper stiff weathered crust with much softer clay underneath. The tough crust is used in designing footings that spread the footing loads onto the underlying softer clay.

When considering house foundations on clay deposits, consider all the influences. These influences together must not reduce the clay's ability to support the load:

- Loads from the house structure itself
- Loads from the fill used to grade around the house
- The effects of groundwater lowering, which is often associated with housing developments.

Potential problems:

- Foundation design may not have considered the strength of the softer clay below the weathered crust, or all of the loads to be imposed by the planned construction. The result could be significant soil settlement in the long term.

- May be disturbed by ponded water, construction traffic or frost, resulting in unplanned settlement after construction.

Granular Soils (Sands, Silty Sands, Silts)

Granular soils may be poorly graded (uniformly sized) or may be well (broadly) graded soil. They may be layered or relatively homogeneous. If thick and extensive, granular soils should provide an adequate subgrade for house foundations.



Potential problems:

- Above the water table, granular soils may become loosened during the excavation process, requiring recompaction.
- Excavation below the groundwater level results in loss of ground, disturbance to the subgrade and loss of support.
- May clog perimeter drainage systems. Adequate basement drainage under these conditions may be impractical and a better approach is to always build above the water table.

Glacial Till (Hardpan)

Glacial till is a mixture of all grain sizes. If it's not in a naturally loose condition, it should provide an adequate subgrade for foundations.

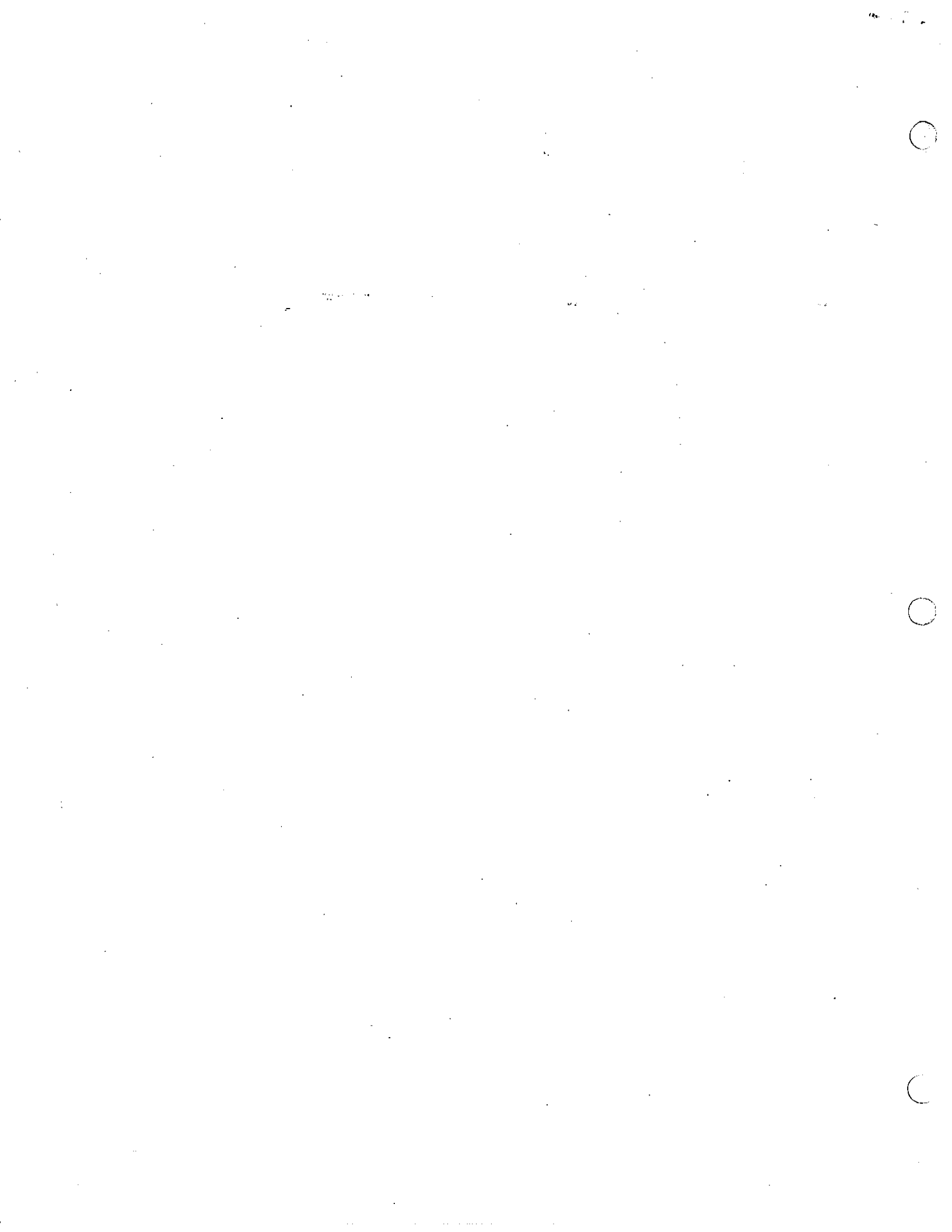
Potential problems:

- Till is easily disturbed (particularly in Eastern Ontario).
- May contain boulders large enough to require breaking up for removal.
- Excavation in the till may loosen boulders disturbing the soil mass at footing level.

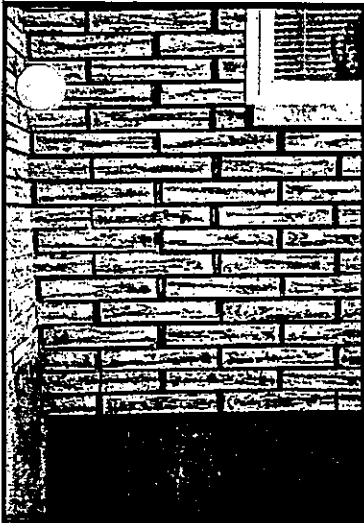
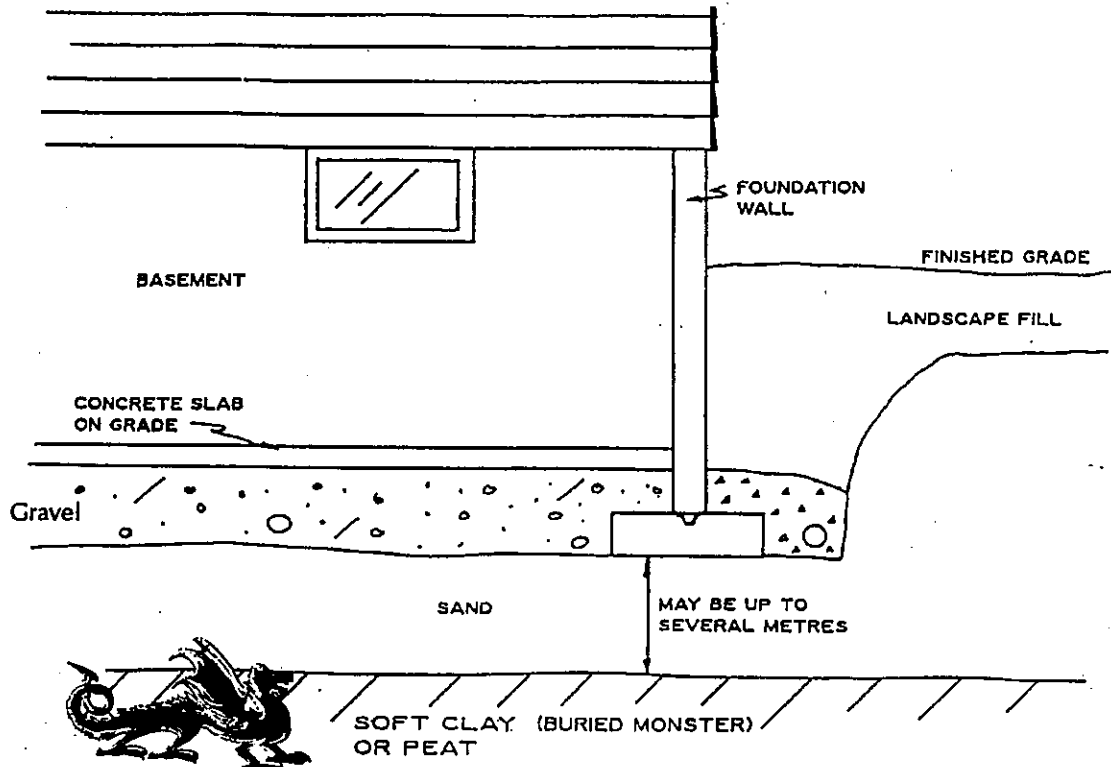
Bedrock

When bedrock is encountered in a house excavation, excavation usually requires drilling and blasting. Once that is done properly, bedrock supports most structures. However, potential problems could result if highly weathered rock is not removed, if blast disturbed rock or overblasted rock is not removed or if all of the house is not supported on the bedrock. ▼





Watch out for Buried Monsters



Cracked foundation due to effects of "buried monster"

Most housing construction involves excavation to a relatively shallow depth, and a site grading that optimizes the use of the excavated soil from the site.

Therefore, house excavations in general are not deep enough to uncover the sources of potential problems. The problems are buried monsters, waiting to cause grief at a later time. Some examples:

□ A man made buried monster is a house excavation

unknowingly terminated in fill material previously placed to raise the grade above weak or compressive soils.

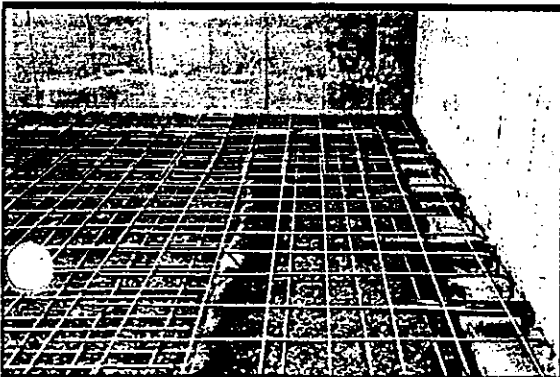
□ A naturally occurring buried monster is an excavation which terminates within a surface deposit of sand that has replaced the weathered crust of a sensitive clay deposit. The sand masks the presence of the underlying soft clay.

□ Similarly, a house excavation may terminate in the very stiff crust of a clay deposit, leaving insufficient crust to

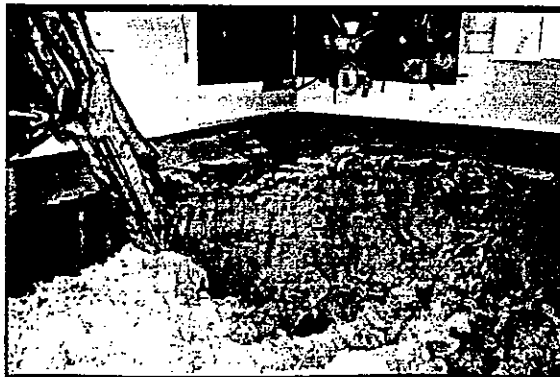
spread the footing loads onto the softer clay soil below.

Foundations which perform poorly are very difficult and costly to repair. A repair could include new or reconstructed foundations requiring earthwork in limited space (see below), and could cost a builder about \$40,000 per unit, based on ONHWP experience.

With inexpensive pre-construction investigation and care you can avoid costly post-construction repairs and ensure a quality product. ▼



Repair for cracked foundation (above).

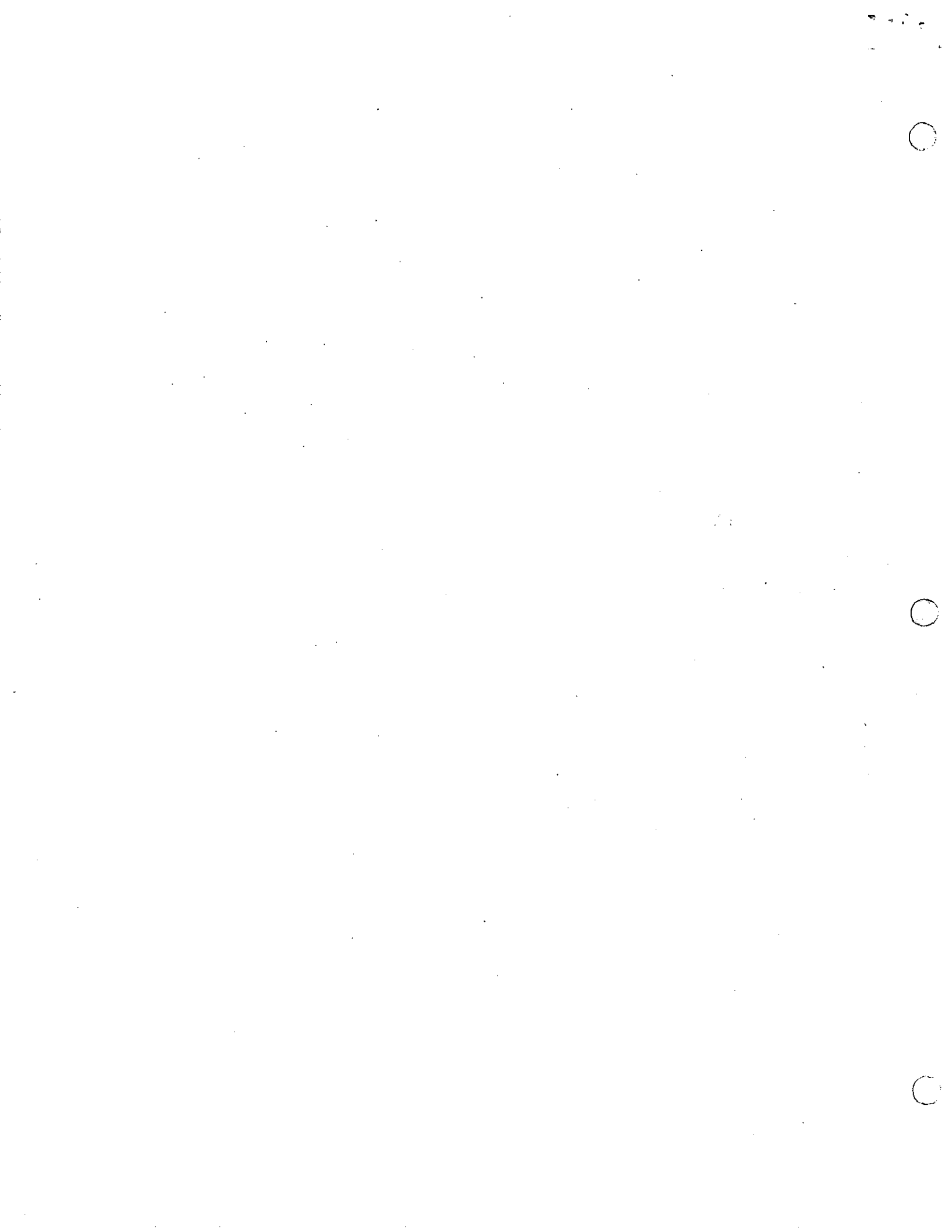


Earthwork in a confined space should be avoided.

Building Smart

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Warranty Program
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6th Floor, North-East Tower,
North York, Ont. M2N 6L9
Editor: Dave Silburt

29 Phone: (416) 229-9200





Interoffice Correspondence

July 16, 1991

TO: ALL BUILDING INSPECTORS
PLANS EXAMINERS
JIM WILKIN
ROGER O'MALLEY
BILL PAUL

FROM: B. A. FRANSEN

SUBJECT: ONTARIO BUILDING CODE
SECTION 9.12.1.4
PRECAUTIONS DURING EXCAVATION

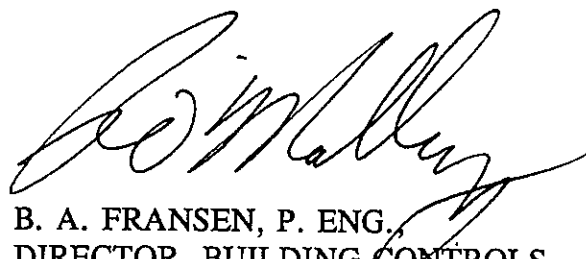
The Ontario Building Code reads as follows:

9.12.1.4. Precautions During Excavation

***** (1) Every *excavation* shall be undertaken in such a manner to prevent damage to adjacent property, existing structures, utilities, roads and sidewalks at all stages of construction.

(2) Material shall not be placed nor shall equipment be operated or placed in or adjacent to an *excavation* in a manner that may endanger the integrity of the *excavation* or its supports.

This is just to serve as a reminder of the above noted precautions.



B. A. FRANSEN, P. ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/dn

REGIONAL MUNICIPALITY OF SUDBURY

SPEED MEMO

SIZE TO



FROM <u>BERNIE FRANKEN</u>	
DATE <u>1991-07-08</u>	SUBJECT <u>RETAINING WALL</u> <u>389 HOMEWOOD</u>
INSPECTORS.	

MESSAGE

SUDBURY, ONT.

would you please advise if you
have collected any information
connected with a retaining wall
at 389 Homewood Ave., Sudbury.

Thank you
Bernie.

C.C. BILL PAUL
ROGER O'HALLEY.

REPLY

31

REPLY FROM

DATE

FIELD INSPECTOR'S DAILY WORK SCHEDULE
BUILDING INSPECTION DIVISION

INSPECTOR GLEN LEWIS

DATE MAY 28, 1991

OUTGOING

PROJECT	NAME	LOCATION	TYPE OF INSPECTION	
✓ S90-1855	Dalron	62-68 Lady Ashley	Final	✓
✓ S88-2377	Shingadia Holdings	1375 Regent	P/D	✓
✓ S89-1422	Cerrelli	3619 Bancroft	Final	✓
✓ S91-0049	Ackroyd	3662 Bancroft	Final	✓
✓ S91-0419	Collette	204 Moonlight	Final	✓
✓ S84-0884	Doyon	600 Downland	Final	✓
✓ S90-0643	Denis	1723 Madison	Footing-SFD	✓
✓ S91-0195	Zelinsky	1400 Lamothe	Framing	✓
✓ N90-2271	Svos	85 Gladys	Final	✓
✓ N90-0754	Laforest	54 Carr	Final	✓
✓ S86-0178	Campeau	419 Perreault	Final	✓
✓ SUDBURY HYDRO	Paxy	362 Jean St		✓
✓ S90-2186	Potvin	56 Copper	Occupancy	✓
✓ S90-2186	Turcotte	389 Homewood Ave	Check retaining wall	✓
✓ S89-2400	Dalron	59 Pebblehill	Final	✓
✓ S91-0438	Mayer	3291 Gladu	Weeping Tile	✓

The Regional Municipality of Sudbury

La Municipalité Régionale de Sudbury

Bag 3700 Station 'A' Sudbury, Ontario P3A 5V5

See 3700 Succursale 'A' Sudbury, Ontario P3A 5V5

(705) 673-2171 Fax: (705) 673-2960

(705) 673-2171 Fax: (705) 673-2960

JULY 2/91 @ 3:50 pm

BERNIE, AS I MENTIONED IN MY PHONE CALL, NO ATTACHMENTS WITH THIS LETTER. SEE 9.14.2.1.(1). OBC. IF IT CAN BE SHOWN TO BE UNNECESSARY BY WAY OF SOIL INVESTIGATION OR OTHER EXPERIENCE WITH LOCAL SOIL CONDITIONS INDICATES NOT NECESSARY THEN WEeping TILES NOT REQ'D.

F.A.V. SCALLY

June 24, 1991

MINISTRY OF HOUSING,
662 Falconbridge Road,
SUDBURY, Ontario,
P3A 4S4.

**ATTENTION: MR. FRANK SCALLY, C.E.T.,
BUILDING CODE ADVISOR**

Dear Sir:

RE: WEeping TILE REQUIREMENTS

Would you kindly review the attached letter and provide me with your comments, particularly as it relates to excluding weeping tiles when consultants verify that they are not required.

Very truly yours,



B. A. FRANSEN, P. ENG.,
DIRECTOR, BUILDING CONTROLS

BAF/dm
cc: R. O'Malley



Interoffice Correspondence

July 1, 1991

TO: All Building Inspectors 9
Plans Examiners 3
Jim Wilkin

FROM: B. A. FRANSEN

SUBJECT: ONTARIO BUILDING CODE ADMINISTRATION
SECTION 2.3 DESIGN AND GENERAL REVIEW

- "(2) *An architect may provide the services within the practice of professional engineering in any building described in Table 2.3.1.A., or a professional engineer may provide the services within the practice of architecture in any building described in Table 2.3.1.A. where to do so does not constitute a substantial part of the services provided by the other profession related to the construction of the building and is necessary*
- (a) *for the construction of the building and is incidental to the other services provided by the architect or professional engineer, or*
 - (b) *for coordination purposes."*

BUILDING CONTROLS DIVISION

PROCEDURES

The Chief Building Official will accept a design and general review by only one professional where the work that he has or will perform does not constitute a substantial part of the services within the practice of the other professional and is merely incidental to his professional work, and where the professional makes a statement to that effect on the drawings or by way of a separate letter.

cont'd.....

PURPOSE:

There are some instances where buildings are marginally over the limits requiring only one professional and it can be reasoned that the life safety of the occupants will not be compromised if only one professional is responsible for the design.

A handwritten signature in black ink, appearing to read "B. A. Fransen". The signature is written in a cursive style with a large initial "B" and "F".

B. A. FRANSEN, P. ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/dn

cc: R. O'Malley
Bill Paul

88-03-04
17

1991, up to 40.
Please attach to
memo on same
subject. Bennie

SECTION 2.5. - DESIGN AND GENERAL REVIEW

RESPONSIBILITIES OF PROFESSIONAL ENGINEERS VS. ARCHITECTS

2.3.1.A (4)

Where table ~~2.5.1.A~~ requires both an architect and a professional engineer, the Chief Building Official may accept a design and general review by only one professional where the work that he has or will perform does not constitute a substantial part of the services within the practice of the other professional and is merely incidental to his professional work, and where the professional makes a statement to that effect on the drawings or by way of a separate letter. It was the Committee's decision that the responsibility for adhering to Rules ~~4~~ ⁽²⁾ and ~~5~~ of the relationships between Architect and Professional Engineer as contained in the respective Acts is up to the professional involved and is not within the realm of expertise of the Chief Building Official to determine compliance with the Architects Act and the Professional Engineers Act.

88-03-04
17

SECTION 2.5. - DESIGN AND GENERAL REVIEW

RESPONSIBILITIES OF PROFESSIONAL ENGINEERS VS. ARCHITECTS

Where table 2.5.1.A requires both an architect and a professional engineer, the Chief Building Official may accept a design and general review by only one professional where the work that he has or will perform does not constitute a substantial part of the services within the practice of the other professional and is merely incidental to his professional work, and where the professional makes a statement to that effect on the drawings or by way of a separate letter. It was the Committee's decision that the responsibility for adhering to Rules 4 and 5 of the relationships between Architect and Professional Engineer as contained in the respective Acts is up to the professional involved and is not within the realm of expertise of the Chief Building Official to determine compliance with the Architects Act and the Professional Engineers Act.



Interoffice Correspondence

cc: Plans Ex. (3)
JW
MT
BP
ROM
all Clerical Staff

July 11, 1991

TO: ALL BUILDING INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: DEVELOPMENT CHARGES
CITY OF SUDBURY

This is to advise that the City of Sudbury has adopted a Development Charges By-Law which will come into force on August 1st, 1991.

This legislation is extremely important insofar as it effects the building permit issuance procedure, and the building inspectors will have a key role to insure that permits are not issued before the development charge is collected.

DISCUSSION:

1. The building permit issuance procedure will proceed as it normally does with each of the commenting agencies requested to advise of their requirements before the permit is issued.
2. After the Building Department is convinced that all of the approvals have been received only then will it advise the Treasurer of the Area Municipality of this event.
3. The Area Treasurer will then immediately advise the Building Controls Department that it has collected the development charge and it would be appropriate to issue the building permit.

CONCLUSION:

You can appreciate that this is a departure from the current procedures and a real effort will have to be made if we are to ensure that the building permit process is not adversely affected.

BA Fransen

B. A. FRANSEN, P. ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/dn

Precast Concrete Masonry Lintels

With proper design, good workmanship and attention to detail, precast lintels can act as integral components in masonry construction.

IN THIS AGE of high technology and automation, some construction techniques and products have remained virtually unchanged for decades. One such product is the precast concrete lintel. Frequently used to span openings in walls, the precast masonry lintel is a horizontal member that functions as a beam, supporting the weight of the wall and any other loading, and transferring these loads to surrounding masonry.

Although normally considered a supporting member for construction over window and door openings, lintels have many other applications. They can also be employed in the construction of fireplaces, crawl spaces, retaining walls, construction fences, highway walls, and numerous other wall applications.

Unfortunately, though, this masonry component is poorly understood and documented for specifiers, so they tend to copy existing specifications, which may be inadequate and cause liability or job interruption.

Recently, the National Concrete Masonry Association (NCMA) published TEK 165: *Precast Lintels for Concrete Masonry Construction* to establish standards for precast lintels

By **LARRY SILVER**
Director of Marketing, Faddis Concrete Products

throughout the industry.¹ This article will present many of the guidelines set forth by the NCMA.

Load Considerations

The first priority in selecting proper lintel size and reinforcement is to estimate the load supported by the lintel in pounds per linear foot, allowing for anticipated live and dead loads. Consider what type of loading will be present. Generally, two types are encountered:

- uniformly distributed loads or those that may be assumed to be uniformly distributed, such as the dead weight of the lintel and the masonry above the lintel, and floor and roof loads (where the floor and roof consist of slab construction supported directly by the masonry), and

- concentrated loads, such as the loads from roof trusses, rafters, floor beams, or joists bearing directly on the lintel.

Ordinarily, loads from the floor joists and rafters in residences and

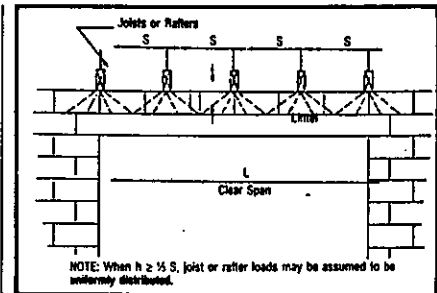


Figure A—Lintel under equally spaced concentrated loads.

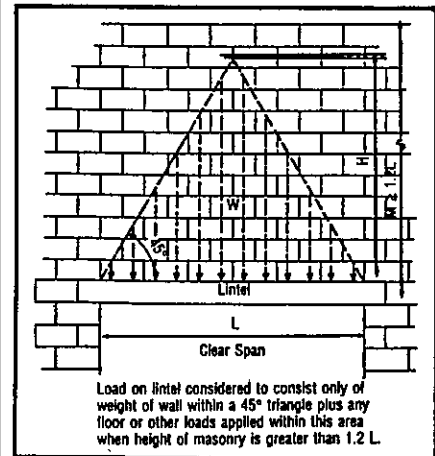
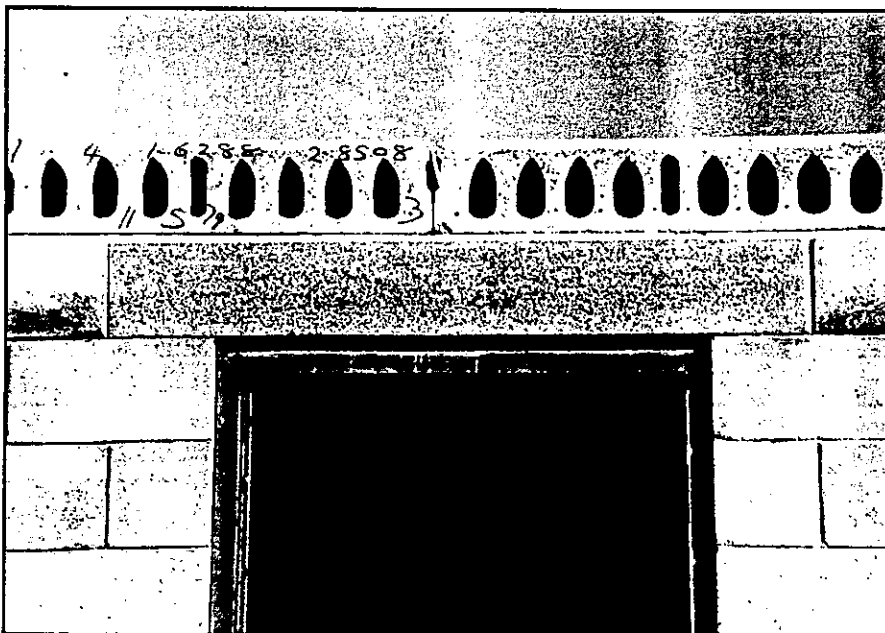


Figure B—Suggested load diagram when "arching action" is assumed.

other light-load structures may be considered to be uniformly distributed when the height of the masonry between the lintel and the bearing is greater than one-third the joist or rafter spacing, as shown in Figure A. If the members bear directly on the lintel or are relatively heavy, they usually should be treated as concentrated loads. Keep in mind that if a considerable height of masonry is structurally continuous over a lintel, arching action will probably occur (see Figure B).

Nearly all load systems can be con-

LARRY SILVER is director of marketing for Faddis Concrete Products, Downingtown, Pennsylvania. Silver serves on the National Lintel Committee for the National Concrete Masonry Association, and is on the Board of Directors for the Pennsylvania Concrete Masonry Association.



Lintels: Options "Span" Various Materials

TODAY'S LINTELS are formed from a variety of materials, including cast-in-place, precast, and steel.

Cast-in-Place. With wood or other forming, it is possible to pour-in-place the desired support. Lintels formed this way require at least seven days curing, with special consideration given to deflection. While their texture will not be consistent with the surrounding masonry, the lintels are not always exposed. If architectural block is used, a matching lintel or U block can be produced.

Precast. It is more difficult to match color from a precast lintel to architectural masonry. Within precast, two types of lintels exist—wet-cast (poured concrete) and dry-cast (pressed concrete). In the wet-cast method, wet concrete is poured into a form or mold (on- or off-site). Color is easily added to the mix. Wet-cast is more flexible and costly than dry-cast since it uses many forms with constant adaptations from prospective bids and is more labor-intensive.

The dry-cast method uses special molding equipment that matches the mix design, color, and texture of a standard gray concrete masonry unit. Only one mold per width is needed, and the compressive strength tends to be higher. Manufacturers that use this method have developed their own testing methods and documents to comply with architects' and engineers' requests.

Steel. Some geographies have developed steel as their main lintel material. However, it is usually more costly than, and does not have the fire resistance and masonry benefits of, a dry-cast lintel. Steel is recommended for applications with greater than 20-foot openings or with extreme loading.

verted to an equivalent, uniformly distributed load by equating moment and shear formulas. Table 1 shows conversion formulas for a few cases. Since the ratio of moment to shear varies for different types of loading, it may be necessary to use two equivalent uniform load values, one for shear and the other for moment calculations.

As a general rule, lintel loads in residential structures will range from about 200 to 300 pounds per linear foot with wall load only, and from 700 to 1,000 pounds per linear foot where floor or roof and wall loads are transmitted. Commercial applications generate heavier loads.²

Installation Guides

Proper design, good workmanship, and attention to detail are essential in obtaining a satisfactory lintel installa-

tion. A typical, simply supported, reinforced precast lintel installation is illustrated in Figure C. For optimal lintel performance, check the following factors.

Bearing. At minimum, a nominal eight-inch bearing (projected onto the masonry) should be required for all lintels. Larger bearing areas should be provided where long spans or heavy loads are anticipated. A rough guide is to make the support equal to the height of the lintel or, alternately, provide one inch bearing for every foot of clear span. An adequate bearing area is necessary to distribute high compressive stresses.

Where long-span or heavily loaded lintels are to be used, the designer should investigate the end reaction to ensure that the allowable compressive stress is not exceeded in the supporting masonry. High stresses may require the use of solid or solid-top units, or standard units with grout-filled cores in the first one or two courses of masonry under the lintel bearing. For extremely high stresses, use solid or grouted masonry units to tie the precast lintel to the surround-

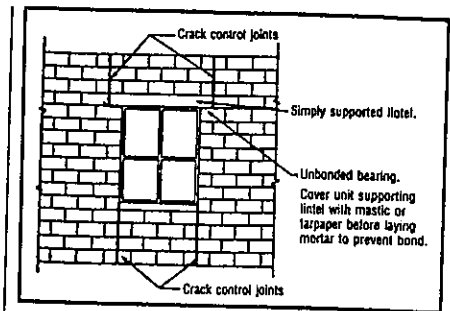


Figure D—Suggested control joint locations and details.

ing masonry. This transmits the end reaction of the stress from the lintel to the wall system's foundation and other structural members.

Crack Control. Properly designed control joints are particularly effective in preventing critical temperature and shrinkage stresses at openings. Suggested joint locations and details are shown in Figure D. When the opening's width is six feet or less, a control joint is required on only one side of the opening. If the opening's

Continued on Page 27

Type of load	Concentrated load at midpoint	Equal concentrated loads at 1/3 points	Wall load with arching action
Equivalent uniform load moment	$W = 2P/L$	$W = 4P/3L$	$W = 4W/3L$
Equivalent uniform load shear	$W = P/L$	$W = P/L$	$W = W/L$

W = equivalent uniform load (lb per linear foot)
P = total concentrated load (lb)
W = total load or weight of masonry in load triangle (lb)
L = clear span (feet)

Table 1—Formulas for converting concentrated and other loads to equivalent, uniformly distributed loads.

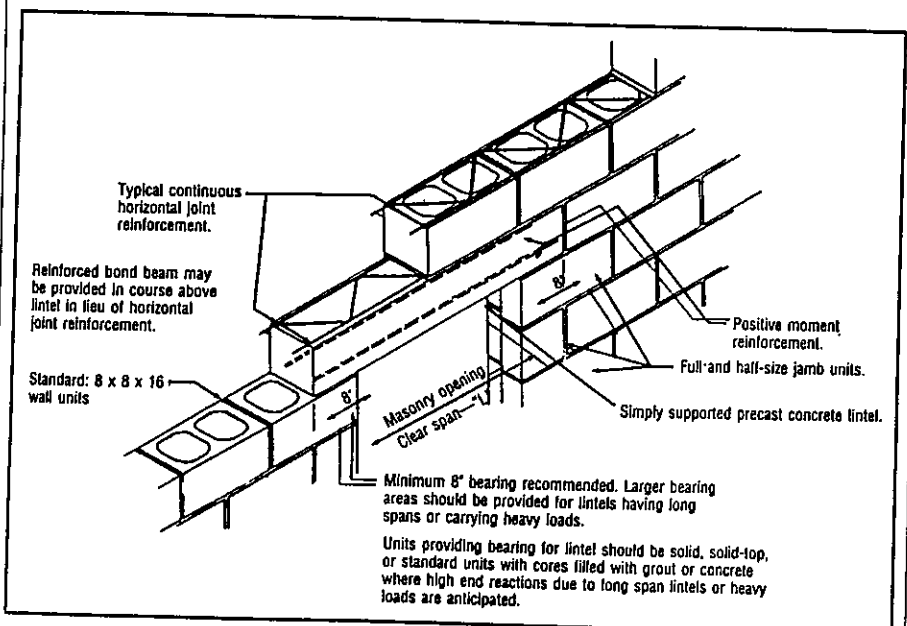


Figure C—A typical, simply supported, reinforced precast lintel installation.

PRECAST LINTELS

Continued from Page 22

width exceeds six feet, control joints should be located on both sides.

A horizontal slip plane should be created under one end of the lintel by using a piece of flashing or similar material that produces a bond break, providing unrestrained lintel movement at the joint. The joint should extend from the lintel's end to the top of the wall. Horizontal wall reinforcement located above simply supported lintels—lintels whose ends are not tied into the wall with vertical reinforcing—should be discontinuous at the control joints above openings. In the absence of control joints over openings, horizontal wall reinforcement—located in the joints that separate the two courses of masonry immediately above simply supported lintels—will help control the effects of shrinkage and temperature stress at the openings' corners.

Mortar. Mortar used for bedding lintels should be of the same quality as that used in laying the wall. The first course of masonry above the lintel should be laid in a full mortar bed so that the cross webs as well as the face shells of the units will bear on the lintel and thus reduce the shear stress between the grout-filled core and the face shell of the unit.³

Lintel Properties

Width = 3-5/8" Height = 7-5/8"

Weight = 30 lbs. per linear foot

Reinforcement	Maximum Design Load - Pounds per Linear Foot											
	Clear Span											
	3'-4"	4'-0"	4'-8"	5'-4"	6'-0"	6'-8"	7'-4"	8'-0"	8'-8"	9'-4"	10'-0"	10'-8"
1 - # 3	850	625	445	330	250	195	150	120	95	80	65	50
1 - # 4	910	680	475	350	260	200	160	125	100	80	65	50
1 - # 5	895	700	515	370	280	210	165	130	105	85	65	55
1 - # 6	880	690	610	435	320	240	185	145	115	90	70	55

Lintel Properties

Width = 5-5/8" Height = 7-5/8"

Weight = 45 lbs. per linear foot

Reinforcement	Maximum Design Load - Pounds per Linear Foot											
	Clear Span											
	3'-4"	4'-0"	4'-8"	5'-4"	6'-0"	6'-8"	7'-4"	8'-0"	8'-8"	9'-4"	10'-0"	10'-8"
1 - # 4	1410	985	700	515	390	300	235	190	150	120	100	80
2 - # 3	1500	1005	710	525	395	305	240	190	150	125	100	80
1 - # 5	1385	1045	735	540	405	310	245	195	155	125	100	80
2 - # 4	1410	1110	775	560	420	320	250	200	160	125	100	80
1 - # 6	1365	1070	780	565	425	325	250	200	160	130	105	85
2 - # 5	1385	1090	885	630	465	355	275	215	170	135	110	85

Lintel Properties

Width = 7-5/8" Height = 7-5/8"

Weight = 60 lbs. per linear foot

Reinforcement	Maximum Design Load - Pounds per Linear Foot											
	Clear Span											
	3'-4"	4'-0"	4'-8"	5'-4"	6'-0"	6'-8"	7'-4"	8'-0"	8'-8"	9'-4"	10'-0"	10'-8"
1 - # 4	1445	1045	790	610	485	400	315	250	200	165	130	105
2 - # 3	1930	1310	930	690	520	405	320	255	205	165	130	105
1 - # 5	1880	1355	960	705	535	410	325	255	205	165	135	110
2 - # 4	1915	1415	995	730	550	425	330	260	210	170	135	110
1 - # 6	1850	1425	1000	730	550	425	330	265	210	170	135	110
2 - # 5	1880	1475	1070	775	580	445	345	275	215	175	140	115
2 - # 6	1850	1450	1195	880	645	490	375	295	235	185	150	120

All tables, figures courtesy of the National Concrete Masonry Association

Table 2—Maximum design loads for precast concrete lintels where $f'_c = 3,000$ psi.

Lintel Design Elements

Precast lintels are fabricated to a height of 7 $\frac{5}{8}$ inches to coincide with the typical course height of masonry. A modular lintel length should be specified to equal the clear span plus at least two times the lintel height to

ensure adequate bearing. The width of a lintel, or two lintels side-by-side, should equal the width of the supported masonry wythe.

Typical concrete compressive strengths for 28-day precast lintels range from 2,500 to 4,000 psi. Reinforcement is normally Grade 60

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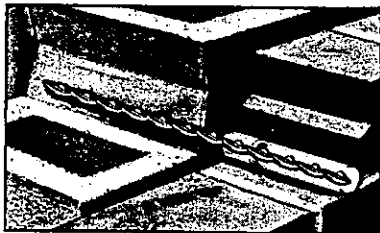
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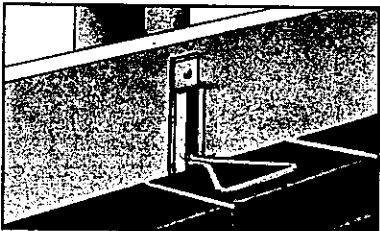
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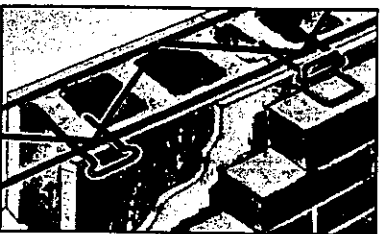
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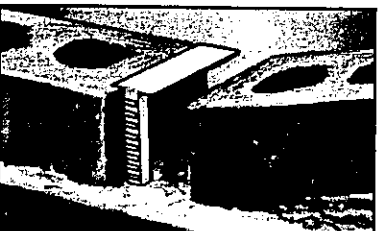
AA900 - Retro Tie repair anchors to stabilize masonry walls



AA401S - Adjustable veneer anchors



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(60,000 psi specified yield strength). The cover for the reinforcing—the area between the bottom of the lintel and the reinforcing—should always be at least 1½ inches.

Three elements—flexural strength, shear strength, and deflection—are critical to lintel design. Flexural strength is determined in accordance with ACI 318-89 Section 9.1. Shear strength is defined in accordance with ACI 318-89 Section 11.3. Deflection—based on controlling cracking in lintel-supported masonry—is calculated using the effective moment of inertia given in ACI 318-89 Section 9.5.2.3. Consequently, for lintels supporting nonreinforced masonry, lintel deflection should be limited to 0.00167 times the effective span of the lintel ($L/600$). For lintels supporting reinforced masonry, deflection should be limited to 0.00278 times the effective span ($L/360$). Allow provision for long-term deflection resulting from creep and shrinkage by multiplying the original deflection by a factor of two in accordance with ACI 318-89 Section 9.5.2.5. Table 2, from NCMA's TEK 165, depicts maximum design loads for precast lintels of standard dimensions and 3,000 psi.

Specifying Strength

Precast concrete lintels' strength, fire resistance, durability, and appearance have made them an integral component in masonry construction. And fortunately, with published standards now available, specifiers will be able to specify even better systems. ■

Notes: 1. The National Concrete Masonry Association, *NCMA-TEK 165: Precast Lintels for Concrete Masonry Construction*, Herndon, Virginia: NCMA, 1990. For more information, call the Association at (703) 435-4900 and ask for "Publications."

2. The National Concrete Masonry Association, *Design and Construction of Lintels*, Herndon, Virginia: NCMA, 1953, pp. 4-5.

3. *Ibid.*, pp. 9-14.

Author's Note: I would like to thank Robert Van Laningham, Director of Technical Communications for the National Concrete Masonry Association, for his assistance in preparing this article.

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NCMA Elects Officers

DONALD C. Emich, president of Binkley and Ober Incorporated, Lancaster, Pennsylvania, has been elected 1991 chairman of the board of the National

Concrete Masonry Association (NCMA).

Emich, who served as chairman-elect during 1990, assumed his office, as did the association's other officers and directors, at the NCMA convention in Houston in mid February.

In addition to serving as president of Binkley and Ober, Emich is president of Lancaster Ready Mix Company. He's a past member of NCMA's board of directors and executive committee. He has also served on the task force on segmental retaining walls, the task force on long range planning, and task force on radon, the dues and bylaws committee, and the statistics and financial committee.

Harry Horn, Devening Block Company, Columbus, Indiana, NCMA's 1990 chairman, became the association's immediate past chairman. Danny W. Marshall III, Marshall Concrete Products, Danville, Virginia, has been elected chairman-elect of NCMA.

MIM Presents Fourth Certification Seminar

THE MASONRY Institute of Michigan presented its fourth masonry certification seminar late last year. The seminar drew nineteen representatives from governmental agencies, architectural and engineering firms, contracting companies and building products suppliers. It was held in the architectural auditorium at Lawrence Technological University.

Instruction accompanied by visual aids and a hands on bricklaying session was provided by Michael Navetta, MIM president and mason contractor; MIM's Daniel Sechmeister, PE, executive director; and David McGrath, AIA, staff architect.

PCA Honors Top Concrete Buildings

THE PORTLAND Cement Association has announced the winners of its 1990 Awards of Excellence, a biennial building program honoring new and remodeled buildings in North America. "The sheer variety of styles and functions of this year's winners," says PCA's Glen Simon, who directs the program, "attests to concrete's versatility."

This year, eight Award of Excellence winners, a mix of commercial, industrial and institutional, were chosen. The winning buildings were selected by a panel of four jurors, three architects and an architectural magazine editor.

MSEUCHIN

The
1990
Ontario Building Code

STYROFOAM*
Insulation Products
and You.

*Meeting the challenge
of a changing world.*

The Challenge

With the 1990 Ontario Building Code (OBC) come changes which will have a dramatic affect on new home construction. One of the most significant of these changes is the demand for greater residential R-values.

The Goal

Under the new OBC, new residential wall construction other than foundation walls, will call for a minimum insulation thermal resistance of RSI 3.25 to RSI 3.87 (R-18.5 to R-22), depending on the site location.



Zone 1:

Southwestern Ontario — Eastern Ontario — Metro Toronto

(Less than 5000°C Degree Days)

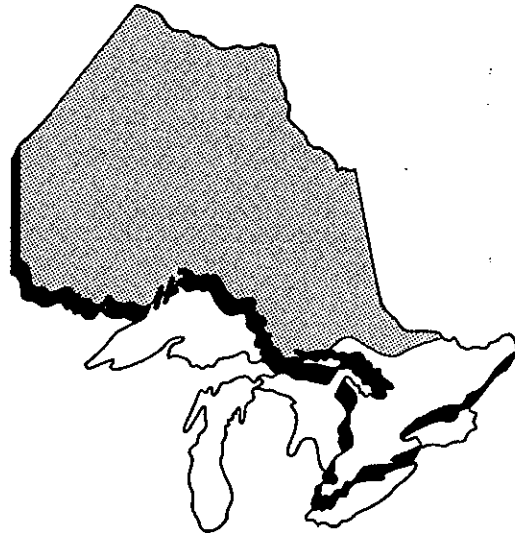
The new code requirements for Zone 1 are to achieve a thermal resistance of R-18.5. To do this without altering current 2" x 4" stud construction with R-12 Fibrous Batts, 1.5" (R-7.5) of STYROFOAM* SM insulation or 1.3" (R-6.5) STYROFOAM* CLADMATE* exterior sheathing will do the job.

The Benefit

If you prefer 2" x 6" stud construction with R-20 Batts inside, you can really bring insulation home with 1/2" (R-2.5)

STYROFOAM* CLADMATE* exterior sheathing outside. The combined total thermal resistance of this complete wall in most cases can exceed R-25. That's more than 10% additional R-value than the competition — at no extra cost.

New STYROFOAM* CLADMATE*. The Insulation Solution for the 1990's.



Zone 2:

Northern Ontario

(5000°C Degree Days or more)

The Zone 2 thermal resistance requirements are for a minimum of R-22. 2" x 4" stud walls with R-12 Fibrous Batts with 2" (R-10) STYROFOAM* SM will meet this.

For 2" x 6" stud walls with R-20 Batts inside, 1/2" (R-2.5) STYROFOAM* CLADMATE* outside will exceed the code.



R-5/Inch — A premium product for above or below grade interior and exterior applications.



R-5/Inch — A lower density, above grade insulated sheathing designed specifically for exterior residential wall application.

The Reasons

For forty years, STYROFOAM* brand insulation products have been recognized as a pre-eminent rigid board insulation. In that time, countless homebuilders throughout North America who count on STYROFOAM*, have been building with the confidence that comes with four decades of consistent reliability and innovation.

The Benefit

Saving money is what it's all about. Traditionally, the use of insulated sheathings to reach higher R-values has been cost competitive with Batt construction.

STYROFOAM* brand product innovations combined with conventional 2" x 4" construction will not only meet code requirements but come in at a price that the competition will find hard to beat.

More Reasons

Exposing the Double Vapour Barrier Myth. For years, this myth has been associated with low permeance sheathings. And unfairly, as well. Look over the following data and judge for yourself.

7/16" OSB/Waferboard...	118-149 ng/Pa s m ² (2.1-2.6 perms)
1" STYROFOAM* CLADMATE*...	76 ng/Pa s m ² (1.4 perms)
1" STYROFOAM* SM...	50 ng/Pa s m ² (0.9 perm)
4" Clay Brick...	46 ng/Pa s m ² (0.8 perm)
3/8" Plywood...	40 ng/Pa s m ² (0.7 perm)
1" Foil Faced Polyisocyanurate...	<1.7 ng/Pa s m ² (<0.03 perm)
1" Foil Faced Polyurethane...	1.5 ng/Pa s m ² (0.025 perm)

Homebuilders have been using low permeance sheathings including STYROFOAM*, waferboard and plywood with great success for many years.

Quite simply, using an insulated sheathing will keep your wall cavity at higher temperatures, and this, in turn, will minimize the risk of condensation within the cavity. Case closed.

The Installation

The Ontario Building Code states that walls clad externally with sheathings such as; panel type siding, diagonal lumber, plywood or waferboard or finished internally with the following; plaster and lath, gypsum board with taped joints, plywood, hardboard or waferboard, don't require bracing for racking strength.

However, during construction, Dow does recommend the use of metal corner strapping or countersunk 1" x 4" wood diagonal bracing when building with STYROFOAM* brand insulation products. Whenever possible, STYROFOAM* insulation boards should be installed horizontally and should be fastened with plastic washers and standard spiral nails or special "Insulation nails".

The Answer

Not only do the STYROFOAM* family of Insulation products help you meet the 1990 OBC, but they have proven, time and again, to be the ideal sheathing for builders.

When it's blue, consumers and builders alike recognize it as a sign of quality. Lightweight, easy to handle and cut, STYROFOAM* products make short work of any installation. High resistance to moisture and wind damage are an obvious plus. And with the introduction of STYROFOAM* CLADMATE* exterior sheathing, there's now a low cost insulating alternative to non-insulating conventional sheathings.

For more information,

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Ottawa, Ontario
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(613) 232-6105



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Construction Materials

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PRECAUTIONS — These products are combustible and should be properly installed. For specific installation instructions in compliance with appropriate building codes, contact your local Dow sales representative.

NOTICE — "Dow believes the information and recommendations herein to be accurate and reliable as of the date of publication (October 1990). But no warranty express or implied is given, nor is freedom from any patent owned by The Dow Chemical Company or by others to be inferred. Inasmuch as any assistance furnished by Dow respecting the proper use and disposal of its products is provided without charge, Dow assumes no obligation or liability therefor. For any information that may have been published subsequent to the above date, consult your nearest Dow sales office."

902514016



Interoffice Correspondence

June 13, 1991

TO: ALL BUILDING CONTROLS STAFF

FROM: B. A. FRANSEN

SUBJECT: TRAILER PROHIBITION BY-LAWS

I am attaching a copy of the Town of Rayside-Balfour By-law No. 73-60, a trailer control by-law, since its content is of significant interest as it effects your activities.

You are aware that the zoning by-law effecting the construction of buildings in the Town of Rayside-Balfour permits mobile homes, provided of course, they are erected and placed on permanent foundations, in specific areas of the municipality. On the other hand, the Town of Rayside-Balfour's trailer control by-law permits the area municipality to place added controls on trailers, notwithstanding that they may very well be permitted by the zoning by-law.

This establishes an extremely awkward situation for the administrators of the building and zoning regulations since it may result in a contradiction of information that we may provide an applicant wanting to erect a trailer in the Town of Rayside-Balfour.

For example: It is possible for the building inspector to advise that trailers/mobile homes are permitted in the Town of Rayside-Balfour after having reviewed the zoning by-law and then find out at a later date that the Town of Rayside-Balfour is prohibiting the erection of the trailer.

CONCLUSION:

The Building Inspector should exercise extreme caution when advising applicants, wanting to erect trailers on their property in Rayside-Balfour. Even though the zoning by-law does provide for trailers/mobile homes, provided they are placed on permanent foundations, the Town must grant their permission before full and complete authorization is given for the erection of the trailer/mobile home.

cont'd.....

This matter will be reviewed with Mr. Ron Swiddle (Regional Solicitor), Mr. Jim Rule (Regional Director of Planning and Development), and the Town of Rayside-Balfour officials, to make certain that the two pieces of legislation can be made to provide the control that is desired.



B. A. FRANSEN, P. ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/dn

cc: Ron Swiddle
Jim Rule
Marty Kivistik
Art Potvin
Roger O'Malley
Bill Paul
Bryan Gutjahr
P. J. Morrow
Julie Darmanin

Bldg. Insp. (4)
Plans Ex. (3)
J. Wilkin

THE CORPORATION OF THE TOWN OF RAYSIDE-BALFOUR

BY-LAW NO. 73-60

BEING A BY-LAW TO CONTROL TRAILERS
IN THE TOWN OF RAYSIDE-BALFOUR

RECEIVED
JUN 11 1991
BUILDING CONTROLS
DEPARTMENT

WHEREAS the Municipal Act R.S.O. 1970, Section 354 (1) (86) provides that the Council of a local municipality may pass by-laws for regulating or prohibiting the use of trailers for the accomodation of persons;

AND WHEREAS, it is deemed necessary to control the use of trailers in the Town of Rayside-Balfour.

BE IT THEREFORE ENACTED by the Council of the Corporation of the Town of Rayside-Balfour;

THAT no person shall use or permit the use of any trailer for the living, sleeping or eating accomodation of persons for more than sixty (60) days in any period of ten consecutive months within the boundaries of the Municipality of the Town of Rayside-Balfour.

Any person convicted of a violation of any of the provision of this by-law shall upon conviction therefore be subject to a penalty of \$25.00 for the first offence and not more than \$50.00 for every subsequent offences exclusive of costs and every day that a person contravenes the by-law shall be deemed to be a separate offence. Such penalties and costs shall be recoverable under the provisions of the Summary Convictions Act.

THAT all by-laws or parts thereof inconsistent with the provisions of this by-law be and are hereby repealed.

THIS by-law shall come into force as soon as the final passing thereof.

READ A FIRST, and considered read a SECOND and THIRD time and finally passed in open Council this 13th day of December, 1973.


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MORTAR JOINT REINFORCING

Introduction

The reasons for horizontal mortar joint reinforcing are well established both by usage (since 1939) and innumerable research programmes.

Properly detailed and installed joint reinforcing performs the following:

- Resists thermal and moisture movements in the wall
- Distributes local stresses to a wider portion and thus increases lateral load capacity (e.g. shearwalls)
- Can replace intermediate bond beams
- Connects intersecting walls
- Ties masonry wythes in composite and cavity walls
- Provides structural reinforcement when required by the design

Characteristics

Joint reinforcing is prefabricated using deformed or knurled cold-drawn parallel steel wires joined perpendicularly (ladder type) or diagonally (truss type) in widths approximately 50mm less than the wall thickness: this ensures a minimum of 20mm horizontal mortar cover while still allowing an installation tolerance. Deformations in the wire improve the bond between mortar and reinforcing. Classifications (standard, heavy duty, and extra heavy duty) reflect the diameter of the wire used.

Durability

Joint reinforcing must have sufficient corrosion resistance to function effectively for the expected life of the structure. Protection is commonly provided by zinc coating: the current Standard (CAN3-A370) requires Hot Dip Galvanizing.

Usage and Types

A: Single Wythe Walls

Joint reinforcement is used in single wythe walls to increase the tensile strength of masonry by distributing lateral stresses. (Figure 1) This joint reinforcing can be included in the requirements of engineered design.

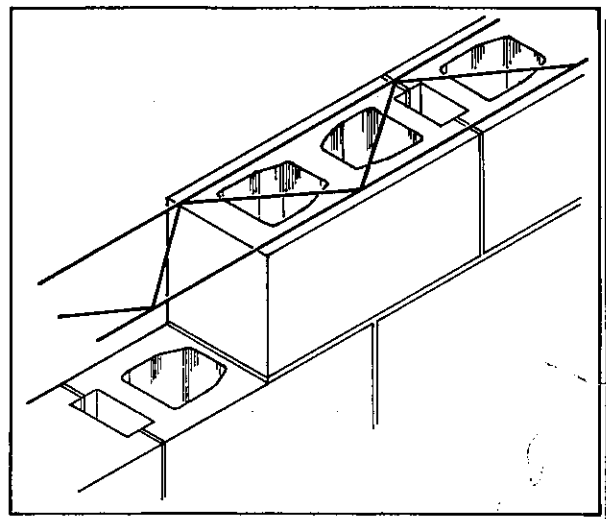


Figure 1: Truss Type Reinforcement

B: Multi Wythe Walls

In addition to increasing tensile resistance, joint reinforcing acts in tying the wythes together. Integral ties, both rigid and adjustable, facilitate placing and thus lead to reduced mason and construction time.

Some factors merit special consideration before selecting the type of reinforcing and tie assembly to provide optimum performance: cavity or composite wall, exterior or interior application, aligning or non-aligning courses, compatibility of materials.

O.C.B.A. SECTION 8

ARTICLE 01

- (i) Basic Reinforcing & Tie: for use where wythes are aligned in both composite and cavity walls: available in both ladder and truss configurations. Note that cross wires in ladder type permit some vertical movement arising from differential thermal and moisture conditions, an important consideration in cavity wall applications. (Figure 2)

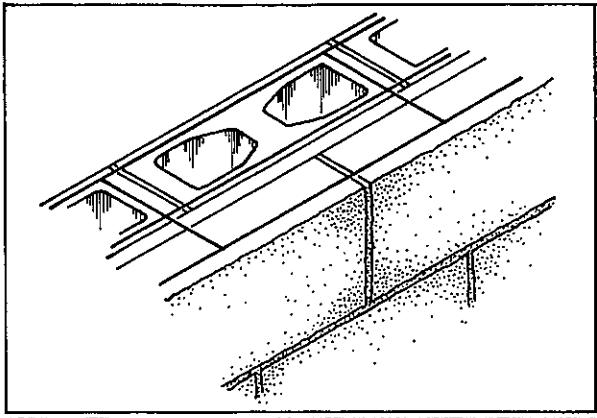


Figure 2: Ladder Type Reinforcement

- (ii) Adjustable Reinforcing & Tie Assemblies: for use when courses do not align in both composite and cavity walls: available in ladder and truss configurations. Note that adjustable ties allow differential vertical movements, however lateral movement must be restricted. (Figure 3)

Tie assemblies which allow lateral movement may only be used in composite walls with filled collar joints in order to develop full restraint capacity.

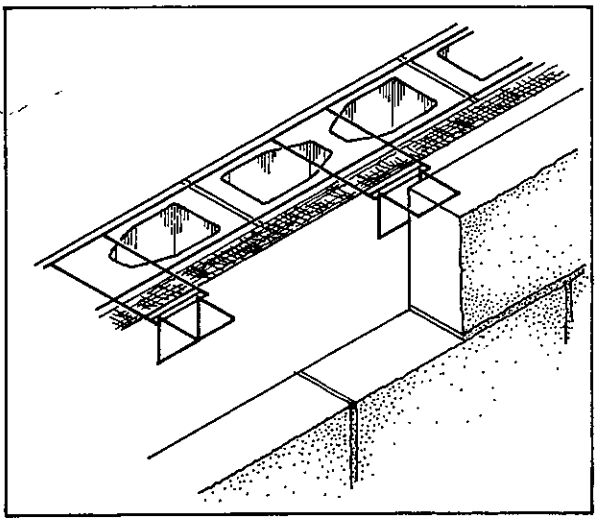


Figure 3: Adjustable Ties with Restraint

On-Site Considerations

- When the primary functions are resistance of movements and uniform distribution of stresses, joint reinforcing is usually placed at 400mm vertically (alternate courses of block) and under the top masonry course.
- Proper splicing will ensure transfer of stresses between the reinforcing pieces: a 150mm lap provides adequate load transfer for deformed or knurled wires; a 300mm lap is required for plain wires. To be effective reinforcing must be continuous except through control joints.
- Where joint reinforcing is required for structural considerations, engineered design will govern size and spacing frequency. Note that multi-rod reinforcing is available to meet increased engineering requirements. (Figure 4)

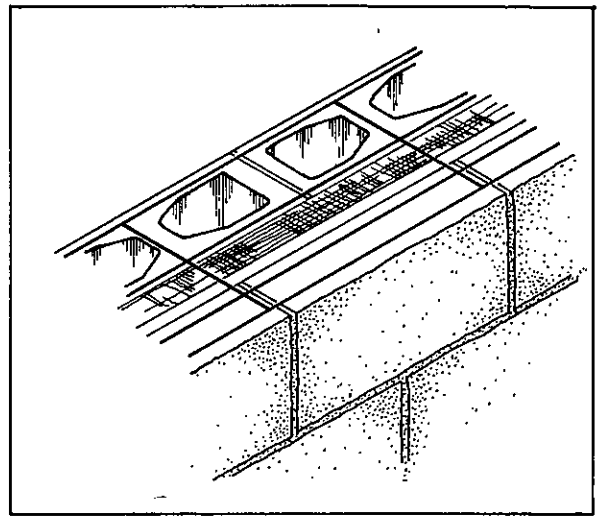


Figure 4: Multi-Rod Reinforcing

Conclusion

A review of all factors leads to selection of the material most suitable for the purposes intended: good planning, detailing and execution provide benefits, perhaps immeasurable due to problem avoidance.

— *Do it right, do it once* —

Further information on reinforcing materials is available from your masonry supplier, or directly from the manufacturers, Dur-O-Wal Limited (416-670-4470) or Blok-Lok Limited (416-749-1010)

SUPPLIER MEMBERS of the Ontario Concrete Block Association

Besser Canada
Bramalea, Ontario

Blok-Lok Ltd.
Weston, Ontario

Columbia Machine (Canada) Ltd.
Mississauga, Ontario

Dur-O-Wal Ltd.
Mississauga, Ontario

Essroc Canada Inc.
Downsview, Ontario

Lafarge Canada Inc.
Richmond Hill, Ontario

Lithibar Matik
Holland, Michigan

National Slag Ltd.
Hamilton, Ontario

Northern Pigment Co. Ltd.
Toronto, Ontario

Proneq Industries Inc.
Ville des Laurentides, Quebec

St. Lawrence Cement Inc.
Mississauga, Ontario

St. Marys Cement
Toronto, Ontario



Action Memo

Date May 25 '91

To Inspectors

From B.A. Franzen

Area Code Telephone No. Ext. Message Taken By

- Phoned On Hold
- Please Call Returned Your Call
- Will Call Back
- Wishes Appointment
- Waiting in Person
- Will Return
- Was Here

- File
- Draft Reply For My Signature
- Provide More Details
- For Your Information

- Type Draft
- For Your Approval and Signature
- Keep Me Informed
- Per Discussion

- Type Final
- Circulate, Initial and Return
- Take Appropriate Action
- Per Your Request

- Make Copies
- Return With Comments
- Note and See Me
- Returned With Thanks

- Please Answer
- Investigate and Report
- Note and Return
-

Comments:

Further to information supplied earlier regarding door swing

RBF/ics

Over



Ontario

Ministry of Housing
Ministère du Logement

Ontario Buildings Branch
777 Bay Street
2nd Floor
Toronto, Ontario
M5G 2E5

Telephone: (416) 585-6666
Facsimile: (416) 585-4029

March 21, 1991

Mr. Claude Trumble
Building Department
Regional Municipality of Sudbury
Sudbury, Ontario

Dear Claude:

This will confirm our telephone conversation of March 21, 1991 regarding interpretation of Article 3.4.6.11 of the Building Code.

The Branch opinion is, that Article 3.4.6.11 requires only principal entrance doors and required exit doors should swing towards the exit direction.

All additional doors may swing into the building or suite, or store.

The writer has consulted with the National Building Code, Codes and Standards Section, and their interpretation which concurs with ours, is enclosed for your information.

Yours truly,


George Feher
Advisor

Enclosure



Code

For Office Use Only

405 | 4.4.4

Proposed Changes

Tom Yurchi

Name of Commentor

Sentence 3.4.7.12.(7)

Change Number

3 | 1 | 2 | 3

I support the proposed change

I do not support the proposed change

Reason

The addition of the phrase "principal entrance door" should not be used in this sentence. This phrase would inhibit the design concept of having an entrance door, which swings inward to a commercial establishment and an exit door in the near vicinity that swings outward.

This concept of having doors swing inwards in retail/commercial establishments at the principal entrances is used to enhance the accessibility to such a building.

Perhaps the proposed change should read;

3.4.7.12.(7)(a) Except for a door serving a single dwelling unit, every exit door shall open in the direction of exit travel and shall swing on its vertical axis.

(b) Exit doors of equal capacity of the entrance doors shall be provided at every principal entrance location.

If the change is modified in this way, it would allow for flexibility of having some doors swing inward to facilitate ease of entering a building and also meet the requirements of safe exiting at that location.

Use additional blank sheets as needed

Committee Action (For Secretariat Reply Only)

The Committee concurred with the observations of the commentor that the concept of having doors swing inwards in retail and commercial establishments at the principle entrances is used to enhance the accessibility to such a building. It was agreed to withdraw the proposed change. It was agreed that this subject be deferred as New Business for consideration at a future meeting.





Interoffice Correspondence

March 7, 1991

TO: INSPECTORS
FROM: B.A. FRANSEN
SUBJECT: PROCEDURES

The attached information describes the components of a structure that must be completed before occupancy, where the building is unfinished.

In the event you encounter a situation where these components are not completed and the building is occupied, you are to proceed with written orders advising the owner of the items remaining outstanding under the unsafe provisions of the Ontario Building Code Act.

Occupancy is to be prohibited until such time as the components described are completed to satisfy the requirements of the Ontario Building Code.

for B.A. Fransen, P. Eng.
Director, Building Controls
BAF/kcs

cc: R. O'Malley

has been vacated by the occupants except where the safety of the occupants is not affected.

2.4.2. Site Documents

2.4.2.1. Where a permit has been issued pursuant to the Act, the person to whom it is issued shall have the permit or a copy thereof posted at all times during *construction* or *demolition* in a conspicuous place on the property in respect of which the permit was issued.

2.4.2.2.(1) The person in charge of the *construction* of the *building* shall keep and maintain on the site of the *construction*

- (a) at least one copy of drawings and specifications certified by the *chief official* or a person designated by the *chief official* to be a copy of those submitted with the application for the permit to *construct* the *building*, together with changes that are authorized by the *chief official* or a person designated by the *chief official*, and
- (b) authorization or facsimiles thereof received from the Building Materials Evaluation Commission, including specified terms and conditions.

2.4.3. Occupancy of Unfinished Building

2.4.3.1.(1) Except as permitted in Sentence 2.4.3.2.(1), a person may occupy or permit to be occupied any *building* or part thereof that has not been fully completed at the date of occupation where the *chief official* or a person designated by the *chief official* has issued a permit authorizing occupation of the *building* or part thereof prior to its completion in accordance with Sentence (2).

(2) The *chief official* or a person designated by the *chief official* shall issue a permit authorizing occupation of a *building*, where

- (a) the structure of the *building* or part thereof is completed to the roof,
- (b) the enclosing walls of the *building* or part thereof are completed to the roof,

- (c) the walls enclosing the space to be occupied are completed, including balcony *guards*,
- (d) all required *fire separations* and *closures* are completed on all *storeys* to be occupied,
- (e) all required *exits* are completed and fire separated including all doors, door hardware, self-closing devices, balustrades and hand-rails from the uppermost floor to be occupied down to *grade* level and below if an *exit* connects with lower *storeys*,
- (f) all shafts including *closures* are completed to the floor-ceiling assembly above the *storey* to be occupied and have a temporary *fire separation* at such assembly,
- (g) measures have been taken to prevent access to parts of the building and site that are incomplete or still under *construction*,
- (h) floors, halls, lobbies and required *means of egress* are kept free of loose materials and other hazards,
- (i) if service rooms should be in operation, required *fire separations* are completed and all *closures* installed,
- (j) all *water*, *drainage* and *venting systems* are complete and tested as operational for the *storeys* to be occupied,
- (k) required lighting in corridors, stairways and *exits* is completed and operational up to and including all *storeys* to be occupied,
- (l) required standpipe, sprinkler and fire alarm systems are complete and operational up to and including all *storeys* to be occupied, together with required pumper connections for such standpipes and sprinklers,
- (m) required fire extinguishers have been installed on all *storeys* to be occupied,
- (n) main garbage rooms, chutes and ancillary services thereto are completed to *storeys* to be occupied, and
- (o) required fire fighting access routes have been provided and are accessible.

2.4.3.2.(1) A person may occupy or permit to be occupied a *building* intended for *residential occupancy*

that has not been fully completed at the date of occupation provided that

- (a) the *building*
 - (i) is not more than 3 *storeys* in *building height*,
 - (ii) has not more than 1 *dwelling unit* above another *dwelling unit*,
 - (iii) has not more than 2 *dwelling units* sharing a common *means of egress*, and
 - (iv) has no accommodation for tourists,
- (b) the following *building* components and systems are complete and operational:
 - (i) required *exits*, handrails and *guards*, fire alarm and detection systems, and *fire separations*, and
 - (ii) water supply, sewage disposal, lighting and heating systems, and
- (c) where applicable, the *building* conforms to Article 2.1.1.8.

2.4.3.3. Where a person has occupied or permitted the occupancy of a *building* under this Subsection, such person shall notify the *chief official* forthwith upon completion of the *building*.

2.4.4. Fire Department Inspection

2.4.4.1. Where the council of a *municipality* assigns to an inspector who is the chief of the fire department of the municipality specific responsibility for the enforcement of any portion of this Code respecting fire safety matters, the *chief official* shall not issue a permit to *construct* a *building* unless the inspector approves as complying with such portion of this Code the drawings submitted with the application for the permit.

2.4.5. Notices to Chief Official

2.4.5.1.(1) Where the council of a *municipality* passes a by-law pursuant to Clause 5(2)(e) of the Act, the person to whom a permit has been issued shall notify the *chief official*,

- (a) of the commencement of the *construction* of the *building*,
- (b) of the readiness to *construct* the footings,

- (c) of the substantial completion of the footings and foundations,
- (d) where the *building* is within the scope of Part 9, of the substantial completion of
 - (i) structural framing,
 - (ii) insulation and vapour barriers, and
 - (iii) ductwork and piping for heating and *air-conditioning* systems,
- (e) where the *building* is within the scope of parts of this Code other than Part 9, of the substantial completion of
 - (i) structural framing of each *storey*,
 - (ii) insulation and vapour barriers, and
 - (iii) roughing-in of heating, ventilation, *air-conditioning* and air-contaminant extraction equipment,
- (f) of the commencement of the *construction* of
 - (i) masonry fireplaces and *masonry chimneys*,
 - (ii) factory-built fireplaces and allied *chimneys*,
 - (iii) *stoves*, *ranges*, *space heaters* and add-on *furnaces* using solid fuels and allied *chimneys*,
- (g) of the substantial completion of all required *fire separations* and *closures* and all fire protection systems including standpipe, sprinkler, fire alarm and emergency lighting systems,
- (h) of the substantial completion of interior finishes and heating, ventilating, *air-conditioning* and air-contaminant extraction equipment,
- (i) of the substantial completion of exterior cladding, fire access routes and site grading, and
- (j) of the completion and availability of drawings of the *building* as constructed.

Section 2.5. Climatic Data

2.5.1. Climatic and Seismic Values

2.5.1.1. The climatic and seismic values required for the design of *buildings* under this Code shall be in conformance with the values provided in Table 2.5.1.A. (See Appendix A.)



Interoffice Correspondence

August 28, 1991

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: INSTALLATION OF WATER METERS

The Region requires only a single water meter to serve multi-family dwellings, a building complex, apartment buildings, and so on.

It is left to the owner to determine if he/she wants to install additional water meters for his/her own purposes.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs



Interoffice Correspondence

August 28, 1991

TO: CLERICAL STAFF - BUILDING CONTROLS
FROM: B. A. FRANSEN
SUBJECT: INFORMATION REQUIRED BY INSPECTORS

Please include copies of all engineer's/architect's reports with the package of information that the Inspectors receive before they carry out an inspection. The reason for this is that the Inspector's role is to review construction and co-ordinate this effort with the work being done by the architect or engineer. On many occasions the Inspector will need a report from the architect/engineer to confirm the suitability of a building component. Sometimes, these reports are in the file without the Inspector having any knowledge of their content. It is for this reason that the reports should be included with the Inspector's sheets.

B. A. Fransen

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

cc: Inspectors ✓



Interoffice Correspondence

September 12, 1991

TO: ALL INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: PROCEDURES
LOT GRADING AND DRAINAGE

You will note that the files include notations with respect to the contractors obligations with respect to lot grading and drainage.

So that there is no misunderstanding, the Region's policy on this issue has not changed in so far as responsibility is concerned, thus, the Region will enforce the provisions of the Ontario Building Code with the area municipality left in charge of administering the drainage requirements that are contained in the subdivision agreements and lot drainage agreements.

The Ontario Building code, reads as follows:

9.14.6 SURFACE DRAINAGE

9.14.6.1 SURFACE DRAINAGE

The building shall be located and the building site graded so that water will not accumulate at or near the building and will not adversely affect adjacent properties.

9.14.6.2 DRAINAGE AWAY FROM WELLS OR SEPTIC DISPOSAL BEDS

Surface drainage shall be directed away from the location of a water supply well or septic tank disposal bed.

. . . . 2

9.14.6.3 CATCH BASINS

Where runoff water from a driveway is likely to accumulate or enter into a garage, a catch basin shall be installed to provide adequate drainage (where storm sewers exist)

9.14.6.4 DOWNSPOUTS

Where downspouts are provided any are not connected to a sewer, provisions shall be made to prevent soil erosion.

Thus, the inspector will want to become familiar with these provisions and advise the construction of his obligations as often as he possibly can.



B.A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/dd



Regional Municipality of Sudbury

From P.J. Morrow, P.Eng., Regional Engineer

Date 1991-01-23

For Action For Information

File No. _____

Planning Committee

Sudbury Regional Development Corporation

Engineering Committee

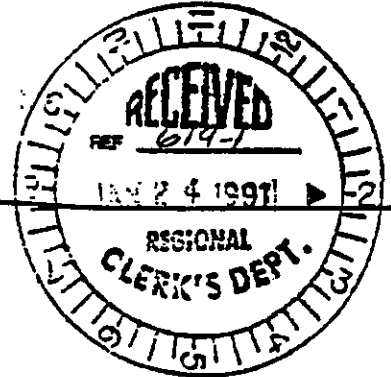
Finance Committee

Health and Social Services Committee

Council

Committee of the Whole

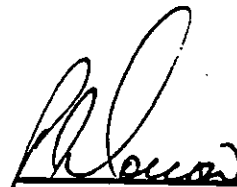
Other



SUBJECT

Weeping Tile Connections to the Sanitary Sewer System
(Budget Enrichment - Technical Services Section)

*1991-08-29.
copy: inspectors
file: procedures.*



P.J. Morrow, P.Eng.
Regional Engineer

Regional Engineering Committee

1991-01-23

RE: Weeping Tile Connections to the Sanitary Sewer System

Background

The sewage back-up study for the June 17, 1989 storm attributed the connection of weeping tile to the sanitary sewer system as one(1) of the factors contributing to the flooding problem. A recommendation from the study came forward to establish means of eliminating the weeping tile connections. A report to the Engineering Committee of October 18, 1990 recommended that a grant program be established in the amount of \$200,000 for 1991 to initiate the disconnection of weeping tile from the sanitary sewer system. The Committee asked for further information with respect to costs for discussion at the budget deliberations.

I can advise that it is difficult to establish costs for such work as there are many variables involved in carrying out this work. There are three(3) main situations which would be encountered:

1) Weeping tile connected to a sump

In this case, the sump would have to be disconnected from the sewer and a sump pump would be installed along with a discharge pipe to the outside of the building. Costs for this scenario would be \$300 to \$500.

2) Weeping tile connected through a floor drain and "P" trap

Work in this case would involve disconnecting the weeping tile from the floor drain and constructing a new sump. A pump and discharge pipe would have to be installed. Costs for this situation would range from \$1,000 to \$2,000. This would probably be the most common situation.

3) Weeping tile connected directly to the sanitary sewer outside foundation walls

The weeping tile would have to be disconnected outside the foundation and be redirected inside to a new sump. Again, a pump and discharge pipe would be necessary. This work could cost \$3,000 to \$5,000.

There may be an estimated 40,000 homes in the Region with weeping tile connected to the sanitary sewers. At an average cost of \$1,500 per disconnection, it could cost \$60,000,000 to disconnect all the weeping tile from the sanitary sewers. The Region could not afford to carry out a program to eliminate all these connections although it would be desirable.

Regional Engineering Committee
RE: Weeping Tile Connections to the Sanitary Sewer System

1991-01-23

Background - Cont'd...

We have recommended that \$200,000 be established to start a program in 1991. The program should concentrate on areas where flooding has occurred in 1989 and 1990. Approximately, 130 homes could be accommodated.

Two(2) methods for having the work carried out are possible. The first method involves calling a contract to do the work on behalf of the owner. The second involves having the owner carry out the work and the Region paying the owner or his contractor. The second option is preferred.

The benefits of such a program include:

- 1) not having to reconstruct sewers to accommodate this infiltration;
- 2) reduced treatment costs;
- 3) reducing the need to prematurely expand sewage treatment plants;
- 4) reduced capital costs for expansion of sewage treatment plants as the size of the expansions could be reduced; and
- 5) reducing the possibility of sewage backups.

Based on operating experience in the Region, it costs \$0.07 to treat 100 gallons of sewage. If a home contributes 100 gallons of weeping tile water per day, the daily reduction for 40,000 homes would be \$2,800. Of course, not every home in the Region would contribute weeping tile drainage at the rate of 100 gallons per day on a daily basis, but the potential for savings is certainly evident.

For the information of the Committee, I am attaching a report that was provided to the Committee on May of 1985 on weeping tile. You will note that as of December 1984, weeping tile connections are no longer permitted for any new construction.

Attach.



Interoffice Correspondence

September 27, 1991

TO: STAFF
FROM: B. A. FRANSEN
SUBJECT: APPLICATION PROCEDURES

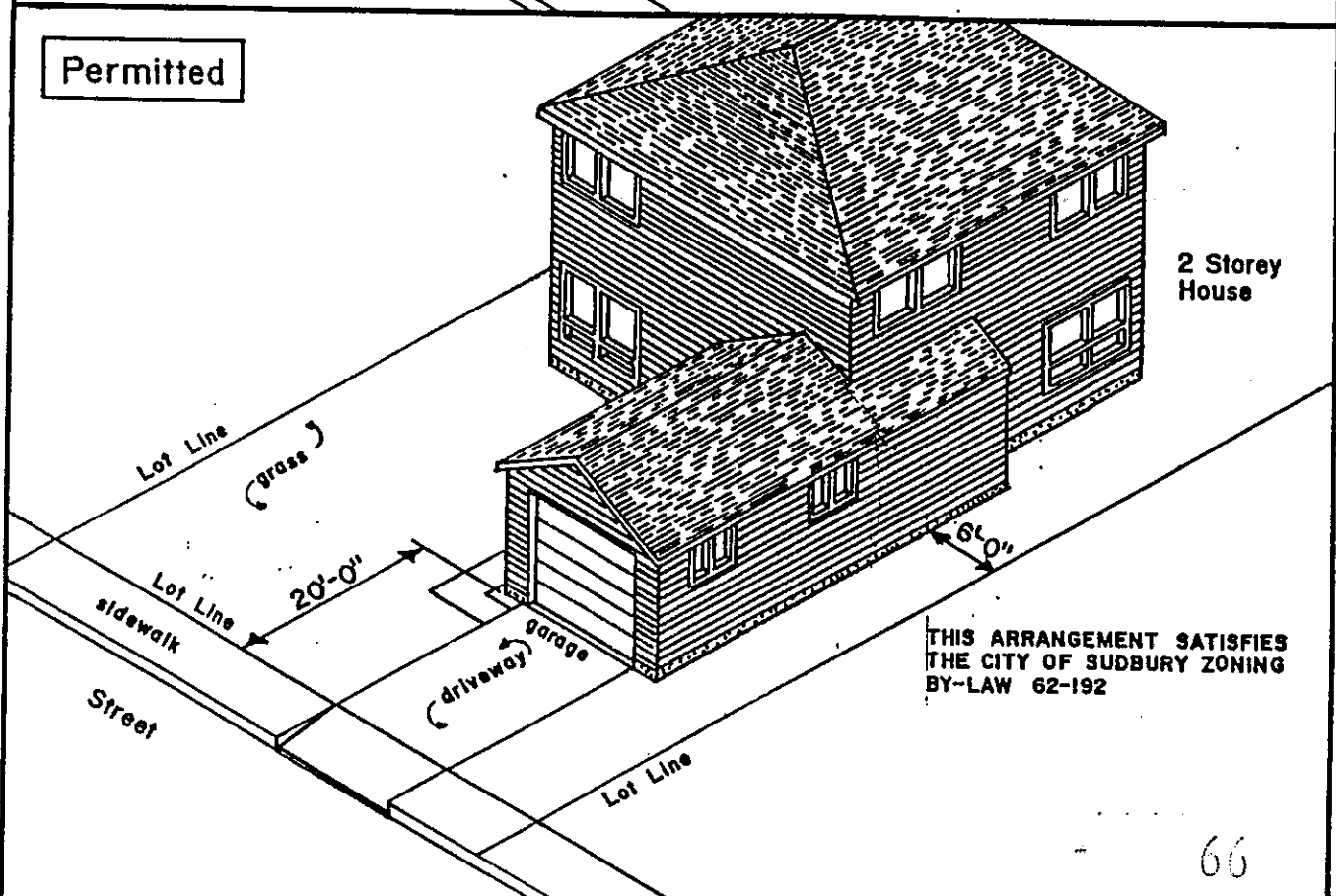
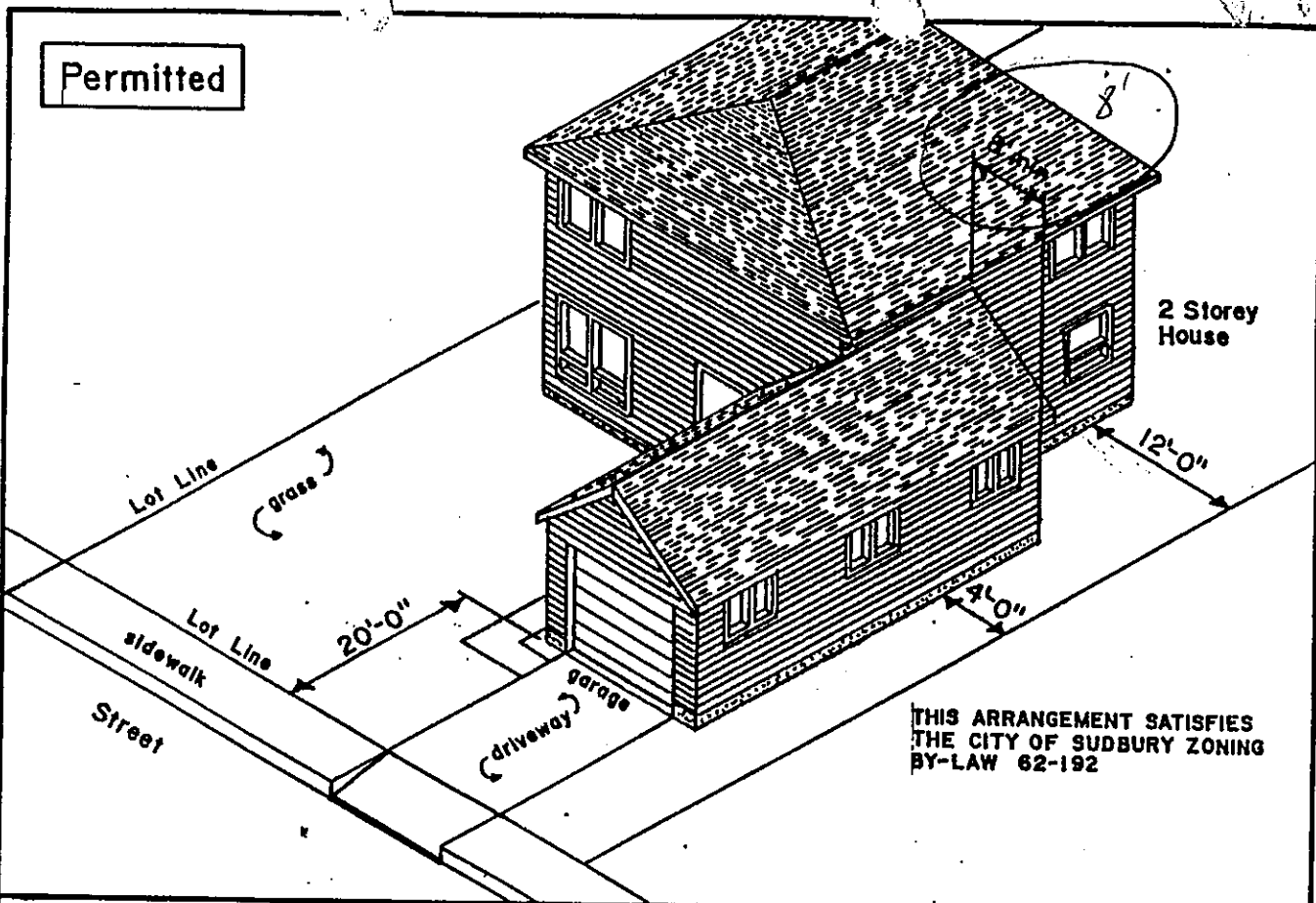
I can confirm that the City of Sudbury Engineering Department, the Regional Engineering Department and the Sudbury Fire Department are able to receive permit approval forms at each of their respective offices if they are brought there by the applicant.

When dealing with an applicant, you can offer him/her the opportunity to deliver the forms to each of these offices, which may assist in expediting the building permit issuance procedures. You should alert the applicant, however, that delivery of the documents does not guarantee an immediate response.

I trust that you will assist in implementing this new procedure.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

cc: D. McLean
P.J. Morrow
L. Moustgaard
R. O'Malley
H.A. Proudley



66

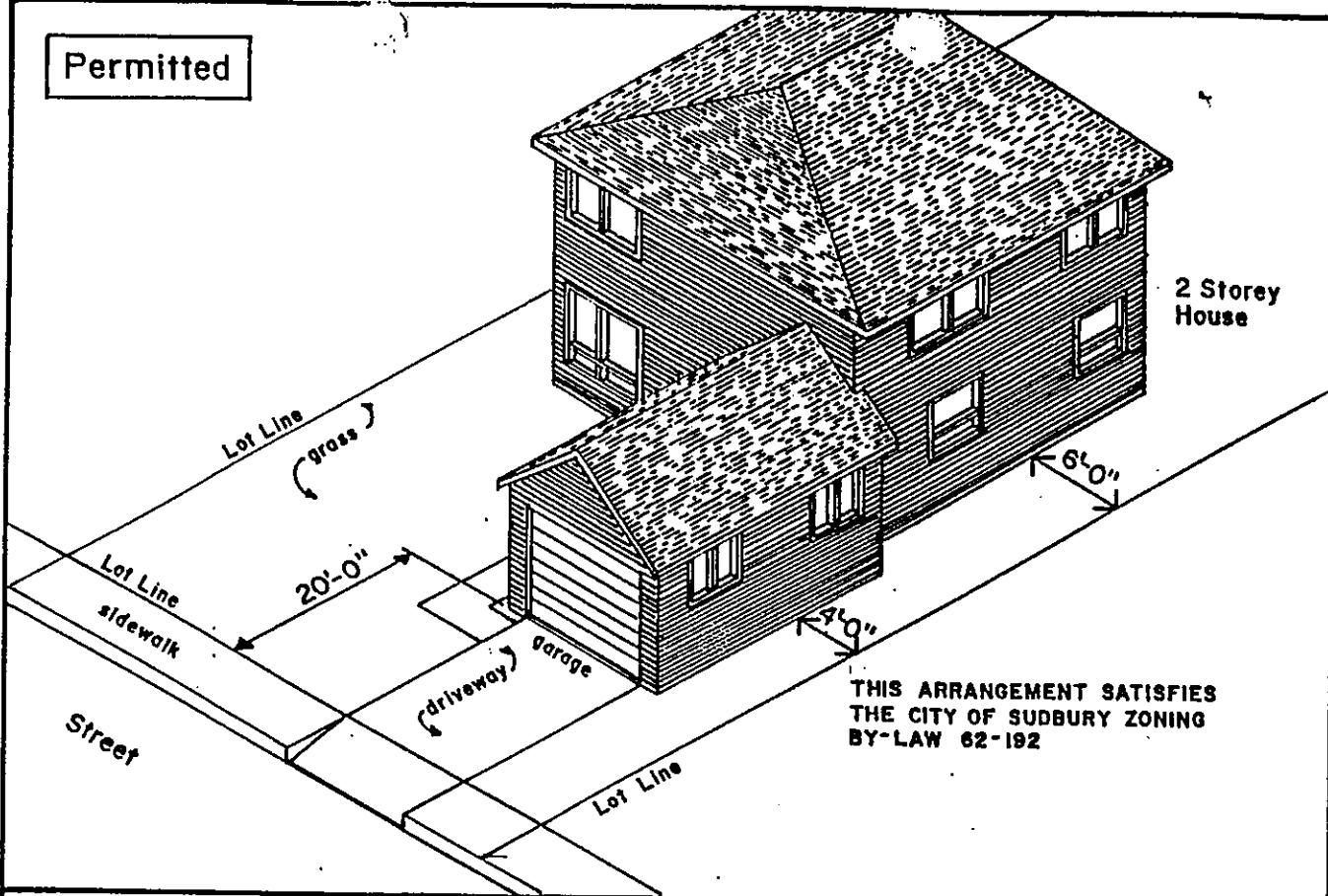
REVISIONS	
DATE	BY

REGIONAL MUNICIPALITY OF SUDBURY

CITY OF SUDBURY
ZONING BY-LAW 62-192

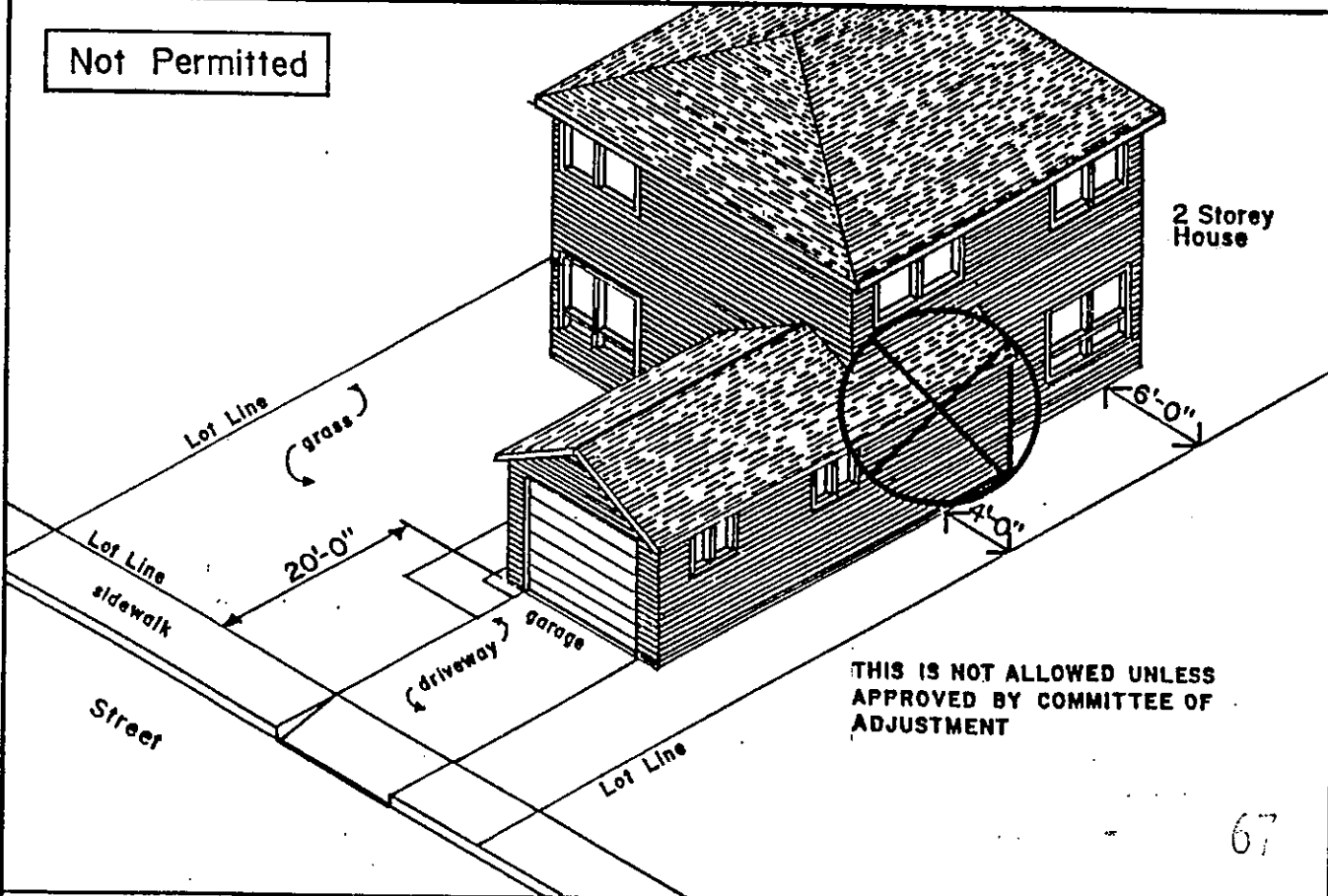
DRAWN: R.TILSON
DATE: JUNE 1987
SCALE: N.T.S.
APPROVED:
FILE

Permitted



THIS ARRANGEMENT SATISFIES THE CITY OF SUDBURY ZONING BY-LAW 62-192

Not Permitted

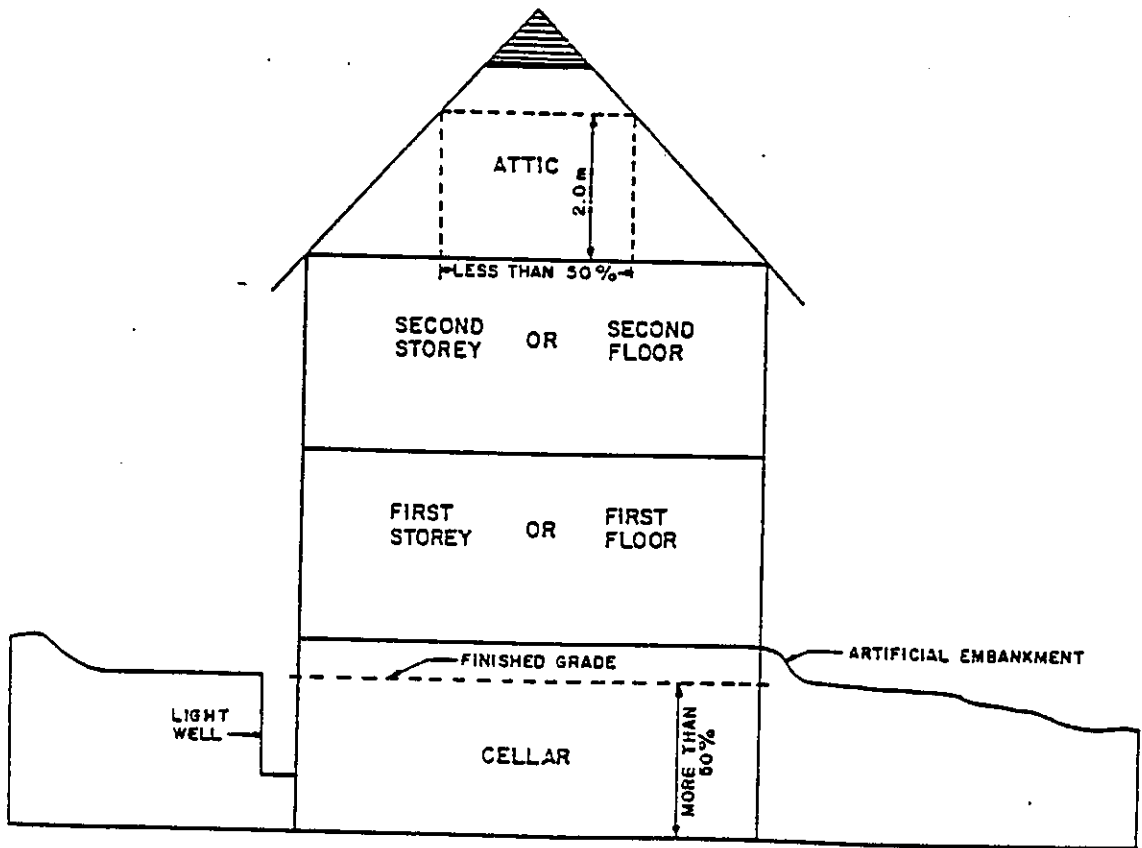
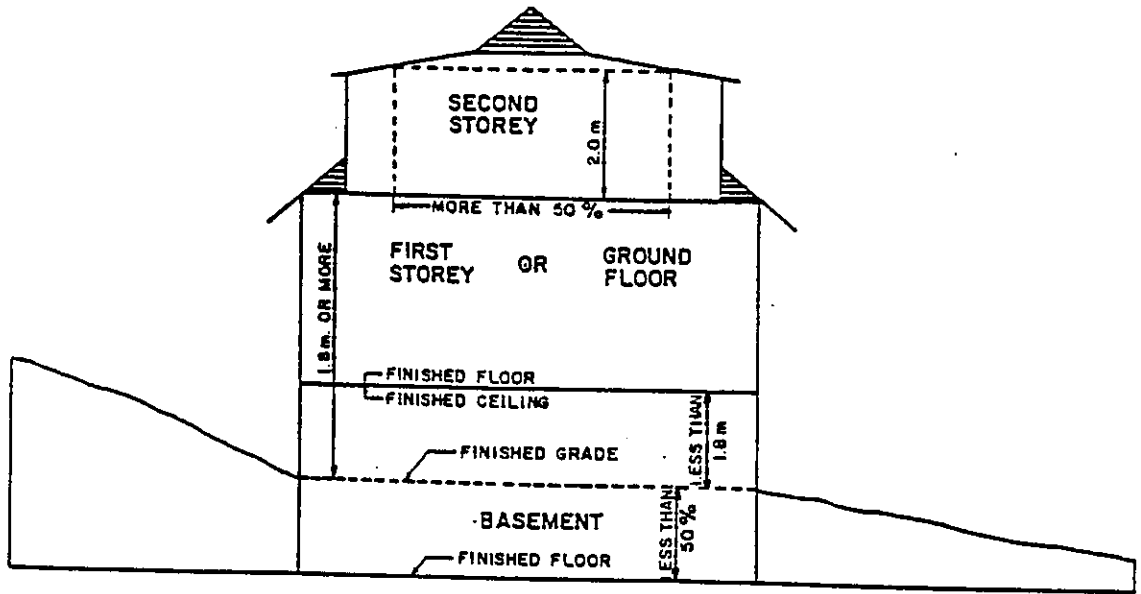


THIS IS NOT ALLOWED UNLESS APPROVED BY COMMITTEE OF ADJUSTMENT

67

REVISIONS		REGIONAL MUNICIPALITY OF SUDBURY	DRAWN: R.TILSON
DATE	BY		DATE: JUNE 1987
		CITY OF SUDBURY ZONING BY-LAW 62-192	SCALE: N.T.S.
			APPROVED:
			FILE NUMBER:

ILLUSTRATION OF STOREY DEFINITIONS



THIS ILLUSTRATION DOES NOT
FORM PART OF THIS BY-LAW
BUT IS PROVIDED FOR CONVENIENCE
ONLY.



Interoffice Correspondence

December 19, 1991

TO: BUILDING INSPECTORS
R. O'MALLEY

FROM: B. A. FRANSEN

SUBJECT: OCCUPANCY PERMITS - PROCEDURES

The following deals with co-ordination of the issuance of occupancy permits with Ontario Hydro and municipal Fire Department.

BACKGROUND

Residential buildings that exceed 600 m. sq. (6460 ft. sq.) in gross area and contain a dwelling unit above another dwelling unit require that the design and general review be conducted by an architect. Every building that exceeds 600 m. sq. in building area containing three or more dwelling units and having no dwelling unit above another dwelling unit requires that the building be designed and reviewed by an architect. Every building that exceeds 600 m. sq. in gross area or three storeys in building height requires its design and general review be performed by an architect and professional engineer.

Currently, an occupancy permit was issued if the architect and/or engineer was able to substantiate that the building complied with Section 2.4.3, Occupancy of Unfinished Buildings.

PROPOSAL

It is proposed that the Building Controls Division will grant permission to occupy an unfinished building only after the appropriate reports have been received from the architect and/or engineer, as well as a confirmation from Ontario Hydro and the municipal Fire Department that the areas requested to be occupied can be safely occupied.

Keray

BAF
B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs





Ministry of Housing
Ministère du Logement

Ontario Buildings Branch
777 Bay Street
2nd Floor
Toronto, Ontario
M5G 2E5

DEC 18 1991
DEC 18 1991
DEC 18 1991

December 18, 1991

TO: ALL ONTARIO PLUMBING CODE HOLDERS

RE: COPPER WATER TUBE IN PLUMBING SYSTEMS

The Ontario Buildings Branch of the Ministry of Housing is investigating various types of "Seamless Copper Water Tube" used in potable water distribution systems.

Tests in other jurisdictions as well as in Ontario indicate that the weights and thicknesses of some types of copper water tube do not comply with the ASTM B88-83 standard, which is specified in the Plumbing Code, Ontario Reg. 815/84. Further comprehensive testing is being conducted on all types of copper water tube.

Effective March 31, 1992, all copper water tubing for use in a plumbing system will be required to be certified for compliance with the ASTM B88-83 standard. The Ontario Buildings Branch is preparing a Plumbing Code amendment to require certification of copper water tubing.

In view of this change to the Plumbing Code, as of March 31, 1992, all copper water tubing manufacturers, wholesalers, retailers and plumbing contractors must be prepared to demonstrate that their tubing is in compliance with the Plumbing Code. This may be demonstrated by certification markings on the tubing made by a testing agency accredited for that purpose by the Standards Council of Canada. Some manufacturers of copper tube have already started an independent certification program.

In the interim, the Ontario Buildings Branch recommends that municipalities accept copper tubing without certification markings until March 30, 1992. The present Ontario Plumbing Code does not require certification markings on copper water tubing. The Ontario Buildings Branch will notify the industry of the test results when they become available.

Ali Arlani

Ali Arlani
Manager
Code Development & Advisory Services

Ventilation systems upgraded

It was the English philosopher Herbert Spencer who wrote "every cause produces more than one effect."

Although he was writing about the course of progress at the time, his words can certainly be applied to the spate of changes made to the Ontario Building Code recently. Take, for example, the upgrades made to the Code's residential ventilation requirements.

As of Oct. 1 of this year, the standards for residential ventilation have been upgraded so that builders are now required to install mechanical ventilation systems into each new home they build. Previously, the Code's provision for ventilation requirements was found in the section on windows; builders were told to put them in and owners were told to open them.

The energy crisis forced us to change that way of thinking.

It's on the house

Maureen Guy



In our cause to conserve energy, and keep our fuel bills out of the stratosphere, we asked the construction industry to build us more energy efficient homes; and the industry delivered, providing improved heating systems and insulation, better weather stripping around doors and windows and tighter seals throughout.

The result is that today's homes are sealed tight as a drum. The effect is that it is now more difficult to control the humidity and for stale, moist air to escape, hence the need for changes to the residential ventilation require-

ments.

In the new specifications, the minimum changes builders will have to make will be to install fans exhausted to the outside. At best, this passive system will satisfactorily control the humidity of the house if the owner is vigilant about monitoring the humidity level and operating the fans as needed. Unfortunately, few of us are as vigilant as we should be, so thankfully, there are other options.

An automatic humidistat and timer will monitor humidity and automatically activate the ventilation system when the humidity level strays outside of the ideal 30 to 40 per cent comfort level.

A two-speed furnace fan is a second option. You can set the fan to run on low speed for constant use, or select the higher speed when you want to heat or cool the house. With this option the furnace fan is used to bring fresh air into the house.

A third possibility is a ventilation duct system connected to a fan that has the capacity to meet the ventilation requirements of the house. One of the prime advantages of this option is that you will have the ability to control ventilation for the entire house rather than only at limited points.

Special interest

A fourth option, which I'll call the "Thunder Bay" option, will be of special interest to readers who live in extremely cold parts of the province. You can purchase ventilation systems that come with heat recovery features; an especially cost-effective option which we all might want to consider if the current crisis in the Middle East worsens.

Understanding the various types of ventilation systems and what best suits the needs of you and your family can make a difference in the level of comfort you will experience while living in your home. The information I've given you here is really just the bare bones.

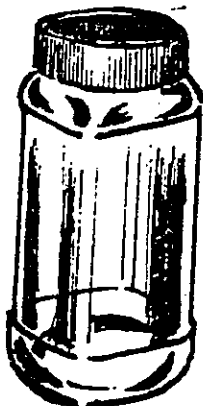
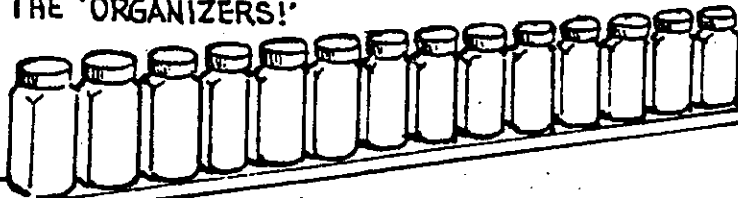
□ Maureen Guy is the director of communications of the Ontario New Home Warranty Program. In her weekly column she will detail protection offered by the program and respond to readers' questions. If you have a query about the warranty program or about builders, write to: Maureen Guy, Ontario New Home Warranty Program, North York City Centre, North York East Tower, 6th floor, 5160 Yonge St., North York, Ont., M2N 6L9. (Tel. 229-9200).

BILLY DELOW'S

Something out of Nothing

YOU CAN CONVERT "THROW-OUT" ITEMS INTO SOMETHING USEFUL! SAVE MONEY!

THE 'ORGANIZERS!'



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SAVE THEM TO MAKE SETS ALL IN THE SAME SIZE

MAIL YOUR IDEAS TO BILLY DELOW, 1280-50 INVERLOCHY BLVD. THORN HILL, ONT. L3T 4T6 (CANADA) IDEAS CANNOT BE RETURNED. \$20. PAID IF USED

Compliance — Inspector, Lawyer and Judge

Peter L. Gordon

of the law firm of DuVernet, Stewart, Fenn
Toronto

Some property owners believe their homes are their castles. They believe they reign supreme — at least in so far as alterations to their house. They believe they can renovate without deference to authority. Nothing is further from the truth. When safety is a factor the chief official wants to know what owners construct in their own houses. An unsafe condition at a house could unknowingly become the problem of a purchaser. How can a chief official discharge his or her duty? This article will examine a few ideas. First, the scenario.

THE NEW HOUSE

Ross, a young man, buys his first home. It is a three story brick residence. There is an existing bedroom on the third floor. A basement exists but the head room is only about six feet. This house, even in its unaltered state, is a hefty commitment for Ross. A large generous mortgage from his mother has made this transaction possible. After moving in, Ross decides to rent out parts of the house for extra revenue. Rather

than seek the professional advice of an architect or a lawyer, he discusses his ideas with a few of his friends and after calculating his potential rental income he starts working on the renovations. He works on weekends with two of his buddies. One is a carpenter and the other helped his brother with some plumbing a few years ago. Ross, the boss, believes there is enough knowledge amongst his group. His plans are sketched out on the back of an envelope. The plan was hatched and settled over coffee at the local donut store.

PLANS

Ross plans to renovate the third floor and turn it into a separate dwelling unit. He renovates the basement also to be converted into a separate dwelling unit. The basement area will have its own entrance. Access to the third floor is to be via the main house entrance. There will be a private access to the basement from the third floor off a hallway. There is no other access to either level. The basement apartment will include a kitchen and a full bathroom. There is an existing toilet and sink in the present basement floor. The area is excavated to a lower level to provide greater head room. Carl, the carpenter, one of Ross' friends, says he knows something about this type of work.

The project starts. The first big problem occurs in excavating to lower the basement floor. A sanitary drain is broken while digging up the floor. This is a minor problem in the scheme of things. It causes some standing water to pool during the week between the bursts of construction activity. The object of this story is to emphasize the legal, rather than the practical problems. Further interesting details must remain untold.

The renovation on the third floor proceeds with speed. Few difficulties

occur here. This is because Peter the plumber, Ross' other buddy, is handy at both, plumbing and carpentry. He has taken over the third floor as his special project, while Ross and Carl, the carpenter, wade things out in the basement.

During the fifth weekend of construction activity, the neighbour across the street decides he has had enough. The swear words emanating from this construction site are too much for him. The next working day he calls a building official. The response of this official is immediate.

CHARGES

Ross receives a summons for building without a permit. An order to comply is served also. This order to comply relates to the work in the basement. The shoddy appearance of the workmanship concerns the inspector as does the integrity of the foundation walls. Digging, to lower the basement floor, has occurred right next to the walls. Two inches of muddy water on the basement floor prevents its condition from showing. The inspector, however, notices what he thinks are fresh cracks in the basement walls. He hands Ross the order to comply and orders Ross to get the benefit of an engineer's report on the integrity of the foundation walls and advice on any remedial suggestions the engineer may have.

MOTHER'S VISIT

At about this point in the story Ross' mother pays a visit. The extent of the renovations is cause for concern and she begins to worry about her large loan to her son.

Ross has no extra cash and cannot hire an engineer to complete the required report on the foundation walls. He thus fails to comply with the inspector's order. He is charged with failing to obey an inspector's order. Soon Ross is con-

Peter L. Gordon practices law in Toronto. He recently left the City of Toronto's litigation section where he was employed for ten years. Much of his practice involves enforcing zoning and building code laws. He has previously written articles on this subject for Municipal World. See: The Ultimate Penalty — Municipal World, October, 1981; Who's the Boss? — Municipal World, February, 1982; Change it? — Adjust It? Disregard it? — Municipal World, January, 1983. In this article, Mr. Gordon looks at several types of orders which may be appropriate under section 26 of the Building Code Act. In particular he examines what he calls the "stepped order."

victed of both these charges – building without a permit and failing to comply with an order of an official. The house remains in shambles. A few more weeks pass without activity. Peter the plumber moves back to his hometown. Carl the carpenter accepts a gift of a return air ticket to Europe to visit a generous aging aunt. Ross, the boss, has nobody to boss. He falls into a deep depression.

INSPECTOR AND LAWYER

At this point the inspector consults his lawyer. What should be done? They discuss options.

A high court judge should be asked for what order? Here are a few suggestions.

First, the engineer's report which the inspector requested was a good idea. The integrity of the foundation walls remains a concern; this safety aspect should be followed through.

Second, the question of preventing the impending creation of a separate dwelling unit on the third floor, without a second separate means of exit/entrance, would be proper subject matter of an order under section 26 of the *Building Code Act*.

Third, an order allowing access to the premises to inspect might be an idea worth developing, especially if the depression of Ross is likely to be directed into hostility against the inspector.

Although the property was a single family residence before the illegal construction, an order to return the property to a lay-out consistent with a single family use may not be a proper or a desirable order for a chief official to seek of a high court judge. The building inspector and the lawyer must determine the least demanding order which is reasonable in the circumstances. It must also go far enough to cause the property to be in compliance with law, and to be safe.

STEPPED ORDER

Let us take a closer look at the exact order sought.

Ross must get a report from an engineer to determine the structural integrity of the foundation walls. The order directs the engineer to suggest what remedial relief, if any, to follow. This report will cost money. Ross may not be able to muster the necessary funds. The order should also require the chief official to get the engineer's report if Ross does not. The report will give the situation direction.

The way to do this is to require both Ross and the chief official to carry out the necessary steps to get the engineer's report. The stepped order is a mechanism which acknowledges progressive enforcement. The courts require that this procedure be followed in several areas of the law. For example, an employee must be warned to "shape up" before being discharged. The way to achieve the stepped order, or the order recognizing increasing enforcement, is for a stayed order against the chief official to a future date so that the home owner could have more time to complete the report. If the report is not delivered in time, the chief official is required to get one. When the report is received the chief official may find that the engineer suggests immediate action. For example, to avoid the collapse of the building. This stepped order is quicker, less cumbersome and less costly than the use of the power of contempt. The contempt route is the usual way to remedy a default of a high court order. The real concern of the chief official should be to remedy the problem and not punish the owner.

Stepped orders are most effective, but can involve the chief official with an extensive financial debt. Hence, the cost concern deserves attention.



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COSTS

The order for costs is a fourth item. The costs of hiring the engineer and following the remedial work he recommends, is recoverable. One effective way of recovering the costs is to have them charged to the municipal taxes for the property and collected in a like manner as municipal taxes.

What is the order for the third floor? Should the judge be asked to seal the third floor? This may be going too far. The third floor, after all, can be used, but not for a separate dwelling unit. Perhaps in this example, Ross has learned his lesson. The situation in the basement will be everyone's biggest concern. A fifth order could prohibit the use of the third floor as a separate dwelling unit.

REGISTER ON TITLE

A sixth order, one which is frequently requested, is authority to register the court order on the title. The wording of the enabling section 26 is wide enough to cover this request. The usefulness is that Ross' mother may have had concealed from her all the difficulties of the renovation. Her mortgage may well be in default. She may have consulted her own lawyer who may have carried out a sub-search of the property. Her lawyer will have an accurate idea of his client's predicament when he discovers the order on title.

Because of the problems left in the wake of ambitious property owners such as Ross, it is suggested that the various orders under section 26 are claimed against the owners, "their successors, assigns and others." Just who the "oth-

ers" are is something for a later court to decide. This would probably include Ross' mother, the mortgage holder. By this time she may have foreclosed!

The result of the inspector and lawyer meeting is to be able to submit to the court specific suggestions as to what could be done. On the excavation in the basement, the request of an engineer's report is made. To help resolve the issue of the third floor, the court may be asked

for a simple order to prevent its occupation as a separate dwelling unit. The court has also had a specific provision concerning costs suggested. The stepped order allows gradual enforcement. When the inspector and the lawyer have co-operated to package these ideas, most courts will recognize the thought that has gone into the case. The court will accept the reasoning, and grant the order sought. □

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Interoffice Correspondence

October 4, 1991

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: MOBILE HOMES

The attached correspondence serves as a reminder that mobile homes constructed in the Regional Municipality of Sudbury must comply with the strict provisions of the Ontario Building Code.

These requirements are spelled out in Section 2.1.1.4, under the heading, "Site Assembled and Factory-Built Buildings". You will want to become familiar with these regulations, since they apply to mobile homes specifically. Our role is to ensure that the occupants of mobile homes enjoy the same degree of safety and comfort as those who occupy single family residential buildings. Thus, mobile homes must be anchored and/or placed on foundations the very same way that residential buildings are, and may include pier type foundations, in accordance with Section 9.15.2.4, or foundation walls as outlined in Section 9.15.4.

I trust that this will assist you in determining the foundation requirements for mobile homes.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attachment



Interoffice Correspondence

October 2, 1991

TO: W.E. LAUTENBACH

FROM: B. A. FRANSEN

SUBJECT: APPLICATION FOR OFFICIAL PLAN AMENDMENT AND RE-ZONING - 772384 ONTARIO LIMITED, PART OF PARCELS 28719 & 2869, LOT 2, CONCESSION 4, HANMER TOWNSHIP, GRAVEL DRIVE, HANMER - VALLEYVIEW MOBILE HOME VILLAGE

I respectfully request that the members of the Planning Committee give favourable consideration to a proposal that the mobile homes currently occupying lands in the Valleyview Mobile Home Village and subject to a current re-zoning application be made safe for occupancy by having the below-listed program carried out by the owners.

BACKGROUND

The Ontario Building Code recognizes that site assembled and factory-built buildings (mobile homes) serve to provide a unique mode of shelter that differs substantially from that derived from a single family dwelling constructed in the traditional manner. Thus, site assembled and factory-built buildings comply with the Ontario Building Code provided that they bear the appropriate CSA label.

The Ontario Building Code reads as follows:

....cont'd

"2.1.1.4 Site Assembled and Factory-Built Buildings

(1) Except as provided in Sentence (2) and Article 2.1.1.7., this Code applies to the design and construction of site assembled buildings and manufactured buildings.

(2) Except as provided in Sentence (3), a manufactured building intended for residential occupancy is deemed to comply with this Code if it is designed and constructed in compliance with

(a) CSA Z240.2.1. "Structural Requirements for Mobile Homes" and CSA Z240.8.1., "Light Duty Windows", if the building is constructed in sections not wider than 4.88 m (16 ft), or

(b) CSA A-277 "Procedure for Certification of Factory-Built Houses".

(3) The requirements of this Code shall apply to

(a) building components designed and constructed outside the place of manufacture, and

(b) site installation of such buildings.

Manufactured buildings intended for residential occupancy must comply with all appropriate Code requirements. Only those building components that are designed and constructed in manufacturing plants in accordance with the Standards (CSA Z240.2.1., CSA Z240.8.1. and CSA A-277) are deemed to comply with the Code.

Building components designed and constructed outside the place of manufacture (e.g., masonry chimneys, basement stairs, foundations, etc.) must conform to the requirements of the Ontario Building Code. The Code also applies to the site installation of manufactured buildings in terms of tie down, spatial separation, grading, plumbing connections to street services, etc.

It is proposed that all of those mobile homes that were introduced into the mobile home village after January 1, 1989, be made to satisfy the provisions of the Ontario Building Code with respect to certification and labelling.

....cont'd

A preliminary review of the mobile homes reveals that not a single one has the appropriate label to indicate that the CSA Standards have been met. However, twelve of the buildings were constructed by Champion Home Builders Company, and it has been confirmed that the manufacturer is currently in the process of acquiring CSA approval. The twelve mobile homes on the south side of Jessica Street do not have CSA approval, and we will require that these obtain the appropriate label through a legitimate inspection agency.

We will also require that the mobile homes be properly anchored to resist uplift which could prove catastrophic if the area was affected by winds similar to those that traversed this area in the early 1970's.

We propose that those mobile homes currently occupying the remainder of the mobile home village, currently subject to re-zoning, be made to comply with the anchoring provisions of the Ontario Building Code. I have attached for your further information brief details on mobile home tie-downs that provide a degree of safety from the effects of severe wind loads.

It is proposed that the owners of mobile homes in the remainder of the mobile home park be encouraged to install tie-down devices where it is established that the mobile home-to-ground fastening is not adequate.

This proposal is provided in an attempt to enhance the safety of the occupants of the mobile home village, so that they may enjoy a lifestyle made safer by the adoption and installation of relatively inexpensive building components.



B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attachment

cc: P.J. Morrow
J.L. Rule

Part 2 General Requirements

(See Appendix A.)

Section 2.1 Application

2.1.1. Buildings

2.1.1.1. Parts 1 and 2. Parts 1 and 2 apply to all buildings.

2.1.1.2. Parts 3, 4, 5, and 6

(1) Except as provided in Article 2.1.1.5., Sentence 2.1.1.6.(1) and Subsection 2.1.2., Parts 3, 4, 5 and 6 apply to

- (a) all buildings used for
 - (i) Group A, *assembly occupancies*,
 - (ii) Group B, *institutional occupancies*, or
 - (iii) Group F, Division 1, *high hazard industrial occupancies*, and
- (b) all buildings exceeding 600 m² (6460 ft²) in building area or exceeding 3 storeys in building height used for major occupancies classified as
 - (i) Group C, *residential occupancies*,
 - (ii) Group D, *business and personal services occupancies*,
 - (iii) Group E, *mercantile occupancies*, or
 - (iv) Group F, Division 2 and 3, *medium and low hazard industrial occupancies*.

2.1.1.3. Part 9

(1) Except as provided in Sentences 2.1.1.4.(2), 2.1.1.6.(1) and Article 2.1.1.5., Part 9 applies to buildings

- (a) of 3 storeys or less in building height,

- (b) having a *building area* not exceeding 600 m² (6460 ft²), and
- (c) used for:
 - (i) Group C, *residential occupancies*,
 - (ii) Group D, *business and personal services occupancies*,
 - (iii) Group E, *mercantile occupancies*, and
 - (iv) Group F, Division 2 and 3, *medium and low hazard industrial occupancies*.

2.1.1.4. Site Assembled and Factory-Built Buildings

(1) Except as provided in Sentence (2), and Article 2.1.1.7., this Code applies to the design and construction of site assembled buildings and manufactured buildings.

(2) Except as provided in Sentence (3), a manufactured building intended for *residential occupancy* is deemed to comply with this Code if it is designed and constructed in compliance with

- (a) CSA Z240.2.1. "Structural Requirements for Mobile Homes" and CSA Z240.8.1. "Light Duty Windows", if the building is constructed in sections not wider than 4.88 m (16 ft), or
- (b) CSA A-277 "Procedure for Certification of Factory-Built Houses".

(3) The requirements of this Code shall apply to

- (a) building components designed and constructed outside the place of manufacture, and
- (b) site installation of such buildings.

(See Appendix A.)



Interoffice Correspondence

September 30, 1991

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: ISSUANCE OF PERMITS - BY-LAW 91-85

The Regional Municipality has enacted a by-law that authorizes the issuance of permits and prescribes the time for giving of notices required by the regulations.

This memo deals with one section of the by-law, namely, the requirements that have to be submitted to acquire a building permit.

Please review carefully paragraphs 2, 3 and 4 of the by-law.

As the Region's duly authorized agent, the Inspector has a duty to administer the by-law as written. To do otherwise, you are jeopardizing your position and leaving yourself open to criticism and ridicule.

I mention this only as a reminder and in an attempt to make you aware of the responsibilities of an Inspector.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attach.

12/11/85

BY-LAW 91-85

BEING A BY-LAW OF THE REGIONAL MUNICIPALITY
OF SUDBURY CONCERNING BUILDINGS AND THE
ISSUANCE OF BUILDING PERMITS

WHEREAS the Building Code Act, R.S.O. 1980, c.51,
authorizes a municipal council to pass by-laws concerning the
issue of permits and prescribing time for the giving of notices
required by the regulations;

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE
REGIONAL MUNICIPALITY OF SUDBURY HEREBY ENACTS AS FOLLOWS:

PERMITS

1. (1) A permit is required for all construction and
demolition dealt with by the Ontario Building Code.
- (2) The type of class of permit required for
construction or demolition is set forth in Schedule "A" to this
by-law and which Schedule is hereby enacted as part of this
by-law.

APPLICATION FOR PERMIT

2. Every applicant for a permit or his or her authorized
agent shall file an application in writing on the form or forms
prescribed by the Chief Building Official.
3. (1) Every application shall:
 - (a) identify and describe in detail the work and
occupancy to be covered by the permit for which
application is made,
 - (b) describe the land on which the work is to be
done, by a description that will readily
identify and locate the building lot,
 - (c) be accompanied by plans and specifications as
required by this by-law,
 - (d) state the valuation of the proposed work and be
accompanied by the required fee,
 - (e) state the names, addresses and telephone
numbers of the owner, authorized agent,
architect, engineer or other designer, and of
the constructor,

- (f) be accompanied, where applicable, by a written acknowledgement of the owner that he or she has retained the architect or professional engineer to carry out the field review of the construction, as described in Section 2 of Regulation 413/90 under the Building Code Act, and
- (g) be signed by the owner or his or her authorized agent who shall certify the truth of the contents of the application.

(2) Where compliance with all of the above requirements may create undue hardship the chief official may authorize deletion of one or more of the requirements provided the intent and purpose of this by-law is maintained.

4. Where six (6) months have elapsed after the date of the filing of the application for a building permit the application shall be deemed to be abandoned unless the chief official is satisfied that the applicant is proceeding in good faith and in a continuous process to complete the application.

PLANS, SPECIFICATIONS, DOCUMENTS AND INFORMATION

5. Each applicant shall furnish sufficient plans, specifications, documents and other information to enable the chief official to determine whether or not the proposed work conforms to the Act, the Regulations under the Act, Municipal By-laws, and other applicable statutes and by-laws.

6. Plans submitted shall be drawn to scale under paper, cloth or other suitable and durable material.

7. Site Plans submitted shall be reference to a current plan of survey certified by a registered Ontario Land Surveyor and a copy of such a survey shall be filed with and retained by the Municipality unless the chief official waives such requirement in cases where it would be inequitable or unnecessary.

8. The chief official shall determine the number of plans, specifications, documents and other information required to be furnished with applications.

ISSUE OF PERMITS FOR PART OF A BUILDING

9. (1) When for any reason a permit for a part of a building is sought prior to the issue of a permit for the whole project, the applicant shall:
- (a) file an application for a permit for the entire project and pay the fees for the whole project, and
 - (b) furnish plans and specifications acceptable to the municipality covering the portion of the work for which a partial approval and permit is requested.

The chief official may, in a case where he or she deems it proper, issue a permit for a portion of the project.

(3) The issue of a permit for a part of a project shall not signify to the applicant or assure the applicant that a permit for the whole project will be issued and such applications are at the risk of the applicant as to issue of permits for other parts or the whole of the building to be constructed.

FEES

10. (1) The applicant shall, at the time of permit application, pay the fees prescribed in Schedule "A" to this by-law and no permit shall be issued until the full fee is paid.

(2) Where the fees are based on a valuation of the proposed work the valuation shall include, except as may otherwise be provided in Schedule "A" to this by-law, the total cost of all work, services and materials in respect of the building and its construction or demolition, including the cost of all professional and related services.

(3) The chief official shall place a valuation on the cost of the work and if the permit applicant or holder disagrees with this valuation, the prescribed fee shall be paid before the issue of the permit. Upon completion of the work, if the actual cost of the work was less than the valuation placed by the chief

official, an audited statement satisfactory to the chief official may be submitted detailing the costs of all component parts of the work. The Chief Official shall, if he or she is satisfied that the statement contains the costs of all component parts of the work upon which the valuation was required to be based, value the work in accordance with this statement and issue the appropriate refund.

(4) In the case of non-commencement of any project, and upon written request, the chief official shall determine the amount of refund of permit fees, if any, that may be returned to the permit holder, in accordance with Schedule "B" to this by-law and the decision of the chief official is final.

(5) Works carried out under the authority of the Region or of an Area Municipality are hereby exempted from the payment of fees imposed in this section.

NOTIFICATIONS AND PENALTIES

11. The owner or his or her authorized agent shall notify the chief official at least four (4) business days in advance of the stages of construction specified in Regulation 413/90 under the Building Code Act.

12. (1) Every person who,
- (a) knowingly furnishes false information in any application under this by-law or in any statement or return required to be furnished under the Act or the regulations;
 - (b) fails to comply with any order, direction or other requirement made under this by-law; or
 - (c) contravenes any provision of this by-law,

and every director or officer of a corporation who knowingly concurs in such furnishing, failure or contravention is guilty of an offence and on conviction is liable to a fine of not more than \$2,000 or to imprisonment for a term of not more than one year, or to both.

(2) Where a corporation is convicted of an offence under subsection (1), the maximum penalty that may be imposed upon the corporation is \$10,000 and not as provided above.

(3) Procedure shall be by way of the Provincial Offences Act, R.S.O. 1980, c.400.

13. The short title of this by-law shall be the "Building By-law".

14. That By-laws 83-142, 85-7, 85-32, 86-4, 86-67, 86-88, 87-57, 87-74, 87-343, 88-343, 89-80, 89-274, and 90-396 be and the same are hereby repealed.

15. That this by-law shall come into force and take effect on the 1st day of April, 1991.

READ THREE TIMES AND FINALLY PASSED IN OPEN COUNCIL this 27th day of March, 1991.

CHAIRMAN

CLERK

SCHEDULE "A" TO BY-LAW 91-85

CLASSES OF PERMITS AND PERMIT FEES

<u>CLASS OF PERMIT</u>	<u>PERMIT FEE</u>
Construct a building (minimum Fee \$44.00)	\$13.50 for the first \$1,000 (or fraction thereof) of construction value, plus \$ 7.78 per \$1,000 (or fraction thereof) of construction value in excess of the first \$1,000
Demolish a building	\$44.00
To authorize occupancy of a building prior to completion	\$44.00
	<u>ENQUIRIES</u>
Search Request for Outstanding Work Orders and Occupancy Only	\$29.00
Search Request for Zoning, Outstanding Orders, Occupancy and Location Compliance	\$60.00

CHAIRMAN

CLERK

SCHEDULE "B" TO BY-LAW 91-85

REFUND OF PERMIT FEES

1. Pursuant to subsection 10(4) of this by-law the fees that may be refunded shall be a percentage of the fees payable under this by-law, calculated as follows:

- (i) 80 per cent if administrative functions only have been performed;
- (ii) 70 per cent if administrative and zoning functions only have been performed;
- (iii) 60 per cent if administrative, zoning and plan examination functions have been performed; or
- (iv) 50 per cent if the permit has been issued and no field inspections have been performed subsequent to permit issuance;

and 10 per cent shall additionally be deducted for each field inspection that has been performed after the permit has been issued.

2. If the calculated refund is less than the minimum fee, no refund shall be made.

CHAIRMAN

CLERK



Interoffice Correspondence

November 21, 1991

TO: ALL INSPECTORS & PLANS EXAMINERS

FROM: R. O'MALLEY

SUBJECT: INSTALLATION OF WATER METERS

Further to B.A. Fransen's memo to you on August 28, 1991, please be advised that the only time that two water meters are to be charged on an application is if it is for a semi-detached dwelling that is going to be split off after the building has been constructed.

I trust this information is clear, but if you have any questions, please contact me.

Kerry

ROM
**R. O'MALLEY,
CHIEF BUILDING INSPECTOR
ROM/kcs**

cc: B.A. Fransen





Interoffice Correspondence

August 28, 1991

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: INSTALLATION OF WATER METERS

The Region requires only a single water meter to serve multi-family dwellings, a building complex, apartment buildings, and so on.

It is left to the owner to determine if he/she wants to install additional water meters for his/her own purposes.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs



Interoffice Correspondence

November 15, 1991

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: BUILDING PERMIT ISSUANCE PROCEDURES

GUIDELINES

Clarification of work that is deemed not to be construction as defined in the Building Code Act and is exempt from the requirements to obtain a permit.

SCOPE

A building permit is not required for the following:

1. Wooden decks, with no roof, where the finished deck level is 600 mm (24") or less above finished grade.
2. Sky lights, provided not more than one rafter, joist, or other similar structure member is cut or removed.
3. Non-combustible cladding, excluding brick veneer.
4. Window and door replacement.
5. Add-on cooling systems, air cleaners, plenum heaters and in-line humidifiers.

....cont'd



6. Furnace replacement.

COMMENT TO INSPECTORS

Would you please include a list of other structures which you consider not to require a building permit.

1.

2.

3.

4.

Please provide your comments to B.A. Fransen by no later than November 29, 1991.

Kerry

for B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

cc: R. O'Malley



Interoffice Correspondence

November 25, 1991

TO: INSPECTORS
PLANS EXAMINERS
R. O'MALLEY

FROM: B. A. FRANSEN

SUBJECT: PROCEDURES
BUILDING BY-LAW

The Region's building by-law makes specific reference to the requirements that must be satisfied prior to a building permit being issued. You will want to review the content of the by-law so that all of the requirements are satisfied before a permit is issued.

If you have any concern about the content of the check list attached, please provide me with your comments.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attachment

PERMIT APPLICATION INFORMATION

DWELLINGS - MORE THAN TWO UNITS

To include: Additions and Accessory Buildings

Date: _____

MUNICIPALITY: _____

GEOGRAPHIC AREA: _____

1. Property description clearly shown on plan _____

Lot # _____ Concession # _____

Lot # _____ Plan # _____ Parcel # _____

Part # _____ Plan # _____ Street _____

2. Zoning is _____ Proposed Use: _____

3. Property cleared for building permits//subdivision cleared //

Deed shown on letter submitted _____

(a) Owner's Commitment - Signed & Submitted/Not required //

(b) Letter of Authorization Required/Not required //

4. Zoning Requirements

Zoning By-law Number _____

Lot Frontage _____ Building Height _____

Lot Depth _____ Parking Spaces Required _____ Parking Spaces Provided _____

Lot Area _____ Floor Space Index _____

Floor Area _____ Landscaping _____

Front Yard _____ Suite Count _____

Side Yard (Drive) _____ Play Area _____

Side Yard (Other) _____ Min. Unit Floor Area _____

Rear Yard _____ Usable Open Space _____

Lot Coverage _____ Loading Space _____

Special Case _____

5. Lot:

Corner Interior Key

Reverse Corner Though Wedge

6. Plot Plans are submitted in acceptable form..... _____

7. a) Building Plans and specifications are submitted in acceptable form..... _____

b) Design and general review - only one professional Required/Not required /

8. Proposed and existing uses clearly shown on plans..... _____

9. Number of new units _____

- 10. Name and address of owner on plan.
Name: _____ Address: _____
Phone Number: _____

- 11. Name and address of applicant on plan.
Name: _____ Address: _____
Phone Number: _____

- 12. Size and location of water meter shown..... _____

- 13. Owner/Applicants drawings contain a notation that water cooled air-conditioning units must not be used unless the water is recycled..... _____

- 14. Size and location of service connections at wall shown. _____

- 15. Pre-inspection not required//Site Inspection report attached to plan..... _____ /

- 16. Rezoning requirements:
 - a) Not required..... _____
 - b) Required and O.M.B. approval obtained.... _____
 - c) Required and O.M.B. approval not obtained _____

- 17. Site Plan Control required and registered//not required _____ /

- 18. Conditions of Site Plan Control fulfilled to allow permit to be issued..... _____
Outstanding conditions required to be fulfilled prior to permit being issued. Condition # _____

- 19. Building Permit payment has been received \$ _____
Water Meter Installation:
Fee required/not required \$ _____ /

- 20. Drawings and specifications forwarded to:
 - a) Sewer & Water Dept. Date: _____
 - b) Roads & Drainage Dept. Date: _____
 - c) Transportation Dept. Date: _____
 - d) Fire Inspector's Office Date: _____
 - e) Reg. Roads & Drainage Date: _____

- 21. Drawings and specifications returned and approved by:
 - a) Sewer & Water Dept. Date: _____
 - b) Roads & Drainage Dept. Date: _____
 - c) Transportation Dept. Date: _____
 - d) Fire Inspector's Dept. Date: _____
 - e) Reg. Roads & Drainage Date: _____

- 22. Allocate house number..... _____

- 23. Health Unit Approval required//not required..... _____ /
If required, owner or applicant advised... Date: _____
If required, approval received... Date: _____

PERMIT APPLICATION INFORMATION

COMMERCIAL - PROFESSIONAL - INDUSTRIAL

To include: Additions and Accessory Buildings

Date: _____

MUNICIPALITY: _____

GEOGRAPHIC AREA: _____

1. Property description clearly shown on plan _____

Lot # _____ Concession # _____

Lot # _____ Plan # _____ Parcel # _____

Part # _____ Plan # _____ Street _____

2. Zoning is _____ Proposed Use: _____

3. Property cleared for building permits//subdivision cleared _____//
Deed shown on letter submitted _____

4. Zoning Requirements

Zoning By-law Number _____ Rear Yard _____

Lot Frontage _____ Lot Coverage _____

Lot Depth _____ Building Height _____

Lot Area _____ Parking _____

Floor Area _____ Landscaping _____

Front Yard _____ Loading Space _____

Side Yard (Drive) _____ Sign Area & Location _____

Side Yard (Other) _____

OTHER: _____

5. Plot Plans are submitted in acceptable form..... _____

6. Building Plans and specifications are submitted in acceptable form..... _____

7. Proposed and existing uses clearly shown on plans..... _____

8. Owner's Commitment signed & submitted/not required.... _____ /

a) Letter of Authorization required/not required..... _____ /

9. Name & address of owner on plan

Name: _____ Address: _____

Phone: _____

10. Name & address of applicant on plan

Name: _____ Address: _____

Phone: _____

a) Name & address of builder on plan

Name: _____ Address: _____

Phone: _____

- 11. Size and location of water meter shown..... _____
- 12. Size and location of service connections at wall shown _____
- 13. Owner/Applicants drawings contain a notation that water cooled air-conditioning units must not be used unless the water is recycled..... _____
- 14. Pre-inspection not required/Site inspection report attached to plan..... _____ /
- 15. Rezoning requirements:
 - a) Not required..... _____
 - b) Required and O.M.B. approval obtained.... _____
 - c) Required and O.M.B. approval not obtained _____
- 16. Site Plan Development Agreement required and registered/not required..... _____
- 17. Conditions of Site Plan Development Agreement fulfilled to allow permit to be issued
Outstanding conditions required to be fulfilled prior to permit being issued:
Condition # _____
- 18. Building Permit payment has been received \$ _____
Water Meter Installation:
Fee required/not required \$ _____ /
- 19. Drawings and specifications forwarded to:
 - a) Sewer & Water Dept. Date: _____
 - b) Roads & Drainage Dept. Date: _____
 - c) Transportation Dept. Date: _____
 - d) Fire Inspector's Office Date: _____
 - e) Reg. Roads & Drainage Date: _____
- 20. Drawings and specifications returned and approved by:
 - a) Sewer & Water Dept. Date: _____
 - b) Roads & Drainage Dept. Date: _____
 - c) Transportation Dept. Date: _____
 - d) Fire Inspector's Dept. Date: _____
 - e) Reg. Roads & Drainage Date: _____
- 21. Allocate house number..... _____
- 22. Ministry of Labour approval required/not required
If required, owner or applicant advised:
Date: _____
If required, approval received:
Date: _____
- 23. Health Unit approval required/not required
If required, owner or applicant advised:
Date: _____
If required, approval received:
Date: _____
- 24. L.C.B.O. approval required/not required
If required, owner or applicant advised:
Date: _____
If required, approval received:
Date: _____



Interoffice Correspondence

November 28, 1991

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: OCCUPANCY PERMITS - PROCEDURES

The information enclosed is to inform you that the requirements for occupancy of buildings have been amended to include Ontario Hydro and Fire Department officials' approvals.

Please ensure that these approvals are received and included in the project file before the occupancy permit is issued. Should you have any questions whatsoever, please discuss with me at your earliest convenience.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Encl.

REGIONAL MUNICIPALITY OF SUDBURY

OCCUPANCY PERMIT PROCEDURES

1. Persons seeking permission to occupy a building for residential occupancy that has not been fully completed or is fully completed at the date of occupation must provide evidence that the following requirements have been met:
 - (a) The building:
 - (i) is not more than 3 storeys in building height;
 - (ii) has not more than 1 dwelling unit above another dwelling unit;
 - (iii) has not more than 2 dwelling units sharing a common means of egress, and
 - (iv) has no accommodation.
 - (b) The following building components and systems are complete and operational;
 - (i) required exits, handrails and guards, fire alarm and detection systems, and fire separations, and
 - (ii) water supply, sewage disposal, lighting and heating systems.
 - (c) Where applicable, the building conforms to Article 2.1.1.8.
 - (d) Where the building is required to be designed by an architect or engineer or both, the owner is to submit proof that the building has been approved by the following:
 - (i) Ontario Hydro
 - (ii) Sudbury Fire Department or Municipal Fire Department
 - (iii) Engineer's Approval, including structural, mechanical, electrical, if applicable
 - (iv) Architect's Approval, if applicable.
2. Except as permitted above, persons seeking permission to occupy any building or part thereof that has not been fully completed at the date of occupation, or has been fully completed, must provide evidence that the following requirements have been satisfied:
 - (a) the structure of the building or part thereof is completed to the roof,
 - (b) the enclosing walls of the building or part thereof are completed to the roof,
 - (c) the walls enclosing the space to be occupied are completed, including balcony guards,
 - (d) all required fire separations and closures are completed on all storeys to be occupied,

- (e) all required exits are completed and fire separated including all doors, door hardware, self-closing devices, balustrades and hand-rails from the uppermost floor to be occupied down to grade level and below if an exit connects with lower storeys,
- (f) all shafts including closures are completed to the floor-ceiling assembly above the storey to be occupied and have a temporary fire separation at such assembly,
- (g) measures have been taken to prevent access to parts of the building and site that are incomplete or still under construction,
- (h) floors, halls, lobbies and required means of egress are kept free of loose materials and other hazards,
- (i) if service rooms should be in operation, required fire separations are completed and all closures installed,
- (j) all water, drainage and venting systems are complete and tested as operational for the storeys to be occupied,
- (k) required lighting in corridors, stairways and exits is completed and operational up to and including all storeys to be occupied,
- (l) required standpipe, sprinkler and fire alarm systems are complete and operational up to and including all storeys to be occupied, together with required pumper connections for such standpipes and sprinklers,
- (m) required fire extinguishers have been installed on all storeys to be occupied,
- (n) main garbage rooms, chutes and ancillary services thereto are completed to storeys to be occupied,
- (o) required fire fighting access routes have been provided and are accessible,
- (p) Ontario Hydro Approval has been received, and
- (q) Sudbury Fire Department or Municipal Fire Department Approval has been received, whichever has jurisdiction,
- (r) Architect's Approval, if applicable,
- (s) Engineer's Approval, including structural, mechanical, electrical, if applicable.



As a home buyer or home builder, you ask yourself:
 "Why should I use TYVEK* Housewrap on my house(s)?"

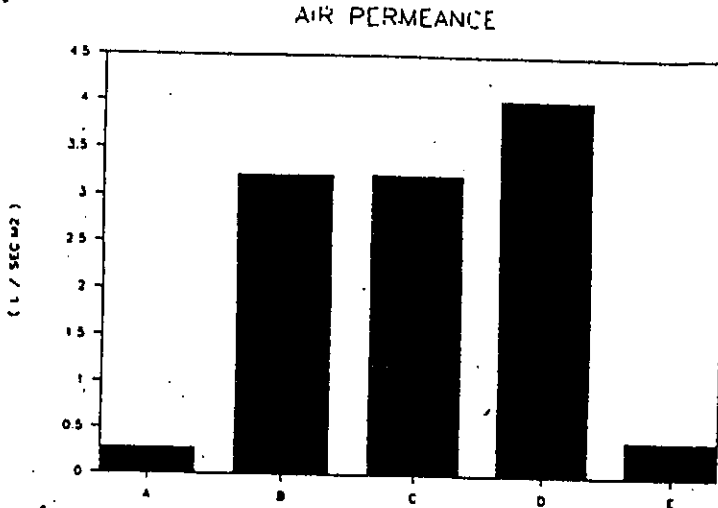
To answer that question you have to compare the benefits of the options available against the following criterias:

1. AIR PERMEABILITY

Air Permeability is a key characteristic while comparing the performance of membranes available. This is the characteristic that determines your energy savings, the lowest air permeability the greatest energy savings.

This bar chart shows that only TYVEK and black papers have a low air permeance, while perforated membranes have at least 10 times more air leakage.

- A - TYVEK
- B - TYPAR
- C - PARSEC
- D - Weldwood
- E - Black Paper



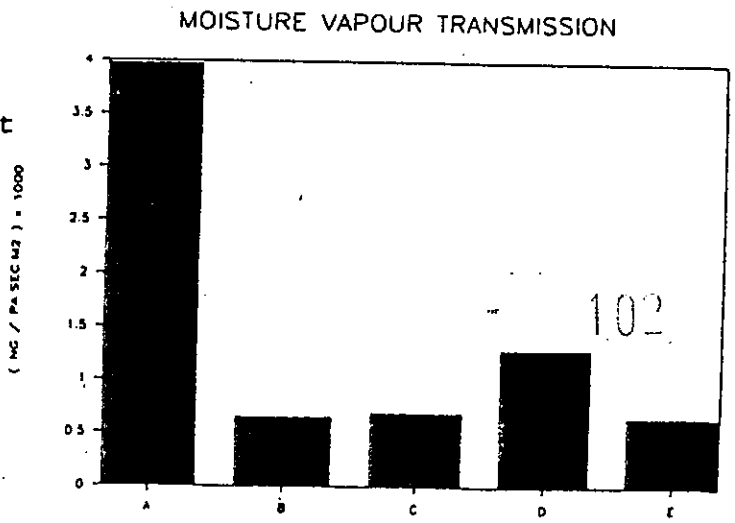
Continuity is critical for air barriers. When air permeability ratings are similar, continuity is the differentiating factor for better air infiltration performance. TYVEK Housewrap is designed to create a continuous envelope around the house, but the narrow width and rigidity of black paper makes it impossible to create continuity. Only TYVEK Housewrap reduces air infiltration, improves comfort and energy performance of your homes.

2. MOISTURE VAPOUR TRANSMISSION

Another key characteristic is the ability of the membrane to allow trapped moisture in the wall cavity to escape. Trapped moisture causes rot to framing members and reduces insulation performance. This is especially critical during the first two years of a new house.

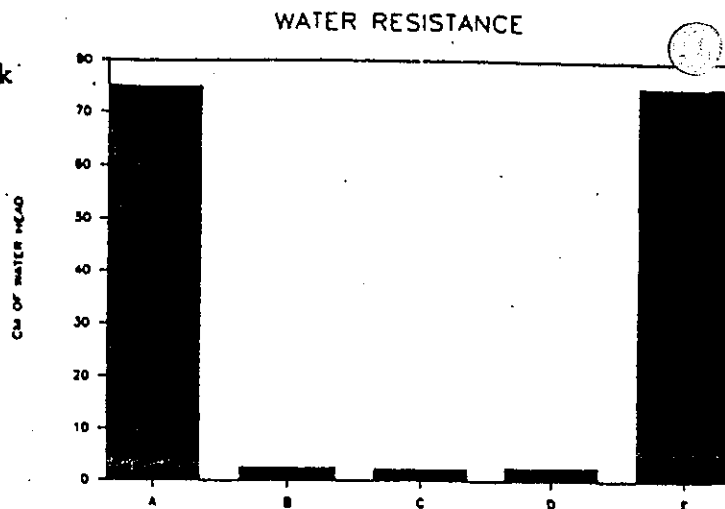
Looking at the bar chart, TYVEK shows its ability of breathing moisture vapour at least 3 times better than the best of perforated membranes and much better than black papers.

NOTE: In the case of perforated membranes and black papers, CMHC specifies a maximum of 1400 Ng/Pa s m². This norm is to ensure a minimum of water resistance of those perforated membranes and a minimum of tar impregnation of thin breathable black papers.



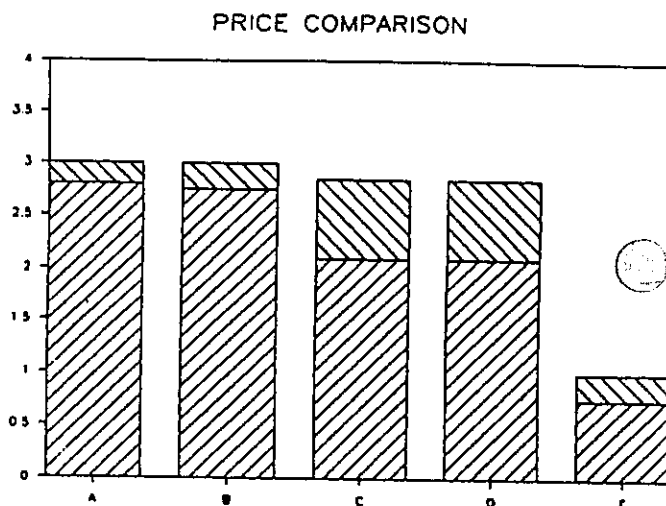
3. WATER RESISTANCE

The comparison is easy. Only TYVEK and black papers can resist any conditions of wind driven rain since they can resist more than 750 mm of water pressure. 25mm of water head is equivalent to a 43 MPH wind.



4. PRICE

While prices may vary from region to region across the country, it is known that housewraps are 2 1/2 to 3 times more expensive than black papers.



Value is the ratio between price and performance and in that case it is easy for you to recognize which combination has the highest value.

EASE OF INSTALLATION

TYVEK is strong, pliable and tear resistant. TYVEK is easy to install and can be sealed easily with construction sheathing tapes or acoustical sealants.

TYVEK is guaranteed+ if it is damaged by weather under normal home construction.

TYVEK HOUSEWRAP IS THE ONLY CHOICE

Only TYVEK combines Low Air Permeability, High Water Resistance and High Moisture Vapour Transmission the 3 Key Characteristics of a good quality housewrap.

Only TYVEK Housewrap offers you the right balance of properties that provides comfort and energy efficiency year round.

+ For product guarantee see product literature.



Interoffice Correspondence

1990-12-18

Glenn L.

• please
review &
double check

Thank you

Bennie

December 5, 1990

TO: FILE

FROM: B. A. FRANSEN

SUBJECT: HINGES, LOCKSETS, DOOR CLOSURES
MEETING WITH CANADIAN HARDWARE
CONSULTANTS - RICK CACCIOTTI

Mr. Cacciotti addressed the Inspectors and advised on the Code requirements affecting hinges, locksets and door closures.

KEY COMMENTS

HINGES

1. Hinges must have ball bearings to satisfy the requirements for a fire rated assembly.
2. Hinges must be constructed of steel (can be detected with a magnet).
3. Hinges must be a minimum of 4" in length to satisfy the Code requirements for fire rated assemblies.
4. Hinges may be coated in brass, usually found where rusting is a problem.
5. A U.L.C. stamp or designation is not required on a hinge.
6. Hinges may be supplied with a spring. This hinge may replace a door closure and satisfy the requirements of the Ontario Building Code for fire rated assemblies.

cont'd.....

DOOR CLOSURES

1. All door closures are U.L. listed.
2. 1980 mm. headroom required for door closures in rated assembly.
3. Hold open arms are not allowed on fire doors.
4. Kick plates are not to exceed 16" in height on fire doors.
6. Every morticed lock set is listed.
7. Apartments requiring doors that are fire rated must have both a dead lock and latch set.

FIRE DOORS

1. The maximum undercut of a fire door is 3/4".

B. A. Fransen

B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS
BAF/kcs

cc: Inspectors ✓
R. O'Malley



THE REGIONAL MUNICIPALITY OF SUDBURY

INTER-OFFICE CORRESPONDENCE

1979-05-04

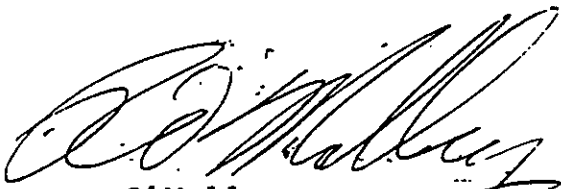
PLEASE REFER TO OUR FILE :

TO: Building Controls Staff
RE: Swimming Pool Fencing By-Laws

- #1 Attached is a copy of the Swimming Pool Fencing By-Laws enacted by Capreol, Onaping Falls, Sudbury, Valley East and Walden.
- #2 Prior to the issuance of a building permit for a "Swimming Pool and Fence" the Regional Building Controls Department must be provided with and must approve the plans for both the swimming pool and the surrounding fence.
- #3 RAYSIDE-BALFOUR have passed the By-Law but have chosen to administer and enforce the By-Law.
Before a building permit is issued for a swimming pool in Rayside-Balfour, an approval of a swimming pool fence or a swimming pool fence permit issued by the Town of Rayside-Balfour must be presented to the Building Controls Department by the applicant. Any inquiries should be directed to the Clerk or the By-Law Enforcement Officer in Rayside-Balfour.
- #4 NICKEL CENTRE have not passed the By-Law. Any inquiries should be directed to Nickel Centre.

SWIMMING POOL FENCE BY-LAW NUMBERS:

Capreol	By-Law #78-42
Onaping Falls	By-Law #78-11
Sudbury	By-Law #78-70
Valley East	By-Law #78-28
Walden	By-Law #78-42


R. O'Malley,
Chief Building Inspector

April 27, 1990

Mr. B. Fransen
Building Controls
The Regional Municipality of Sudbury
Bag 3700, Station 'B'
Sudbury, Ontario
P3A 5W5

53141211

Re: Weeping Tiles
Lofty Pines Subdivision, Capreol

Dear Mr. Fransen:

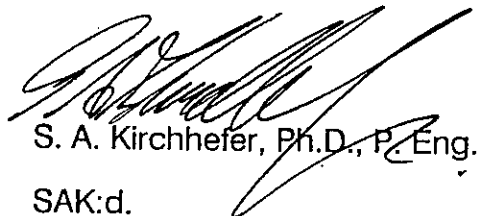
On behalf of the Town of Capreol we inspected the hydrogeological setting of the site which accommodates the Lofty Pines subdivision. We found that the soil consists primarily of sand and gravel, which usually has a high hydraulic conductivity. Further, we found that the groundwater level is in excess of 4 m below the existing grade.

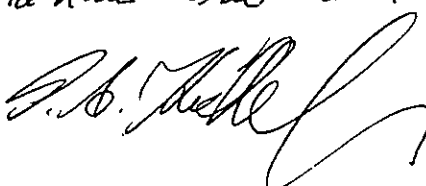
Based on these findings we conclude that there is no need for installing weeping tiles for the residential homes of the area of the Lofty Pines Subdivision.

We trust that you concur with our opinion.

Yours very truly,

S. A. KIRCHHEFER LIMITED


S. A. Kirchhefer, Ph.D., P. Eng.
SAK:d.

Note: Lofty Pines Subdivision
includes Hamme Street and Cedar Court and
Oak Crescent. 



Albio

Interoffice Correspondence

May 21, 1991

TO: All Inspectors
FROM: W. Paul
RE: By-Laws #62-192 and #76-327
Determination of Lot Lines

There has always been a great deal of confusion in determining the front lot line on corner lots in the City of Sudbury, where the street lines meet in a curve or in a series of straight lines which together form a bend.

As a result of a recent staff meeting it was decided that where such a problem arises that the definitions contained in the "83-Series" By-Laws be used in all such cases.

Yours truly

William Paul
Municipal Law Enforcement Officer

WP/dd

c.c. B.A. Fransen
R. O'Malley
M. Kivistik



Interoffice Correspondence

December 30, 1991

TO: BUILDING INSPECTORS
BY-LAW SECTION
SITE PLAN CONTROL SECTION

FROM: B. A. FRANSEN

SUBJECT: PROCEDURES FOR APPROVAL OF REFRESHMENT VEHICLES/
CHIP STANDS - MEMO TO STAFF DATED APRIL 1, 1987

The procedures outlined in the attached memo were adopted in 1987 in an attempt to provide some control over refreshment vehicles/chip stands.

Please review the information contained herein and advise if there are any reasons to alter the procedures.

B. A. Fransen

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attach.

P.D. → Jan. 22, 92.



April 1st, 1987.

TO: Building Controls Staff
FROM: B. A. Fransen
SUBJECT: Commenting on Zoning for Refreshment
Vehicles (Chip Stands)

Refreshment vehicle operators will be requesting approval for their units in the not too distant future. It is important that we provide them with the most current and up-to-date information affecting their facility.

The following items are those which are to be considered before authorizing the establishment of a refreshment vehicle:

1. A proposal should be supported by sufficient information to enable an inspector the opportunity to assess whether or not the refreshment vehicle complies with the zoning regulations. Thus, a drawing showing the location of the refreshment vehicle and the surrounding buildings on the lot should be accurately described on a plot plan.
2. The use must satisfy the applicable zoning regulations.
3. The refreshment vehicle must not occupy parking spaces required by the buildings already on site.
4. Sufficient parking spaces must be provided to satisfy the zoning regulations determined by the size of the refreshment vehicle.
5. It must be established if a Site Plan Agreement currently affects the property and the refreshment vehicle is provided for in the agreement.
6. The signs erected to advertise the refreshment vehicle activities and/or its menu, must satisfy the applicable zoning regulations.

cont'd.....

April 1st, 1987.

- 2 -

Chip Stands

7. The vehicle must be set back from the property lines to satisfy the current zoning regulations.
8. All seating facilities connected with the refreshment vehicle must be shown on the drawing submitted.
9. The operator is to advise whether or not the refreshment vehicle is to be located at a single site or moved from place to place.

Should you have any questions whatsoever in connection with these instructions, please contact me at your earliest convenience.



B. A. Fransen, P. Eng.,
Director of Building Controls,
BAF/dn.

cc: Roger O'Malley
Bill Paul
M. Kivistik
H. Huch
R. Swiddle
P. Morrow
H. R. Akehurst

1978 - 03 - 22

TO: R. O'Malley

FROM: B. A. Fransen

SUBJECT: Issuance of Building Permits
Policy Statement.

Please find attached a copy of the "Issuance of Building Permits Policy Statement" which resulted from the meetings with the Sudbury Construction Association and the local architects.

Would you please review the contents of this policy with the inspectors and plans examiners so that it is clear to each of the staff members what the intent of the policy is and how it is to be implemented.

with the staff

You may have to review this procedure from time to time as it is apparent that, on some occasions, these concepts have to be reinforced.

BAF

B. A. Fransen, P. Eng.,
Director, Building Controls.

BAF:cc
Encl.

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ISSUANCE OF BUILDING PERMITS

POLICY STATEMENT

The Regional Building Controls Department proposes to adopt a policy which will provide engineers and architects with an opportunity to receive drawings and/or plans examination in those instances when a constructor has not been named or when tenders have not been awarded for the construction of a building.

It is intended that the below listed procedures will be followed:

1. The architect/engineer will submit to the Regional Building Controls Department 20% of the actual building permit fee with a minimum of \$250.00 or the actual building permit fee (if less than \$250.00), at the time the application is made for the plans to be reviewed. The fee will be called a "Plans Review Fee".
2. The architect/engineer will complete the building permit application form except that he/she need not include a signature.
3. Schedule "B" - Refund of Permit Fees - By-Law #76-82, will not be altered or amended.
4. The building permit application form will be signed by the constructor and the difference between the building permit fee and the plans review fee made payable, prior to the issuance of the building permit.

It is to be understood that this is a procedural policy, without means for strict enforcement, and will remain in effect so long as the terms are adhered to in good faith.

This policy does not apply when a constructor has been named.

This policy is proposed as a result of discussions having been conducted with the area architects and representatives of the Sudbury Construction Association and is intended to hasten the building permit application procedure and save the constructor from unnecessary delay and inconvenience prior to the start of construction.

BA Fransen

B. A. Fransen, P. Eng.,
Director, Building Controls.

BAF:cc

The technique of giving evidence in court

Excerpts from an address by W. D. (Rusty) Russell, Q.C.,
to the first annual meeting of the Municipal Law Enforcement
Officers' Association (Ontario), held in Sault Ste. Marie, October, 1980.

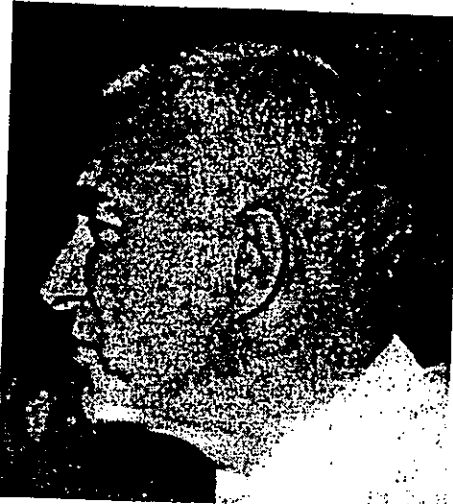
March 18/92
0155

Some day you may end up in the witness box as a chief witness for the prosecution. Some of you may have already been through this experience and I am sure that you will agree that it has its problems and cannot be taken lightly.

How and when do you prepare for this event? The answer is quite simple. You start preparing today. You treat every file as if some day it might end up in the courtroom. When you talk to a person over the counter or on the street, be accurate in what you say because you may be looking at that person across the courtroom if you take liberties with the truth. There is no need to be overly cautious or too sensitive about answering questions from the public — it is your duty to give advice. However, do not go out on limb and say things which are not true because someone is going to cut that limb off behind you.

In municipalities, especially the smaller ones, a little bit of courtesy and psychology can solve a multitude of problems. If you go into the witness box, it is you against the world. If there is a lawyer on the other side of the case, it is you against the lawyer. Who should win the battle between you and the opposition lawyer? Well, you should win it every time — because you have the trump cards; you were there and you have first hand knowledge. The opposition lawyer was not there and so you know more than he does. A word of caution . . . you are bound to make mistakes in the witness box. However, remember that the basic rule of courtroom success is: the side that makes the fewest mistakes, wins.

My purpose is to acquaint you with some of the "tricks of the trade" that help you when you are in the witness box. I have no startling revelations — just a simple strategy for dealing with human beings. The first golden rule — and you have heard it all your life — applies in the witness



W. D. (Rusty) Russell, Q.C.

box more than any other place. It is this:

Rule one — tell the truth. Yes, even if it means losing your case. Why do I stress this? Because you will be appearing before the judge or the justice of the peace on many occasions over the next few years (except perhaps in the larger cities where there could be several J.P.'s). If you get caught telling a lie or stretching the truth, you will lose your credibility and it may be many years before the judge will think you have learned your lesson. In the meantime you are going to lose a lot of cases.

The opposition — the defendant — can take liberties with the truth. He can stretch it, and you know he is doing it. But bear in mind he may never be in court again, but you will be, and your integrity is important to you. None of us like to lose a case and if telling the truth will cause you to lose, then bite the bullet. The court will admire you for your integrity. Perhaps the next time you appear before the judge, and there is something in doubt, and you have something to say, the court will believe you.

The measure of your success in the courtroom will greatly depend upon

how you use the English language and your ability to organize facts. Some say there is a law for the rich and a law for the poor. That is sheer nonsense. A well-read, educated person can put his point across to the court better than someone who is not. Proper use of the English language and its various shades of meaning have a profound effect on what you do say in the courtroom. Do not go into the witness box and say "Ya." That is slang. Keep to straight facts, "Yes sir," or "No sir."

Rule two — always be courteous and polite in the witness box. No matter how much you detest that other person, you must not show it. It is your job to nail the culprit, but do it with a smile! If you are not courteous, the judge will get the impression that you are 'out to get him.' If you are vindictive, the other lawyer will quickly pick that up and will hold that against you through the trial. Be professional and unemotional. Courtesy will help your integrity.

Here is a little trick of the trade. If possible, always try and use the other lawyer's name: "Yes, Mr. Dean, that is correct." But do not overdo it. Using his name puts you on a one-to-one basis, and it is psychologically important.

Remember also that when a lawyer asks you a question, you should always turn so the judge can hear you. It is the judge who makes the decisions, not the lawyers standing out there. It is therefore very important that you remember not to turn your back to the judge.

Rule three — dress and posture. When you go into the witness box, be properly dressed and stand erect. Do not slouch around. You would give a terrible impression if you do. Do not lean on the table and give your evidence — it is bad etiquette. Remember, appearance matters 100%.

To prove my point: suppose you go in the witness box poorly dressed, with

be the accused before *The Provincial Offences Act*) is clean cut, well dressed and well spoken. Now the judge has got the discretion between you as the building inspector, standing there looking sloppy, and the defendant who looks clean cut. Who is he going to be impressed with? Whose evidence is he going to believe? Chances are, if there is a doubt, he is going to believe the defendant and not you.

Rule four — Do not try to be humorous in the witness box. The courtroom is a very serious place, so do not try to be funny. When the court gives a decision, it will have a serious affect, either emotionally or financially for someone, and if you make light of it, the court will make light of you. I know of a building inspector who had a funny habit of always half smiling which gave the impression that he was being insincere. Although he was a very nice gentleman, that half smiling trait seemed as though he was sneering at you and laughing about the whole thing. He had a difficult time winning cases because he put the judge off. I took him into the woodshed and got him to change that smile so that he was deadpan, absolutely leadpan, and then he gave his evidence.

In most instances, you will find moments of spontaneous humour in the courtroom which is acceptable providing it is not at the expense of somebody. That is not good humour.

A detective was giving his evidence without referring to his notes. The lawyer for the accused noted this. It was a criminal case and he said to the detective, "How come you are not using your notes?" The detective said, "Oh, I have an excellent memory."

"So you do not use your notes because you have an excellent memory, is that correct?"

The detective replied "Yes, sir I have an excellent memory."

Immediately the lawyer turned away from him and asked, "What colour tie have I got on?"

The detective looked at him and repeated "What colour tie have I got on?"

ed. That bit of humour may appeal to you and me because the witness got the better of the lawyer. But let me tell you a secret — that humour is in bad taste. The detective may have got a laugh in the courtroom but he lost his credibility by trying to be a smart aleck. The lawyer won the point in the end and the detective did not win at all.

An example of good humour: This happened at an Ontario Municipal Board hearing. I was cross-examining a lady about the number of fast food outlets in the area. In the course of her answers, she made the statement that her outlet was operated by a person named "Leekie". The OMB Chairman reacted quickly, "Leekie? How do you spell that?" She replied "L-E-E-K-I-E." I was puzzled and asked "Tell me, who is Leekie?"

"Oh," she replied, "Leekie is my son. That is his nickname. He used to be a goaltender in hockey and every time the puck went past, the red light went on and they called him Leekie." Needless to say, it brought the courtroom down with laughter. That was innocent humour, not at the expense of anybody. Now that is spontaneous humour that is acceptable. For your purposes, however, remember rule number four — do not try to be funny in the courtroom.

Rule five — listen to the question. Nine out of ten persons in the witness box do not listen intently to the question that is being asked. If you answer a question which was not asked, you have opened the door for the lawyer to ask you another thirty questions. You will create a fertile field for him that he probably never thought about. If you do not understand the question, do not venture into the water — stay out of it! Instead say, "I am sorry sir, I did not understand the question." Do not hesitate to do it. The judge knows you are nervous and he will not take offense if you ask to have the question repeated. Now look at the psychological advantage. By asking the lawyer to repeat the question, you put the lawyer on the defensive. He must now think his way out and he may have trouble trying to sort out his own question. Do not volunteer any information while he is trying to sort the question out. Let silence ring and make him come back to you. This is another

advantage: it gives you time to think of an answer; and it puts the heat on the lawyer.

Let me tell you a secret about lawyers. When you are being cross-examined, watch very carefully the first few questions that the lawyer asks you. If his questions are short and punchy and to the point, then chances are he is an experienced pro and you will have to be on your toes. But if the lawyer asks questions that are about three feet long and are tied up into several parts of other questions, the chances are you have one of two types of people in front of you. You might have a rookie who does not know how to handle it, or you have a seasoned lawyer who has been around but has not done his homework on the case. You know more than he does. If the question you have asked to be repeated is long, chances are the lawyer himself will get mixed up repeating his question.

I once had a case in the Supreme Court when the lawyer asked my witness a long detailed question. To my horror, the witness started to answer it. When he had finished, the Supreme Court judge turned to him and said, "You know, I do not know how you answered that question, because I did not understand the lawyer's question in the first place." So you see, the judge too wants to know what the question is.

Let me give you an example of what an experienced witness can do in such a situation. I am referring to Ross Raymond from Gravenhurst. Ross is an old pro and has been on hundreds of cases and knows exactly how to play his cards when he is being cross-examined. About six months ago I was on a case and we had been going for about a week. Ross was being cross-examined by the other lawyer. The lawyer asked him a question about four feet long and it had about four different parts to it. It was all mixed up, but Ross knew what the lawyer was after. I was sitting at the table and he looked at me and I knew the game was on. Ross answered that part of the question he really wanted to and knew he could handle. That took at least four and a half minutes. He then stopped and turned to the lawyer and said, "Sir, would you mind repeating the other two parts of the question?"

There was dead silence. Everybody in the courtroom waited and waited and waited. Finally, after what seemed an eternity, the lawyer replied "I have forgotten what the other two parts of the question were, so I will go on to the next one."

Psychologically, the witness had beaten the lawyer by trying the trick on a long question. Should you think the lawyer is unprepared and is asking you long questions, ask to have it repeated. Or, if you feel confident, answer part of the question and then ask the lawyer if he would mind repeating the other parts. Chances are he does not know himself.

Another aspect to listening intently is giving your answer slowly. Nine out of ten people speed up their answers because they are nervous. When you are nervous, slow down deliberately. Talk slowly and give the judge a chance to write down what you are saying. If you talk rapidly and go through a whole set of facts, the judge is going to think "Oh my God, another witness, what did he say?" He is liable to turn to you and ask "Now, what did you say there?" You have got the court against you. Remember the golden rule — when you are nervous in the witness box slow everything down. You have all day!

Rule six — Do not argue with the other lawyer. Be a professional! Do not get into an argument when you disagree with the other lawyer when you are in the witness box. If he says it is black and you say it is white, let it go — you have both said your piece. Let the judge decide who is right and who is wrong but do not get into an argument. Simply say, "No, sir, my opinion is . . ." Keep your answers simple and direct. Long winded answers should only be used if there is no other way of explaining the question.

Here is an example of a psychological battle between a witness and a lawyer. This is a true story — it involved my wife. She was witness to a robbery in a parking lot and was called as a witness for the Crown. After giving her evidence, she was cross-examined by the lawyer for the accused. Now my wife is well read and has a profound knowledge of the English language and the lawyer soon found out that in the game of words she was a master. Finally he asked her, "Is your hus-



W. Fred Dean, Solicitor, City of Sudbury, MLEOA legal "mentor"

band a lawyer?" She said "Yes."

"Did he tell you what to say here today in the courtroom?"

Immediately the Crown attorney jumped up and said "That is an unfair question." The judge, too, came to her rescue and said "I think that question is unfair too and we should strike it."

My wife leaned over to the judge and said "Your honour, I have no objection to answering that question." The judge was taken aback and you could see him saying under his breath "Well it is your funeral Mrs. Russell. I was trying to protect you, but if you want to go out amongst the wolves, that's your business."

The lawyer repeated the question "Did your husband tell you what to say in this courtroom?"

My wife said, "Yes." The minute she said yes, he had no alternative but to come back and say, "What did he tell you?"

She said very distinctly, "He told me to listen to the question and to tell the truth."

There are two ways to give evidence. You can shovel it in — which means you just get up there and start talking. The shovel-in method is never very successful. The other method is a step-by-step procedure with facts placed in logical order.

Step one: give your name, your occupation and be prepared. If you are a building by-law enforcement officer or by-law enforcement officer, have a by-law certified by the clerk saying that you are so appointed. You are automatically a provincial offences officer which is only a formality under *The Provincial Offences Act*. Remember, you are an enforcement officer first and then you are a P.O.O.

Step two: Give evidence of your experience, particularly if you are a building by-law official. The minute you give your background, you become an expert witness and you are entitled to give opinion evidence. You are qualified to put two and two together and arrive at a conclusion. If you do not have a lawyer, then qualify yourself, giving details to show that you can give expert testimony.

Step three: Review the facts. Locate the lots, the concessions. Identify the owner, give a certified copy of his deed out of the registry office. If it is a corporation you will have to do some searching. Identify that owner particularly. If you have issued a permit, have the permit there. A photocopy to show that you issued the form. If it is a Stop Work Order have it there, then review your onsite facts. Be accurate in your evidence. Do not overdo it, do not exaggerate! If you filed plans with the Chief Building Officer, have the plans there to show where he has gone astray. If you made any other orders, have copies of them to give to the court. If it is a zoning by-law infraction, have a copy of the zoning by-law there, have it certified by the clerk and make sure the clerk records the date of the OMB approval, because until it is approved by the OMB, you cannot prosecute under it. If you have some-



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not strong, bring it out in your evidence. Do not let the other lawyer bring it out. Start out by laying your bad cards on the table. They will not look so bad when you admit to them rather than having them come out when the other lawyer cross-examines you. If you have bad cards, get rid of them at the start. Tell your weaknesses — the judge will respect you for it.

What do you know about hearsay evidence? You cannot go into the witness box and say "He told me and I told him and she told her and I told her . . ." That is quoting people. You cannot quote people in the courtroom unless the person is there. But suppose you are charging and he (the defendant) said something to you, you can rebut because he is part of the case. If someone told you something you cannot say "Well, Mr. Jones on the street told me that." The other lawyer is going to jump on you — and he will have a psychological advantage because you are going to sweat. However, there is a way to get around hearsay. You can say "In the course of my investigation I heard that this happened and that this happened." You never quote anybody. It is acceptable to say "I learned from my investigation that this happened."

Another point to remember: If your lawyer is examining you, if the witness is standing there, and J. J. is your lawyer and he is asking you questions, he cannot lead the evidence — he can only examine. The lawyer cannot say:

"Now look, did you see this on the 23rd?"
 You as a witness will say, "Correct."
 Lawyer: "And, you also went back on the 24th?"
 Witness: "Yes."

Lawyer: "And when you got there on the 23rd you found thirteen people working on the job?"
 Witness: "Correct."

In this case, the witness is not giving any evidence. The lawyer is and he cannot do it. However, he can ask: "When was the first day you went out?"

Witness: "The 23rd."
 Lawyer: "And when was the next inspection?"

Witness: "The next day."
 Lawyer: "And how many people did you see there on the 23rd?"

Witness: "There were thirteen people on the job."

See the difference? The lawyer cannot lead the witness into what he wants him to say but he can ask the witness the questions so he can give the evidence. The lawyer cannot ask "Well did the defendant tell you that so and so . . ." But he can say "Did you have any conversation with the defendant?"

Witness: "Yes, and he told me such and such."

The witness can quote the defendant because the defendant is in the courtroom but when the lawyer examines the defendant, he can go anywhere he wants — there are no restrictions. So as a witness, you will have to give the evidence — your lawyer cannot lead you. You must have your facts marshalled. By the same token, at cross-examination, the other lawyer can examine you — there are no holds barred. It is you and that lawyer.

That is my Reader's Digest version of 'techniques of giving evidence in the courtroom.'

MUNICIPAL LAW ENFORCEMENT OFFICERS' ASSOCIATION
 EXECUTIVE 1980-81

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Conference photographs by W. K. Schlatter, Municipal Law Enforcement Officer, Town of Ajax and by Municipal World.

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CONSULTANTS ENVIRONMENTAL ASSESSMENT





Interoffice Correspondence

February 7, 1992

TO: BUILDING CONTROLS STAFF
FROM: B. A. FRANSEN
SUBJECT: HOME OCCUPATIONS
CITY OF SUDBURY ZONING BY-LAW 62-192
PROCEDURES

The attached information, although somewhat historic, will provide you with the current procedures connected with Home Occupations in the City of Sudbury and in those areas where the zoning is regulated by Zoning By-Law 62-192.

Please make certain that the procedures are followed, should you become involved with the issue.

B. A. Fransen

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attachments

cc: M. Kivistik
W.E. Lautenbach



THE REGIONAL MUNICIPALITY OF SUDBURY

yellow

INTER-OFFICE CORRESPONDENCE

PLEASE REFER TO OUR FILE :

1985
April 30th, 1958.

TO: BUILDING CONTROLS STAFF
FROM: B. A. FRANSEN
SUBJECT: HOME OCCUPATIONS
CITY OF SUDBURY ZONING BY-LAW 62-192

Attached is an Agenda which describes the subject of a meeting held Friday, April 26th, 1985.

The meeting was attended by:

- Hans Huch
- Klemens Dembek
- Pat Morrow
- Jack Reilly
- Bill Paul
- Ron Swiddle
- B. A. Fransen

As we are currently experiencing some difficulty in the administration of the Zoning By-Law as it relates to Home Occupations, especially in the City of Sudbury, it was agreed that the following procedures would be adopted immediately:

1. Every person wanting to use property for a home occupation is to acquire Committee of Adjustment approval prior to beginning the activity, where the person is subject to the provisions of By-Law 62-192, City of Sudbury Zoning By-Law.

cont'd....

SUBJECT: Home Occupations
City of Sudbury Zoning By-Law 62-192

April 30/85

2. Home Occupations are to be conducted entirely within the confines of the residential building. Thus, accessory buildings are not to be used for activities connected with the home occupation.

B. A. Fransen.

B. A. Fransen, P. Eng.,
Director of Building Controls.
/mm

A G E N D A

Meeting of Regional Staff to
review the Home Occupation
provisions of the Zoning By-law
to be held on Friday, April 26th, 1985
at 9:30 a.m. in C-42 Boardroom

BACKGROUND

Section 7.2, By-law 62-192, the City of Sudbury Zoning By-law,
reads as follows:

USES PERMITTED

7.2.11 Home Occupations, provided:

- (a) There is no display
- (b) No stock in trade or commodity is sold on the premises
- (c) No assistant is employed
- (d) No nuisance or disturbance is created
- (e) Beauty parlors, barber shops shall not be considered a Home Occupation

NOTE: Only with permission of Committee of Adjustment

There are several business activities currently being conducted in the City which may or may not be permitted. Our Department has reviewed a number of these activities where it was not absolutely clear if the By-law was being satisfied. These situations have been brought to our attention by neighbours concerned that the residential atmosphere of an area will suffer as a result of the business activity.

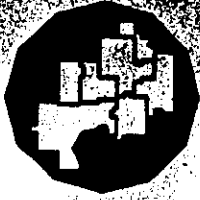
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PURPOSE

The meeting is being held to allow municipal staff an opportunity to review the provisions of the By-law connected with this matter and to acquire a better understanding of what is intended by the current By-law provisions.

It is intended that case studies will be reviewed to better acquaint staff with actual situations.

BAF/mm
April 25th, 1985.



THE REGIONAL MUNICIPALITY OF SUDBURY

INTER-OFFICE CORRESPONDENCE

April 9th, 1985

PLEASE REFER TO OUR FILE :

TO: Pat. Morrow
FROM: B. A. Fransen
SUBJECT: City of Sudbury Zoning By-law 62-192
HOME OCCUPATIONS

We are currently being asked to approve home occupations provided for under the zoning by-law, which in some instances, are objectionable to neighbours, especially, where the activity is introduced into a residential area.

I have some concern with the intent of the zoning by-law as it is currently written. This would be an opportune time to review the specific sections of the zoning by-law as they relate to home occupations and establish whether or not our procedures are consistent with the intent of its provisions.

A meeting of Mr. Dembek, Mr. Huch, Mr. Akehurst, Mr. Bill Paul, Mr. Jack Reilly, yourself and this writer should convene to review the particulars of this subject and offer recommendations to clarify this matter.

If you agree, I am prepared to make the necessary arrangements.

B. A. Fransen, P. Eng.,
Director of Building Controls
BAF/dp

APR 11 1985



THE REGIONAL MUNICIPALITY OF SUDBURY

Bernie F. - pls. process
Plan

INTER-OFFICE CORRESPONDENCE

April 9th, 1985

PLEASE REFER TO OUR FILE :

217 218
fr

TO: Pat Morrow

FROM: B. A. Fransen

SUBJECT: City of Sudbury Zoning By-law 62-192
HOME OCCUPATIONS

We are currently being asked to approve home occupations provided for under the zoning by-law, which in some instances, are objectionable to neighbours, especially, where the activity is introduced into a residential area.

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(246, 249) 295 OK 215

A meeting of Mr. Dembek, Mr. Huck, Mr. Akehurst, Mr. Bill Paul, Mr. Jack Reilly, yourself and this writer should convene to review the particulars of this subject and offer recommendations to clarify this matter.

If you agree, I am prepared to make the necessary arrangements.

B. A. Fransen

B. A. Fransen, P. Eng.,
Director of Building Controls
BAF/dp

Fransen - okay
Dembek - will get back okay
Akehurst - okay
Huck - M - okay
Bill Paul -
Jack Reilly -
Morrow -

Surdable
called
2:30
on the 24th

156

March 3 92

June 9, 1976.

MEMO TO: All Inspectors
FROM: B. A. Fransen
SUBJECT: Mobile Homes

The subject of mobile homes at this date is a controversial one to say the very least. I had an opportunity to discuss the C.S.A. certification program with Mr. Roy Langdon, an engineer with the Canadian Standards Association, who advises that mobile homes must satisfy C.S.A. Standard Z240, however, this standard does not mean that the mobile home complies with either the regulations of the National Building Code or the Ontario Building Code. C.S.A. has established a manufactured home certification program which does provide some assurance that the structure does comply with the National Building Code under CCertification program A277. It has been our practise to permit modular homes to be constructed in the Regional Municipality of Sudbury on residential lots, however, I am advising that the homes in question must satisfy C.S.A. standard A277.

BAF/vm

126



Interoffice Correspondence

February 13, 1992

TO: All Building Inspectors
FROM: B. Gutjahr
SUBJECT: Regional Municipality of Sudbury By-Law 73-53
A By-Law respecting the supply of water, the management
and maintenance of the waterworks systems.

For general knowledge and future reference regarding the use of water for purposes of air-conditioning the following section is contained within By-Law 73-53.

Section 5.2 reads:

That in regard to prohibited uses and restrictions the following shall apply:

"The use of water for purposes of air-conditioning shall be permitted only where the air-conditioning equipment provides for efficient cooling and recirculation of the water within the air-conditioning system, and where there is no provision for recirculation of the water, the Regional Engineer shall require the installation of the necessary additional equipment".

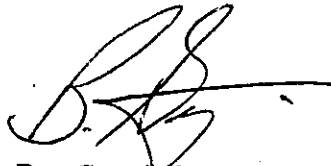
. . . . 2

All Building Inspectors

February 13, 1992

-2-

The foregoing is for your information, however if during your inspections you observe a violation of this section, you should contact the Regional By-Law Department.



B. Gutjahr
Regional By-Law Enforcement Officer

BG/ts



Interoffice Correspondence

March 9, 1992

TO: STAFF
FROM: B. A. FRANSEN
SUBJECT: PREPARATION OF PLOT PLANS

I am attaching two plot plans which were submitted for building permits which do not contain sufficient information.

You will note that each of the plot plans lacks a description of the location of the parking space. This is to serve as a reminder that, in every instance, a submitted plot plan must show the precise and exact location of the parking space, along with the other items normally included on the plot plan.

You will note also that the drainage requirements are not shown on the second drawings, however, these may have been eliminated during the copying process. Also, you will note that the drainage arrows that are shown do not indicate that the drainage will be in compliance with the Ontario Building Code.

The Inspectors are asked to make absolutely certain that the applicant submits the proper information at the time the building permit is being applied for.

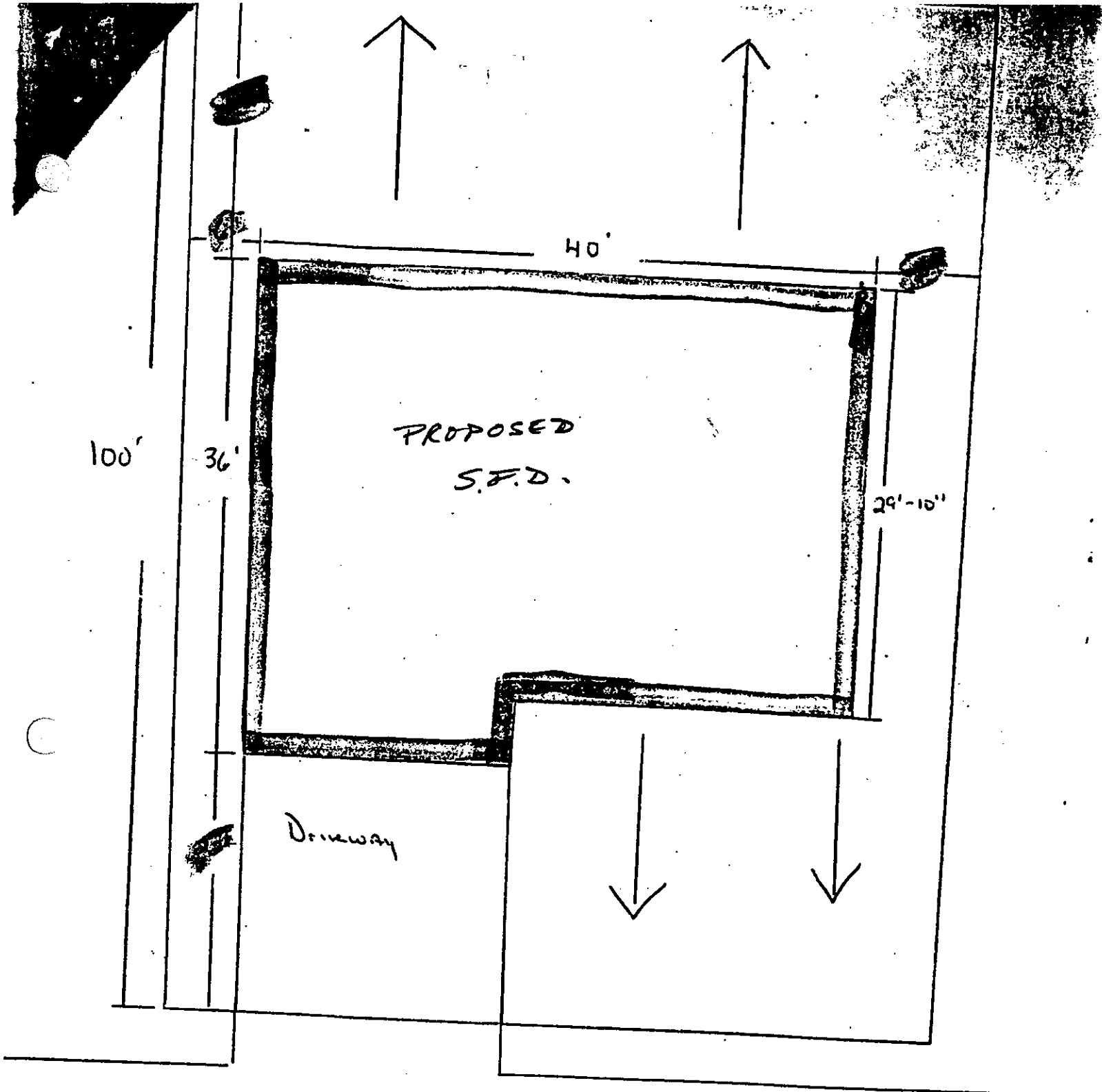
B. A. Fransen

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attach.

FILE!
PROCEDURES





RAVINA AVE

PLOT PLAN

LOT 299



THE REGIONAL MUNICIPALITY OF SUDBURY

156
INTER-OFFICE CORRESPONDENCE

April 13, 1977.

TO: Building Inspectors
Plans Examiners
By-Law Enforcement Officers

FROM: B. A. Fransen

SUBJECT: Retaining Proper Records

I am attaching, for your information, a memo and attached letter ~~comments~~ respecting the necessity to keep proper records of your daily activity.

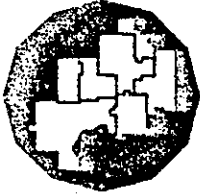
Even though this has been discussed previously, I want to emphasize the need to keep proper records so that there is no question what was done or what activity took place during the time inspections are being inspected.

It is extremely important to note items which you feel may be of consequence at a later date --

Faded ink is better than a short memory.

B. A. Fransen, P. Eng.,
Director, Building Controls.

BAF:cc
Encl.



THE REGIONAL MUNICIPALITY OF SUDBURY

INTER-OFFICE CORRESPONDENCE

April 6, 1977.

MEMO TO: O. Depatie
L. Moustgaard
B. Fransen

D.K. Partington
John Flook
John MacKay

RECEIVED
APR 6 1977

RE: PUBLIC LIABILITY RELATED TO OTHER UTILITIES BUILDING CONTROLS

In 1973 a very serious explosion of natural gas occurred in the City of Peterborough. The litigation in respect to this incident was recently completed and the Public Utilities Commission "Waterworks" was held to be partly responsible.

At a recent meeting of the American Water Works Association, Ontario Section Executive, some concern was expressed in respect to the settlement of this incident and Mr. Bob Goodings, Chairman of the Ontario Section, took it upon himself to contact the manager of the utility. He has provided the attached letter which details some recommendations of the manager of the utility which, I believe, are appropriate to our own circumstances.

I would suggest that this letter be reviewed very carefully in your respective sections, and any appropriate steps be taken to assure that everyone working with you has full understanding of the importance of retaining proper records and details of any incident which could result in legal action being taken against our Corporation.

Thank you.

H.R. Akehurst, P. Eng.,
Regional Engineer

HRA/rm
Attach.

c.c. - L. Sage
- G. Skirda



Interoffice Correspondence

February 7, 1992

TO: B. GUTJAHR
INSPECTORS
D. NOEL DE TILLY
R. O'MALLEY
PLANS EXAMINERS

FROM: B. A. FRANSEN

SUBJECT: FOOTING INSPECTIONS - COLD WEATHER PROCEDURES

This is to serve as a reminder that the inspection of footings is one of the most important roles performed by the Inspectors. At this time of year, particularly, greater care must be exercised to ensure that cold weather procedures are adopted by the contractors, and the Inspector can assist to make certain that the appropriate results are achieved.

In addition, the Inspector must be satisfied that accurate drawings have been prepared and are included in the files. This will enable the Inspector to determine if the work done reflects what was proposed when the permit was obtained.

Your initiative and good judgment is a prime requisite to the construction of proper footings.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attach.



FOOTING INSPECTIONS - COLD WEATHER PROCEDURES

Those persons conducting footing inspections should be made aware that the following items are to be reviewed:

1. Zoning requirements, with respect to building location, including all yard set-backs.
2. Ground conditions, to ensure that structure can be supported by material below the footings.
3. Water conditions, so that the concrete strengths are not affected.
4. When footings are poured on rock, the forms are to be kept free of debris, soil and anything that might contaminate the concrete.
5. Footing size to match those shown on the drawings. If the ground conditions differ from what is shown on the drawings, the Inspector must alert the owner/contractor and arrange for changes to be made to the footing dimensions.
6. If footings are poured on a mat of slag, the footing support system should be designed by an engineer.
7. Where the footings are poured on rock, and the rock slopes to the extent that there is a likelihood that the building will not be stable, reinforced metal dowels should be drilled into the rock to a depth of 18", and designed to project into the footing a distance 1" below the top of the footing.
8. Cold weather conditions should be considered to ensure that concrete is being poured only where the appropriate cold weather provisions have been taken.
9. Footings proposed in areas where there is peat as an underlying soil are not to be approved without a soils engineer's report to confirm the adequacy of the strength of the underlying material.
10. The footing pattern should resemble the layout shown on the drawings. If there is a variance, the drawings are to be amended accordingly. It is the Inspector's duty to alert the owner/contractor that the changes need to be made.
11. The Inspector should review the file to determine if there are any decisions of the Committee of Adjustment/Land Division that affect the footing construction, and advise the owner/constructor of the terms, if it appears the conditions are not satisfied.



Interoffice Correspondence

March 3, 1992

TO: B. GUTJAHR
INSPECTORS
D. NOEL DE TILLY
R. O'MALLEY

FROM: B. A. FRANSEN

SUBJECT: PROCEDURES FOR APPROVAL OF FOOTINGS

During the past several months, we have been experiencing a proliferation of requests from builders and contractors for the approval of footings by an engineer in lieu of the normal Building Inspector's inspection.

SOME CAUTION MUST BE EXERCISED WHEN IT IS DETERMINED THAT AN ENGINEER'S REPORT WILL SERVE AS THE FOOTING APPROVAL.

FIRSTLY, THE ENGINEER WILL NOT NORMALLY EXAMINE THE BUILDING'S LOCATION TO ESTABLISH COMPLIANCE WITH THE ZONING BY-LAWS.

SECONDLY, IF THE FOOTINGS ARE ALREADY POURED, THE ENGINEER WILL HAVE TO DO MORE THAN PROVIDE A CURSORY GLIMPSE OF THE FOOTINGS TO DETERMINE THEIR ADEQUACY.

CONCLUSION

The acceptance of an engineer's report that establishes the adequacy of footings should not be the norm but should be a procedure that is adopted only in extenuating circumstances.

When reports are received that establish the adequacy of footings, they should be reviewed very carefully, since there is the question of whether or not the engineer is commenting on the footings and the underlying soil or just the footing only.



The Inspector must be satisfied that the zoning setbacks and building location is proper before advising the file that the footings are approved.

If you have any doubt about the adequacy of the engineer's reports, you should bring them to the attention of the Chief Building Inspector or the Director of Building Controls so that we are working in concert in our attempt to ensure that buildings have the proper footing support.

A handwritten signature in black ink, appearing to read "B. A. Fransen". The signature is written in a cursive, somewhat stylized font with a large, sweeping initial "B".

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs



Interoffice Correspondence

March 2, 1992

TO: BUILDING INSPECTORS
PLANS EXAMINERS
D. NOEL DE TILLY
R. O'MALLEY

FROM: B. A. FRANSEN

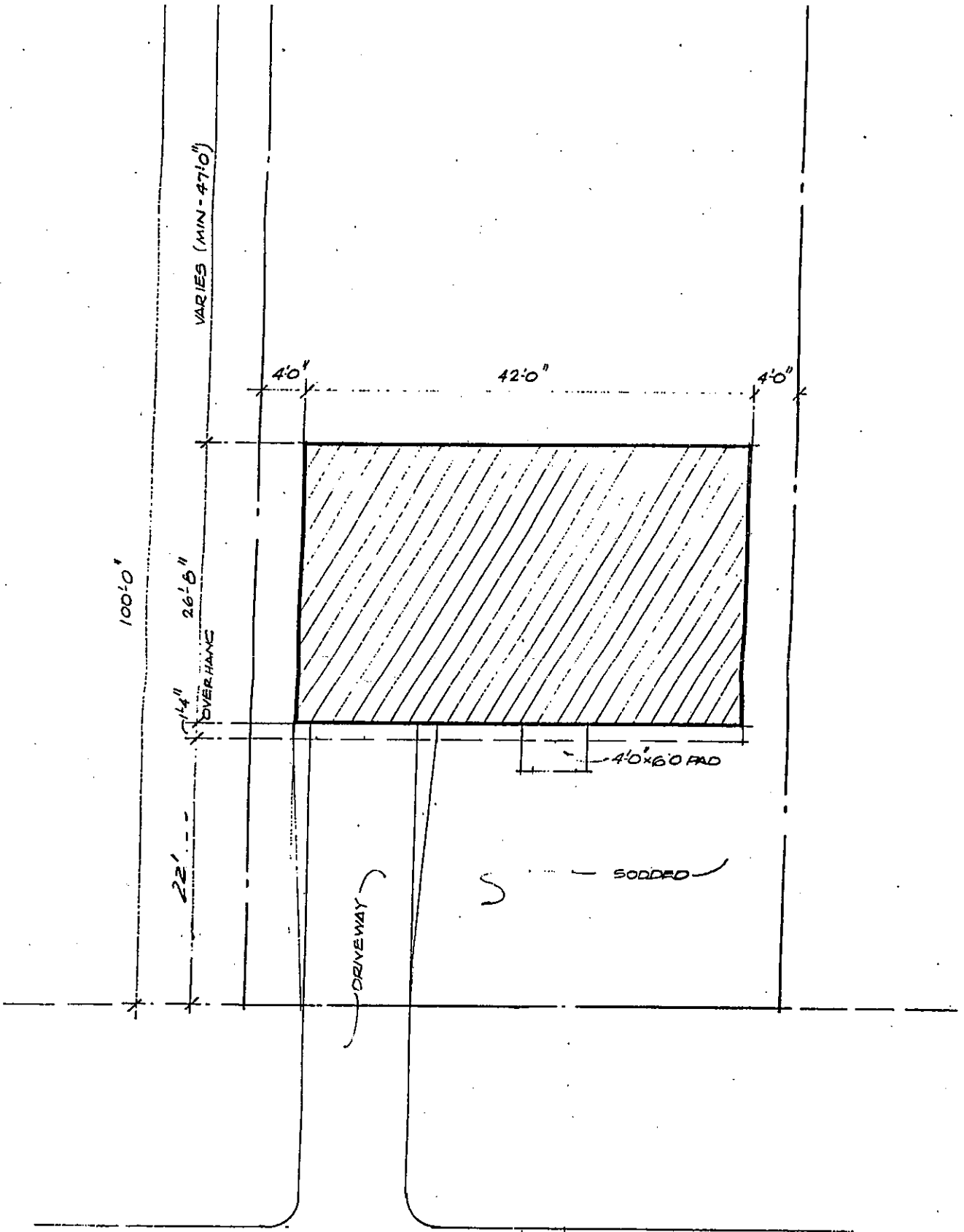
SUBJECT: ONTARIO BUILDING CODE SECTION 3.2.9
- STANDPIPE & HOSE SYSTEMS

I held a brief meeting with Clayton Stevenson as a result of his having expressed a concern that some buildings may be better served if they included standpipe and hose systems as outlined in the Ontario Building Code, Section 3.2.9.

In particular, we reviewed the drawings which describe the development immediately across from the Memorial Hospital on Regent Street, and Mr. Stevenson pointed out that these buildings, in particular, would have their fire safety enhanced if standpipe and hose systems were included.

When one is examining the plans for buildings that may require standpipe and hose systems, please carefully review the drawings to ensure that the requirement for standpipe and hose systems is indicated and locations are clear. I thank you once again for your assistance.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs



VARIES (MIN - 47'0")

4'-0"

42'-0"

4'-0"

100'-0"

26'-5"

OVERHANG

22'-0"

4'-0" x 6'-0" PAD

DRIVEWAY

SODDED

RAVINA AVE.

SITE PLAN SCALE 1" = 10'-0"

FOR LOTS 237, 239, 309



Interoffice Correspondence

February 27, 1992

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: INSTALLATION OF PORTABLE CLASSROOMS
PROCEDURES INFORMATION

I am attaching for your information a commentary on the requirements for the installation of portable classrooms. From time to time, you will be confronted with this issue, and you will want to use the attached data as a guide.

Should you have any questions whatsoever, please discuss them with me.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attach.



LEGAL NOTES

I. In the recent case of J. & R. Rite Holdings (Oshawa) Inc. and City of Oshawa (1988) 64 O.R. (2d) 471 (S.C.O.), an applicant for a building permit wished to construct individual rental storage units. The City was of the view that this use was a form of "warehousing" and its by-law prohibited the same. The court did not agree with the City that the proposed storage units constituted "warehousing". However, the City also pointed out that its zoning by-law did not conform to the official plan of the Regional Municipality and the City was under a statutory duty (Section 27(1) of the Planning Act, 1983) to amend its zoning by-law to conform with the Region's official plan. Since the proposed construction did not comply with the Region's official plan, the City argued that the chief building official could refuse to issue a building permit. The court accepted the City's argument. In summary, the court decided that a chief building official may refuse to issue a building permit where the proposed construction complies with the existing zoning by-law of the area municipality, but

(a) the area municipality is under a statutory duty to amend its existing zoning by-law to conform with the official plan of the Region; and

(b) the official plan of the Region does not permit the proposed construction.

The court found the statutory duty mentioned in clause (a) above in the Regional Municipality of Durham Act which contains a provision similar in effect to Section 27(1) of the Planning Act, 1983.

II. Section 8(2) of the BCA provides as follows:

8(2) Where an inspector finds that any provision of this Act or the building code is being contravened, he may give to the person whom he believes to be the contravener an order in writing directing compliance with such provision and may require the order to be carried out forthwith or within such time as he specifies.

There are at least two ways of interpreting the word "finds". First, it may be argued that "finds" means "finds under section 8(1)". This would mean that the finding of a contravention can only occur in cases mentioned in Section 8(1), namely, where a permit is issued or an application for a permit is made. Section 8(1) provides as follows:

8(1) ... an inspector may, for the purpose of inspecting a building or site in respect of which a permit is issued or an application for a permit is made, enter in or upon any land or premises at any time without a warrant.

This is a narrow interpretation of "finds". It does not work well. For example, the inspector is on a public sidewalk or other public area and from that location finds construction without a permit proceeding on private land, the narrow interpretation would prevent the inspector from issuing a compliance order under Section 8(2). Such a narrow interpretation could frustrate enforcement of the BCA and the Building Code. The Legislature probably did not intend such a narrow meaning of "finds".

The second interpretation of "finds" is that it means "finds in any way". In our view, until a court rules otherwise, this is the better meaning of "finds" in Section 8(2). If this liberal interpretation is applied to the example in the preceding paragraph, the inspector could issue a compliance order under Section 8(2). It is probable that the Legislature intended this liberal meaning of "finds", since it does not frustrate the enforcement of the BCA and the Building Code whose objects are the health and safety of the public.

TECHNICAL STANDARDS

Installation of Portable Classrooms

NEW CLASSROOM

For an assembly occupancy (e.g. portable classroom), Section 2.3 requires design and general review by an architect and a professional engineer. However, either one may provide the services of the other as permitted in Sentence 2.3.1.1.(2).

Where a new portable classroom is installed for the first time, the building must comply with the Building Code, but several exceptions apply:

- The requirements in Section 3.9 are additions or exceptions to the requirements in other sections of Part 3 for the installation of a new portable classroom.
- Where the provisions for fire fighting and the fire alarm system have received approval from the Office of the Fire Marshal, construction in accordance with this approval may be used in lieu of the requirements in Subsection 3.2.5. and 3.9.6.
- Washroom facilities need not be provided in a portable classroom where the facilities in the main school building comply with Subsection 3.6.4. for the total occupant load of the school.
- Based on common practices discovered through discussions with several school boards, it is our opinion that barrier-free access may not be required into a portable classroom where provisions are made to accommodate handicapped persons in the main school building, and the Board of Education provides assurance to the Building Department that this access will be provided should the need arise.

EXISTING CLASSROOM

Where an existing portable classroom is installed in a new location, the Code would apply to the installation in relation to how and where the classroom is installed.

In the Building Code Act, "construct" means to do anything in the erection, installation, extension, material alteration or repair of a building and includes the installation of a building unit fabricated or moved from elsewhere. "Construction" has a corresponding meaning.

Sentence 2.1.1.7.(2) states that where an existing previously occupied building is moved from the original location to be installed elsewhere, the Building Code applies only to changes to the design and construction of the building required as a result of moving the building.

Examples of requirements which would apply are:

- Foundations and anchorage (Part 4).
- Separation from the main school building (3.9.7.).
- Fire alarm system (3.9.6.).
- Provisions for fire fighting (3.2.5.).

(*Where the provisions for fire fighting and the fire alarm system have received approval from the Office of the Fire Marshal, construction in accordance with this approval may be used in lieu of the requirements in Subsections 3.2.5. and 3.9.6.).

The requirements in Subsections 2.3.1. and 2.3.2. for design and general review by an architect and/or a professional engineer would apply to the installation.

Where a portable classroom is moved to a location which has a greater snow load than the previous location, the roof and supporting structure elements must be capable of supporting this increased load. The load carrying capacity of the roof could be determined from the original design or by examining the structure.

Washroom facilities need not be provided in a portable classroom where the existing facilities in the main school building comply with Subsection 3.6.4. for the total occupant load of the school.

Where an entrance door does not comply with the requirements in Section 3.7 for barrier-free access, it would not be necessary to provide a ramp to the entrance door. Furthermore, where an entrance door does comply with these requirements, barrier-free access may not be required, using the same rationale as above for a new portable classroom.

Recent Plumbing Code Amendments

Two special amendments were made to the Ontario Plumbing Code in recent months.

The most recent amendment, O.Reg. 734/88, amends Article 2.8.1. as follows:

2.8.1.(2) "Solders and fluxes having a lead content in excess of 0.2% shall not be used in potable water systems." This amendment is effective March 1, 1989.

The prohibition of lead-based solders in potable water systems was included in the draft Plumbing Code that was mailed to interest groups for comment in August, 1988. This new Plumbing Code is currently expected to become Part 7 of the Building Code in early 1990, after the Building Code Act has been amended.

It was decided to accelerate the amendment on lead-based solder after dissolved lead levels of over 50 parts per billion (ppb) were found in the early morning drinking water of schools around Toronto. The Ministry of Education has issued a directive to school boards to flush water systems in schools before the start of the school day.

The alternative, 95-5 (tin-antimony or tin-silver) solders, are in common supply and they can be used by plumbers without the need for retraining or special equipment. More information on these alternative solders and on testing equipment for plumbing inspectors will be made available in the next newsletter or may be obtained by writing or phoning the Branch.

The second and earlier amendment, Reg. 588/88, requires that certain plumbing pipe and fittings bear a certification mark indicating that the product conforms to a standard referenced in the Code.

Previously, where certification was required, the Code stated that these products must be certified by the Canadian Standards Association. Warnock Hersey Incorporated has now been accredited by the Standards Council of Canada as a certification organization for plumbing fittings, equipment and piping.

Other organizations may be similarly accredited in future even though they do not actually write standards.

The amendment recognizes this fact, by stating that where a product is required to be certified to a standard, the certification shall be performed by an organization accredited for this purpose by the Standards Council of Canada. This amendment became effective on September 23, 1988.

Service Rooms Containing Electrical Services

The requirements for doors serving service rooms are covered in Articles 3.4.4.2.(6) and 3.5.2.7. of the Building Code. A designer of such service rooms which contain electrical services must also be aware of rule 2-310 of Ontario Regulation 183/84 (The Electrical Safety Code). Under this rule, a second exit may be required depending on the layout and the arrangement of the equipment in the room.

Transformer Vaults

Where a transformer vault is required by the provisions of a regulation under the Power Corporation Act, it must be constructed in accordance with Article 3.5.2.8. of the Building Code. This Article requires compliance with Rules 28-350 to 358 of the Ontario Regulation 183/84 (The Electrical Safety Code).

3.4.4.1.(7)(e) Exiting Through Unsprinklered Lobbies

The Code permits not more than one exit from a floor area to lead through a lobby provided certain requirements are satisfied. One of these requirements, as stated in Clause 3.4.4.1.(7)(e), is that the lobby conforms to the requirements for exits, except that:

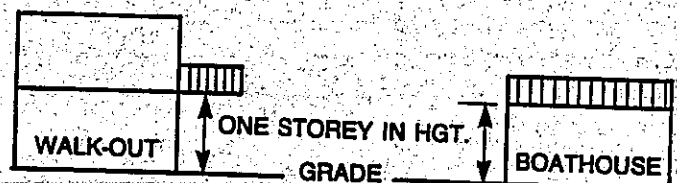
- (i) rooms other than service rooms and storage rooms may open onto the lobby,
- (ii) the fire separation between the lobby and a room used for the sole purpose of control and supervision of the building need not have a fire resistance rating, and
- (iii) the fire separation between the lobby and adjacent occupancies that are permitted to open onto the lobby need not have a fire resistance rating when the lobby and adjacent occupancies are sprinklered.

In unsprinklered buildings, however, the question has arisen with respect to the restrictions on the use of wired glass to provide the required fire separation between the lobby and the occupancies permitted to open onto the lobby.

It is the branch opinion that the amount of wired glass used should be limited to that permitted for exits as stated in Article 3.1.6.11. and Table 3.1.6.B.

9.8.8.8. Guards

The Ontario Building Officials Association has requested a clarification of the requirements for guards on exterior decks such as those on the top of boathouses. It is the Branch opinion that guards on these decks, which are similar to exterior balconies, would require a design to prevent climbing as covered by 9.8.8.8., if the deck is one storey or more above ground.



For example, if a deck attached to a house was constructed off the first storey over a full height walk-out basement, we would deem this deck to be an exterior balcony. It would have to be designed to prevent climbing.

Another related item is whether prefabricated lattice would fulfill the requirements of this Article. It is our opinion that if the lattice were climbable, i.e. openings large enough for a toe-hold, it would not meet the requirements of 9.8.8.8.



Interoffice Correspondence

March 27, 1992

TO: K. ANDERSON
G. LEWIS
INSPECTORS
D. NOEL DE TILLY
R. O'MALLEY

FROM: B. A. FRANSEN

SUBJECT: PROCEDURES - OCCUPANCY PERMITS
BUILDINGS DESIGNED BY ENGINEERS/ARCHITECTS &
SUBJECT TO SITE PLAN CONTROL

The following procedure pertains to issuance of occupancy permits for buildings that are:

(1) subject to site plan control and/or (2) designed by an architect and/or engineer.

Occupancy permits will be issued only after the inspector has received confirmation from the below listed agencies that the building is appropriate for occupancy.

1. Architect;
2. Project Engineer(s);
3. Applicable Hydro authority;
4. Applicable Fire Department;
5. Region's Technical Services; and
6. Region's Site Plan Control section.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs



interoffice Correspondence

April 1, 1992

TO: INSPECTORS
PLANS EXAMINERS
R. O'MALLEY

FROM: B. A. FRANSEN

SUBJECT: PROCEDURES - ISSUANCE OF BUILDING PERMITS

You will want to make absolutely certain that the information you receive for the issuance of a Building Permit is complete and that the forms and documents you normally use to determine compliance are accurate and filled out in total.

Do not, under any circumstances, process the application unless you are satisfied that the data is correct.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

cc: P.J. Morrow
J.L. Rule





Interoffice Correspondence

April 15, 1992

TO: INSPECTORS:
D. NOEL DE TILLY
R. O'MALLEY

FROM: B. A. FRANSEN

SUBJECT: SERVICE TO AREA MUNICIPALITY OFFICES

After consulting with officials at the municipal offices in Onaping Falls, Capreol, and Nickel Centre, it has been decided that Inspectors will make their services available to residents of these municipalities by appointment, as is outlined in the attached notices.

Please take note of this amendment to our regular schedule of service. Your co-operation in accommodating the residents of these municipalities is appreciated.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attach.

cc: P.J. Morrow

Note to Donna and Roger: Please ensure that all staff is apprised of the above.

Thank you.

BAF/kcs



NOTICE TO BUILDERS AND HOMEOWNERS

TOWN OF CAPREOL

PERSONS WANTING TO BUILD RESIDENTIAL BUILDINGS, INCLUDING ACCESSORY BUILDINGS, WILL WANT TO OBTAIN A BUILDING PERMIT BEFORE STARTING THE WORK.

THE REGION'S BUILDING CONTROLS DEPARTMENT WILL ASSIST YOU IN OBTAINING THE PERMIT AND PROVIDE ANY OTHER ADVICE YOU MAY NEED DURING THE CONSTRUCTION PHASE.

YOU CAN CONTACT THE BUILDING INSPECTOR IN THE FOLLOWING WAY.

- 1. A BUILDING INSPECTOR WILL MEET AT A LOCATION CONVENIENT TO YOU DURING THE PERIOD 9:30 A.M. TO 12 NOON EACH MONDAY. YOU NEED ONLY CALL YOUR TOWN OFFICE AT 858-1212 OR PHONE THE REGION'S BUILDING DEPARTMENT AT 673-2171 TO MAKE AN APPOINTMENT.**
- 2. THE BUILDING INSPECTOR WILL BE ATTENDING AT THE MUNICIPAL OFFICE IN VALLEY EAST EACH MONDAY AFTERNOON BETWEEN THE HOURS OF 1:15 P.M. AND 3:30 P.M. YOU MAY FIND IT MORE CONVENIENT TO MEET WITH THE INSPECTOR IN VALLEY EAST.**

SHOULD YOU HAVE ANY QUESTIONS ABOUT THESE PROCEDURES, PLEASE CALL ROGER O'MALLEY OR BERNIE FRANSEN, REGIONAL BUILDING CONTROLS, AT 673-2171.

NOTICE TO BUILDERS AND HOMEOWNERS

TOWN OF NICKEL CENTRE

PERSONS WANTING TO BUILD RESIDENTIAL BUILDINGS, INCLUDING ACCESSORY BUILDINGS, WILL WANT TO OBTAIN A BUILDING PERMIT BEFORE STARTING THE WORK.

THE REGION'S BUILDING CONTROLS DEPARTMENT WILL ASSIST YOU IN OBTAINING THE PERMIT AND PROVIDE ANY OTHER ADVICE YOU MAY NEED DURING THE CONSTRUCTION PHASE.

YOU CAN CONTACT THE BUILDING INSPECTOR IN THE FOLLOWING WAY.

- 1. A BUILDING INSPECTOR WILL MEET AT A LOCATION CONVENIENT TO YOU EACH THURSDAY. YOU NEED ONLY CALL YOUR TOWN OFFICE AT 693-2771 OR PHONE THE REGION'S BUILDING DEPARTMENT AT 673-2171 TO MAKE AN APPOINTMENT.**
- 2. THE BUILDING INSPECTOR WILL BE ATTENDING AT THE MUNICIPAL OFFICE IN NICKEL CENTRE EACH THURSDAY AT APPROXIMATELY 11:30 A.M., AND WILL BE AVAILABLE TO ANSWER INQUIRIES AND TAKE APPLICATIONS.**

SHOULD YOU HAVE ANY QUESTIONS ABOUT THESE PROCEDURES, PLEASE CALL ROGER O'MALLEY OR BERNIE FRANSEN, REGIONAL BUILDING CONTROLS, AT 673-2171.

NOTICE TO BUILDERS AND HOMEOWNERS

TOWN OF ONAPING FALLS

PERSONS WANTING TO BUILD RESIDENTIAL BUILDINGS, INCLUDING ACCESSORY BUILDINGS, WILL WANT TO OBTAIN A BUILDING PERMIT BEFORE STARTING THE WORK.

THE REGION'S BUILDING CONTROLS DEPARTMENT WILL ASSIST YOU IN OBTAINING THE PERMIT AND PROVIDE ANY OTHER ADVICE YOU MAY NEED DURING THE CONSTRUCTION PHASE.

YOU CAN CONTACT THE BUILDING INSPECTOR IN THE FOLLOWING WAY.

- 1. A BUILDING INSPECTOR WILL MEET AT A LOCATION CONVENIENT TO YOU DURING THE PERIOD 9:30 A.M. TO 12 NOON EACH TUESDAY. YOU NEED ONLY CALL YOUR TOWN OFFICE AT 855-4583 OR PHONE THE REGION'S BUILDING DEPARTMENT AT 673-2171 TO MAKE AN APPOINTMENT.**
- 2. THE BUILDING INSPECTOR WILL BE ATTENDING AT THE MUNICIPAL OFFICE IN RAYSIDE-BALFOUR EACH TUESDAY AFTERNOON BETWEEN THE HOURS OF 1:15 P.M. AND 3:30 P.M. YOU MAY FIND IT MORE CONVENIENT TO MEET WITH THE INSPECTOR IN RAYSIDE-BALFOUR.**

SHOULD YOU HAVE ANY QUESTIONS ABOUT THESE PROCEDURES, PLEASE CALL ROGER O'MALLEY OR BERNIE FRANSEN, REGIONAL BUILDING CONTROLS, AT 673-2171.



Interoffice Correspondence

April 15, 1992

TO: INSPECTORS
D. NOEL DE TILLY
R. O'MALLEY
PLANS EXAMINERS

FROM: B. A. FRANSEN

SUBJECT: ACCEPTANCE OF DRAWINGS WITH
BUILDING PERMIT APPLICATIONS

Would you please review the plans that are submitted along with a building permit application to ensure that the notation "unfinished space" is not included on the drawings.

We expect the applicant to be able to describe the use of the space, even if it is in general terms, so that a determination can be made as to whether the zoning by-law and building by-law requirements are being met.

I trust that you will act on this promptly.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs





Interoffice Correspondence

May 25, 1992

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: BRICK TIES

The attached information may be of interest to you, since it addresses the question of corrosion resistance of brick ties.

You will note that the recent amendments to the Ontario Building Code resulted from findings that corrosion has proven to be a major cause of failures of connectors in exterior masonry walls.

You will continue in your effort to advise the industry of these new requirements, and take the appropriate action to ensure that masonry walls are constructed correctly in the Sudbury Region.

B. A. Fransen.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs





Ministry of Housing

Ministère du Logement

OUTGOING FAX

DATE:

May 21, 1992

TO

NAME:

Mr. Franssen

COMPANY:

Director of Building Control

ADDRESS:

CITY:

Sudbury

PHONE NO:

(705) 673-2171 Ext 285

FAX NO:

(705) 675-1075

RECEIVED

MAY 21 1992

BUILDING CONTROL DEPARTMENT

FROM

Danny K.S. Hui, P.Eng.
Building Code Advisor
Ontario Buildings Branch

Ministry of Housing
Buildings Branch
777 Bay Street, 2nd Floor
Toronto, Ontario M5G 2E5
Tel.: 585-7388
Fax: 585-4028



Ontario

COMMENTS:

For your information only

NUMBER OF PAGES TRANSMITTED: 3 (INCLUDING THIS COVER PAGE)

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NAME:

DANNY

PHONE NO:

(416) 585-7368



PROPOSED REVISION SHEET

Change No. 9- NBC	Date: March	Page 1 of 2
Reference: 9.20.18. National Building Code		
Comments: (internal use only)		

PROPOSED CHANGE:

+ new Subsection 9.20.18.

SUBSECTION 9.20.18. CORROSION RESISTANCE

9.20.18.1. Carbon steel connectors required to be corrosion-resistant shall be galvanized to at least the minimum standards in Table 9.20.18.A.

Table 9.20.18.A.
Forming part of Article 9.20.18.1.
MINIMUM REQUIREMENTS FOR GALVANIZING

Connector Material	ASTM Standard	Coating Class
Wire Ties and continuous reinforcing (hot-dipped galvanizing)	A153	Class B2 458 g/m ²
Hardware and bolts	A153	See A153
Strip, plate, bars and rolled sections (not less than 3.18 mm thickness)	A123	610 g/m ²
Sheet (less than 3.18 mm thickness)	A123	305 g/m ² on materia 0.76 mm thickness (1)
Column 1	2	3

Note:
(1) ASTM A123 does not apply to metal of thickness below 3.18 mm. Galvanizing coatings may be interpolated for thicknesses between 3.18 mm and 0.76 mm.

PROPOSED REVISION SHEET

13937

705675 10753R 3

Change No. 9- NBC

Date: March

Page 2 of 2

Reference: 9.20.18.1. National Building Code

REASON

To specify minimum galvanizing for steel masonry connectors. Corrosion has proven to be a major cause of failures of connectors in exterior masonry walls.

These requirements are identical to those found in CSA-A370, "Connectors for Masonry."

See also proposed change to 9.20.9.9. which would increase the minimum thickness of masonry veneer ties to 0.76 mm. (before is 0.41 mm)

(2) Sentence (1) does not apply to a *fixture* located in a *heritage building, institutional occupancy* or passenger station.

(3) Water closets and urinals shall be certified to CSA Standard CAN/CSA-B45.0-M88, "General Requirements for Plumbing Fixtures", including all amendments, revisions and supplements effective to May, 1992.

(4) Notwithstanding Article 2.1.6., in the event of conflict between any provision of this Article and any provision of a referenced standard, this Article prevails.

(3) Article 6.4.2. of the Regulation is revoked on the 1st day of January, 1996 and the following substituted:

6.4.2.(1) The flush cycle for each *fixture* that is a water closet or urinal shall not exceed the maximum flush cycle listed for that *fixture* in Table 6.4.B.

TABLE 6.4.B.

Forming Part of Article 6.4.2.

COLUMN 1	COLUMN 2
<i>Fixture</i>	Maximum Flush Cycle CAN. GAL.
Water Closet (Tank Type)	1.3
Water Closet (Direct Flush)	1.3
Urinal (Tank Type)*	0.83
Urinal (Direct Flush)	0.83

* Urinals equipped with automatic flushing devices shall be controlled to prevent unnecessary flush cycles during down time.

(2) Sentence (1) does not apply to a *fixture* located in a *heritage building, institutional occupancy* or passenger station.

(3) Sentence (1) does not apply to the replacement of *fixtures* in an existing building.

(4) Water closets and urinals shall conform to CSA Standard CAN/CSA-B45.0-M88, "General Requirements for Plumbing Fixtures", including all amendments, revisions and supplements effective to May, 1992.

(5) Notwithstanding Article 2.1.6., in the event of conflict between any provision of this Article and any provision of a referenced standard, this Article prevails.

10.—(1) Subsections 1 (1) and 2 (3) and sections 3 to 8 of this Regulation come into force on the 31st day of March, 1992.

(2) Subsections 1 (2), 2 (1) and 9 (1) of this Regulation come into force on the 1st day of January, 1993.

(3) Subsections 1 (3), 2 (2) and 9 (2) of this Regulation come into force on the 1st day of August, 1993.

(4) Subsections 1 (4) and 9 (3) of this Regulation come into force on the 1st day of January, 1996.

EVELYN GIGANTES
Minister of Housing

Dated at Toronto, this 3rd day of March, 1992.

13/92

FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY ACT

O. Reg. 135/92.

General.

Made—March 11th, 1992.

Filed—March 13th, 1992.

REGULATION TO AMEND ONTARIO REGULATION 516/90 MADE UNDER THE FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY ACT

1.—(1) The Schedule to Ontario Regulation 516/90, as amended by section 1 of Ontario Regulation 371/91, is further amended by adding the following item:

1a. Advisory Committee on Francophone Affairs

1a. Comité consultatif des affaires francophones

(2) Item 26 of the Schedule is revoked.

(3) The English version of item 49 of the Schedule is revoked and the following substituted:

49. Council for Franco-Ontario Education

49. Council for Franco-Ontario Education

(4) The Schedule is further amended by adding the following items:

LOI SUR L'ACCÈS À L'INFORMATION ET LA PROTECTION DE LA VIE PRIVÉE

Règl. de l'Ont. 135/92

Dispositions générales

pris—le 11 mars 1992

déposé—le 13 mars 1992

RÈGLEMENT MODIFIANT LE RÈGLEMENT DE L'ONTARIO 516/90 PRIS EN APPLICATION DE LA LOI SUR L'ACCÈS À L'INFORMATION ET LA PROTECTION DE LA VIE PRIVÉE

1 (1) L'annexe du Règlement de l'Ontario 516/90, telle qu'elle est modifiée par l'article 1 du Règlement de l'Ontario 371/91, est modifiée de nouveau par adjonction du numéro suivant :

Minister of Colleges and Universities

Ministre des Collèges et Universités

(2) Le numéro 26 de l'annexe est abrogé.

(3) Le numéro 49 de la version anglaise de l'annexe est abrogé et remplacé par ce qui suit :

Minister of Colleges and Universities

Minister of Colleges and Universities

(4) L'annexe est modifiée en outre par adjonction des numéros suivants :

153

(ca) a private water supply, including all fittings and appurtenances,

3.—(1) Article 1.3.4. of the Regulation, as amended by section 5 of Ontario Regulation 401/91, is further amended by adding the following paragraphs:

- 1a. CAN. GAL imperial gallon(s)
- 1b. CAN. GPM imperial gallon(s) per minute

(2) Paragraphs 10 and 11 of Article 1.3.4. of the Regulation are revoked.

4. Sentences 1.4.1.(1), (3) and (4) of the Regulation, as made by section 6 of Ontario Regulation 401/91, are revoked and the following substituted:

(1) Except as permitted in Sentence (2), a buried water service pipe shall be separated from the building drain, building sewer, building storm drain, building storm sewer and a sewage system subject to Part VII of the Environmental Protection Act, by not less than eight feet, measured horizontally, of undisturbed or compacted earth.

(3) A buried service pipe shall be constructed of a single run of pipe with no joints or fittings between the street line or source of supply on the property and the inside face of the building if the service pipe is less than fifty feet from,

- (a) a sewage system subject to Part VII of the Environmental Protection Act; or
- (b) a source of pollution other than a sewage system subject to Part VII of the Environmental Protection Act.

5.—(1) Sentence 2.5.5.(2) of the Regulation is revoked and the following substituted:

(2) Except as permitted in Sentence (5), polyethylene water pipe or tube shall only be used in underground installations in service pipe or distributing pipe.

(2) Article 2.5.5. of the Regulation is amended by adding the following Sentence:

(5) Cross-linked polyethylene pressure pipe or tube and fittings used in above-ground or underground installations in service pipe or distributing pipe shall be certified to CSA Standard CAN/CSA-B137.5-M89, "Cross-linked Polyethylene (PEX) Tubing Systems for Pressure Applications".

6. Sentence 2.7.4.(1) of the Regulation is revoked and the following substituted:

- (1) Copper tube in a plumbing system shall,
 - (a) be certified to ASTM Standard B88-88, "Seamless Copper Water Tube"; or
 - (b) comply with ASTM Standard B306-88, "Copper Drainage Tube (DWV)".

7. The heading to Column 3 of Table 4.10.F. of the Regulation is revoked and the following substituted:

Flow Rate
CAN. GPM

8. Paragraphs 3 and 5 of Article 6.2.9. of the Regulation, as made by section 18 of Ontario Regulation 401/91, are revoked and the following substituted:

3. A wet standpipe fire protection system containing anti-freeze or chemicals shall be provided with a reduced pressure principle backflow preventer certified to CSA Standard CAN/CSA B64.4.-M88.

5. A water storage tank fire protection system shall be provided with a backflow preventer certified to CSA Standard CAN/CSA B64-M88 series.

9.—(1) Section 6 of the Regulation is amended by adding the following subsection:

Subsection 6.4. Water Efficiency

6.4.1.(1) The flow rates of fittings that supply water to a fixture shall not exceed the maximum flow rates at the test pressures listed for that fitting in Table 6.4.A.

TABLE 6.4.A.
Forming Part of Sentence 6.4.1.(1)

COLUMN 1	COLUMN 2	COLUMN 3
Fitting	Maximum Flow CAN. GPM	Test Pressure Psi.
Lavatory Faucet	1.84	60
Residential Kitchen Faucet	1.84	60
Shower Head	2.15*	80

* Shower heads producing a flow rate below 1.66 CAN. GPM may be individually regulated by pressure or thermostatic compensating valves.

(2) Sentence (1) does not apply to a fixture located in a heritage building.

(3) Notwithstanding Article 2.9.6., plumbing supply fittings and trim for lavatory faucets, residential kitchen faucets and shower heads shall be certified to CSA Standard CAN/CSA-B125-M89, "Plumbing Fittings", including all amendments, revisions and supplements effective to March, 1992.

(4) Notwithstanding Article 2.1.6., in the event of conflict between any provision of this Article and any provision of a referenced standard, this Article prevails.

(2) Subsection 6.4. of the Regulation is amended by adding the following Article:

6.4.2.(1) The flush cycle for each fixture that is a water closet or urinal shall not exceed the maximum flush cycle listed for that fixture in Table 6.4.B.

TABLE 6.4.B.

Forming Part of Article 6.4.2.

COLUMN 1	COLUMN 2
Fixture	Maximum Flush Cycle CAN. GAL.
Water Closet (Tank Type)	2.9
Water Closet (Direct Flush)	2.9
Urinal (Tank Type)*	1.25
Urinal (Direct Flush)	1.25

* Urinals equipped with automatic flushing devices shall be controlled to prevent unnecessary flush cycles during down time.

(2) The arbitrator or arbitration board shall not order the removal of human remains and associated artifacts from the burial site for scientific study.

(3) The arbitration award may include anything listed in section 14 to the extent it is not included in the site disposition agreement. O. Reg. 133/92, s. 13.

SITE DISPOSITION AGREEMENTS

14. A site disposition agreement respecting an unapproved aboriginal peoples' cemetery or an unapproved cemetery shall contain the following:

1. A legal description of the location of the cemetery in which the human remains are interred and, if appropriate, a statement that the remains will be left where they are interred.
2. The style and manner in which the human remains are to be disinterred and reinterred, if applicable.
3. The time within which the disinterment and reinterment are to take place, if applicable.
4. The provisions being made for future maintenance of the cemetery in which the human remains are to be located.
5. The allocation of the costs for carrying out the agreement.
6. Such other matters as the parties to the agreement agree upon. O. Reg. 133/92, s. 14.

COMMENCEMENT

15. This Regulation comes into force on the day the *Cemeteries Act (Revised)* is proclaimed in force.

13/92

ONTARIO WATER RESOURCES ACT

O. Reg. 134/92.

Plumbing Code.

Made—March 3rd, 1992.

Approved—March 11th, 1992.

Filed—March 13th, 1992.

REGULATION TO AMEND ONTARIO REGULATION 815/84 MADE UNDER THE ONTARIO WATER RESOURCES ACT

1.—(1) Subsection 1.1. of Ontario Regulation 815/84, as amended by section 1 of Ontario Regulation 401/91, is further amended by adding the following Article:

1.1.3. Notwithstanding Article 1.1.1., this Regulation as it reads on the 30th day of March, 1992 continues in force in respect of any *plumbing* system,

- (a) for which a permit has been issued before the 31st day of March, 1992; or
- (b) for which an application for a permit under this Regulation as it reads on the 30th day of March, 1992 is made before the 31st day of March, 1992,

on condition that the *plumbing* system is commenced within six months after the permit is issued.

(2) Subsection 1.1. of the Regulation is further amended by adding the following Article:

1.1.4. Notwithstanding Article 1.1.1., this Regulation as it reads on the 31st day of December, 1992 continues in force in respect of any *plumbing* system,

- (a) for which a permit has been issued before the 1st day of January, 1993; or
- (b) for which an application for a permit under this Regulation as it reads on the 31st day of December, 1992 is made before the 1st day of January, 1993,

on condition that the *plumbing* system is commenced within six months after the permit is issued.

(3) Subsection 1.1. of the Regulation is further amended by adding the following Article:

1.1.5. Notwithstanding Article 1.1.1., this Regulation as it reads on the 31st day of July, 1993 continues in force in respect of any *plumbing* system,

- (a) for which a permit has been issued before the 1st day of August, 1993; or
- (b) for which an application for a permit under this Regulation as it reads on the 31st day of July, 1993 is made before the 1st day of August, 1993,

on condition that the *plumbing* system is commenced within six months after the permit is issued.

(4) Subsection 1.1. of the Regulation is further amended by adding the following Article:

1.1.6. Notwithstanding Article 1.1.1., this Regulation as it reads on the 31st day of December, 1995 continues in force in respect of any *plumbing* system,

- (a) for which a permit has been issued before the 1st day of January, 1996; or
- (b) for which an application for a permit under this Regulation as it reads on the 31st day of December, 1995 is made before the 1st day of January, 1996,

on condition that the *plumbing* system is commenced within six months after the permit is issued.

2.—(1) Article 1.3.2. of the Regulation, as amended by section 2 of Ontario Regulation 675/85 and section 3 of Ontario Regulation 401/91, is further amended by adding the following paragraph:

54a. *Heritage building* — means a building designated under the *Ontario Heritage Act*, or a building that is certified to be of significant architectural or historical value by a recognized, non-profit public organization whose primary object is the preservation of structures of architectural or historical significance and whose certification of the building is accepted by the *inspector*.

(2) Article 1.3.2. of the Regulation is further amended by adding the following paragraph:

61a. *Institutional occupancy* — means the occupancy or use of a building or part of a building by persons who require supervisory care, medical care or medical treatment or by persons who are under restraint for correctional purposes and who are incapable of self preservation because of security measures not under their control.

(3) Paragraph 74 of Article 1.3.2., as remade by section 3 of Ontario Regulation 401/91, is amended by striking out "and" at the end of subparagraph (d), by adding "and" at the end of subparagraph (e) and by adding the following subparagraph:



Interoffice Correspondence

April 27, 1992

TO: INSPECTORS
ROGER O'MALLEY
RAY PITRE
MIKE SHLEMKEVICH
CLAUDE TRUMBLE

FROM: B. A. FRANSEN

SUBJECT: SPATIAL SEPARATION AND EXPOSURE PROTECTION OF PART 9
BUILDINGS

I am attaching for your information a document titled "Spatial Separation and Exposure Protection of Buildings - Part 9 of the Ontario Building Code". You will want to review the information and establish its application.

B. A. Fransen

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attach.

**SPATIAL SEPARATION
AND
EXPOSURE PROTECTION OF BUILDINGS**

Part 9 of the Ontario Building Code

prepared by:
Ontario Buildings Branch
Ministry of Housing, June 1989
Revised, August 1990

Spatial Separation and Exposure
Protection of Buildings
Part 9 of the Ontario Building Code

The purpose of spatial separation requirements is to prevent a fire in the interior of one building from igniting an adjacent exposed building by radiation through windows or other unprotected openings. In a building fire, the source of radiation is the area of the windows or other openings plus the area of flame front which forms along the lintel. As the factor that can be controlled in the Code is the area of windows, the calculations which give permissible openings have been adjusted to take into account the additional radiation from the flame front.

The Code requirements for spatial separations were based on original work done on radiation in Great Britain. It was recognized that because of climatic differences (severe winters) some modifications were necessary. Additional knowledge was gained through full scale fires in buildings, know as the "St. Lawrence Burns", carried out by the National Research Council.

The knowledge that radiation levels are related to the number and sizes of openings (windows) in a building and the distance from that building formed the requirements for spatial separation and exposure protection.

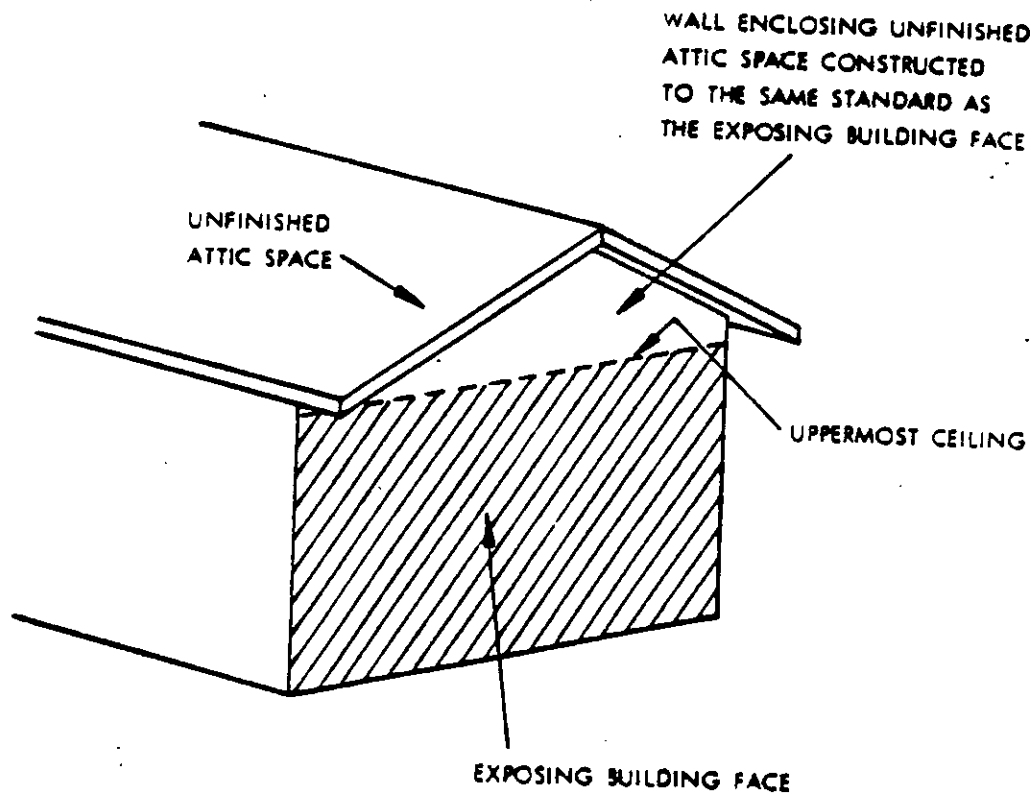
I

Definitions

An explanation of the following definitions is essential to understanding spatial separation requirements:

1. Exposing building face:

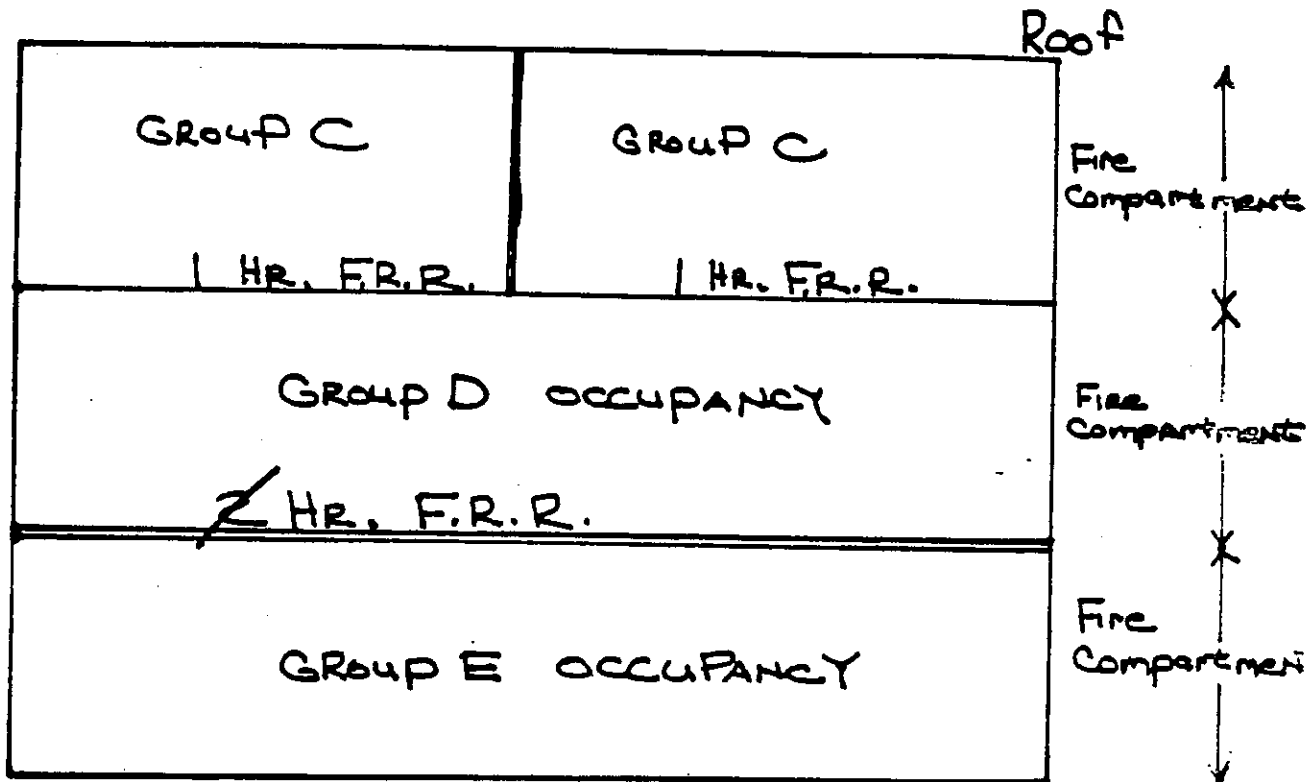
"Exposing building face" means that part of the exterior wall of a "building" which faces one direction and is located between ground level and the ceiling of its top "storey", or where a "building" is divided into "fire compartments", the exterior wall of a "fire compartment" which faces one direction.



2. Fire compartment:

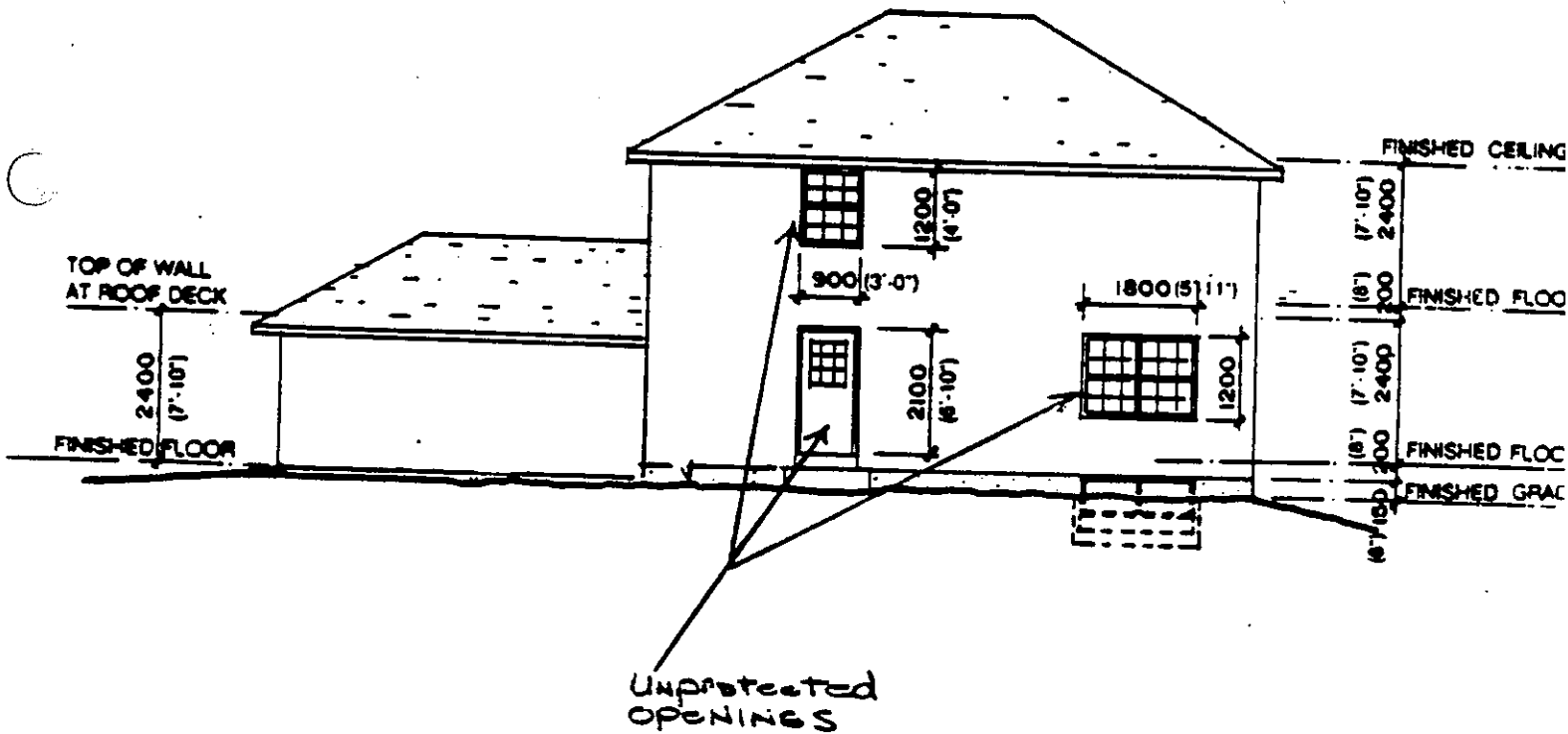
"Fire compartment" means an enclosed space in a "building" that is separated from all other parts of the "building" by enclosing construction providing a "fire separation" that may be required to have a "fire-resistance rating".

ELEVATION



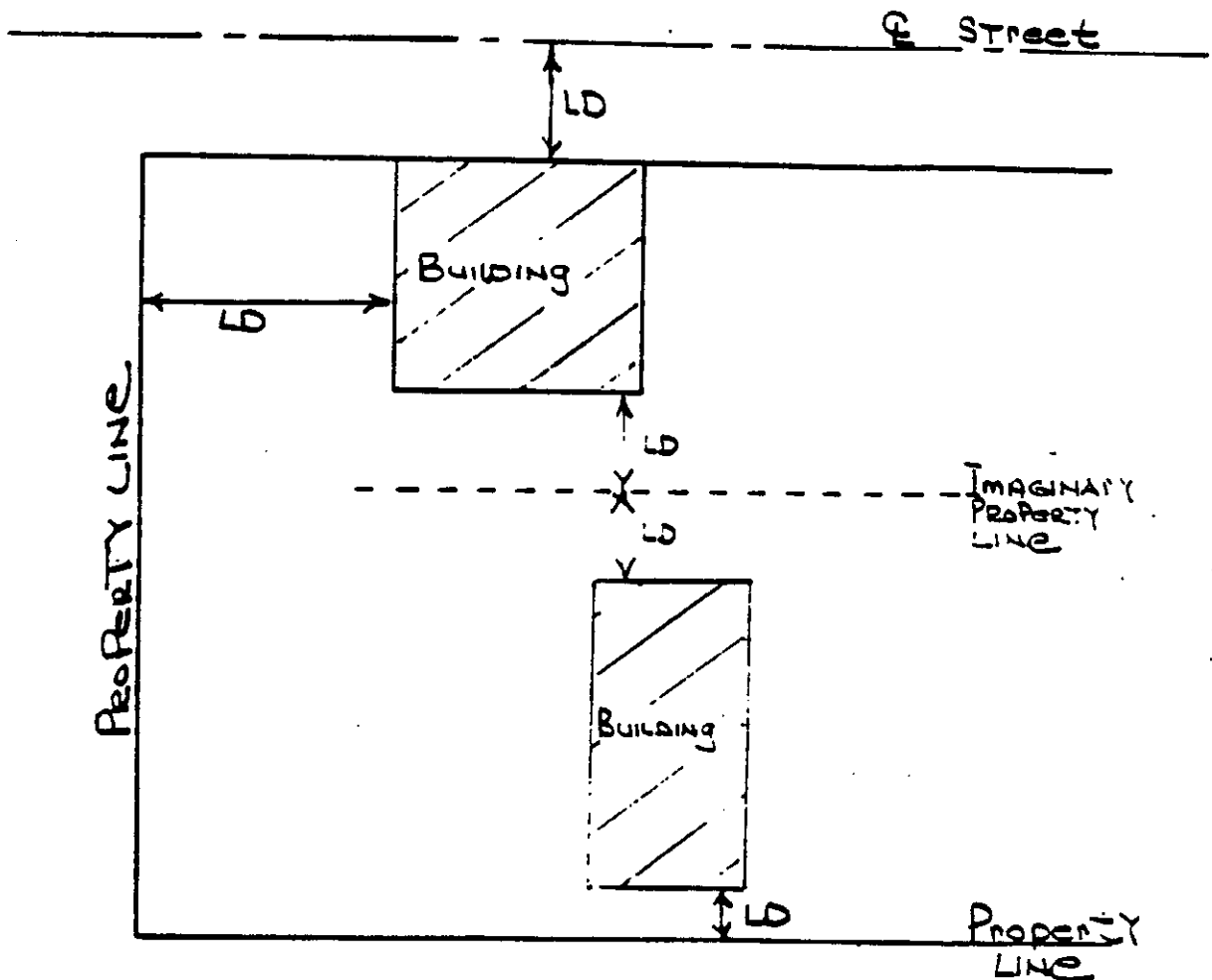
3. Unprotected openings:

"Unprotected opening" as applying to "exposing building face" means a doorway, window or opening other than one equipped with a "closure" having the required "fire-protection rating", or any part of a wall forming part of the "exposing building face" that has a "fire-resistance rating" less than required for the "exposing building face".



4. Limiting distance:

"Limiting distance" means the distance from an "exposing building face" to a property line, the centre line of a "street", lane or public thoroughfare, or to an imaginary line between 2 "buildings" or "fire compartments" on the same property, measured at right angles to the "exposing building face".

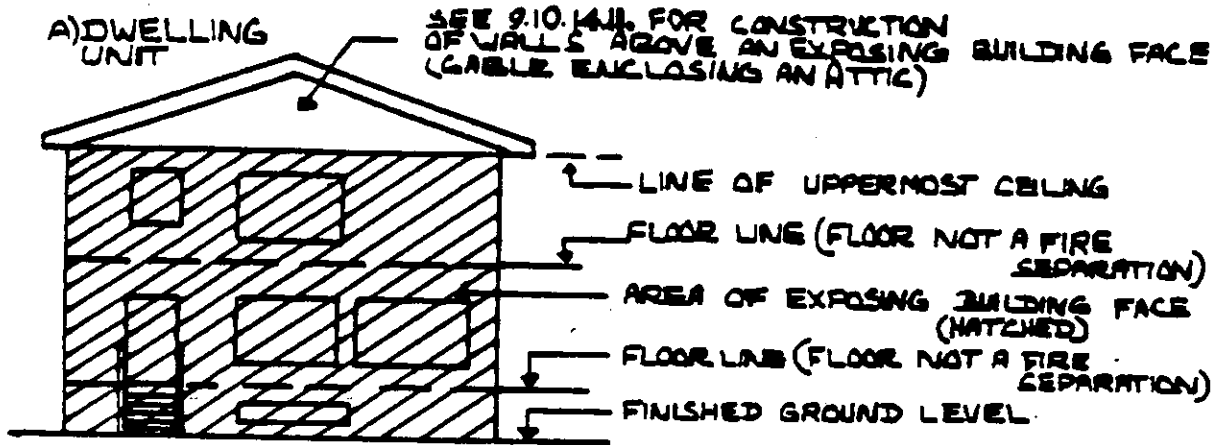


II

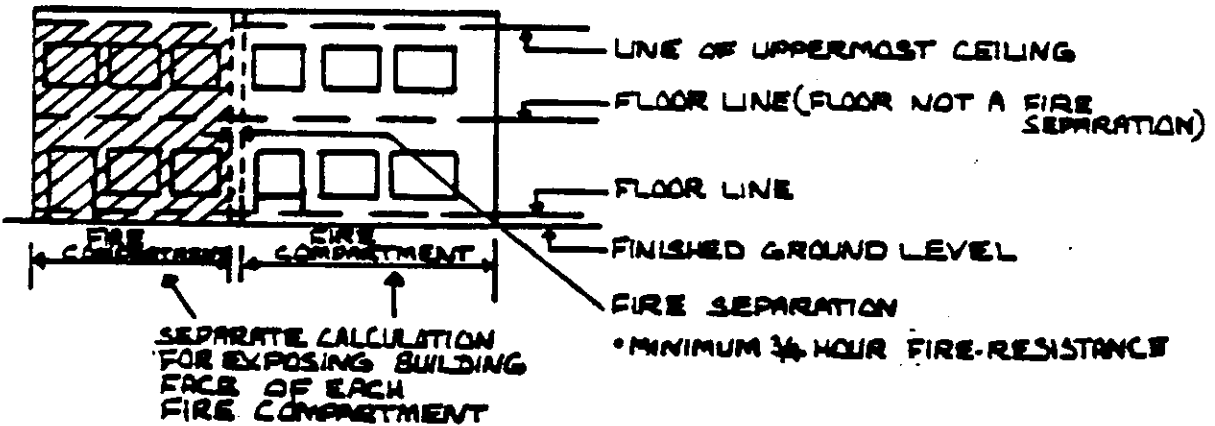
Area of Exposing Building Face

Article 9.10.14.2.

"The area of an "exposing building face" shall be calculated as the total area of exterior wall facing in 1 direction on any side of a "building" measured from the finished ground level to the uppermost ceiling, except that where a "building" is divided by "fire separations" into "fire compartments", the area of "exposing building face" may be calculated for each "fire compartment" provided such separations have not less than a 45 min "fire-resistance rating".



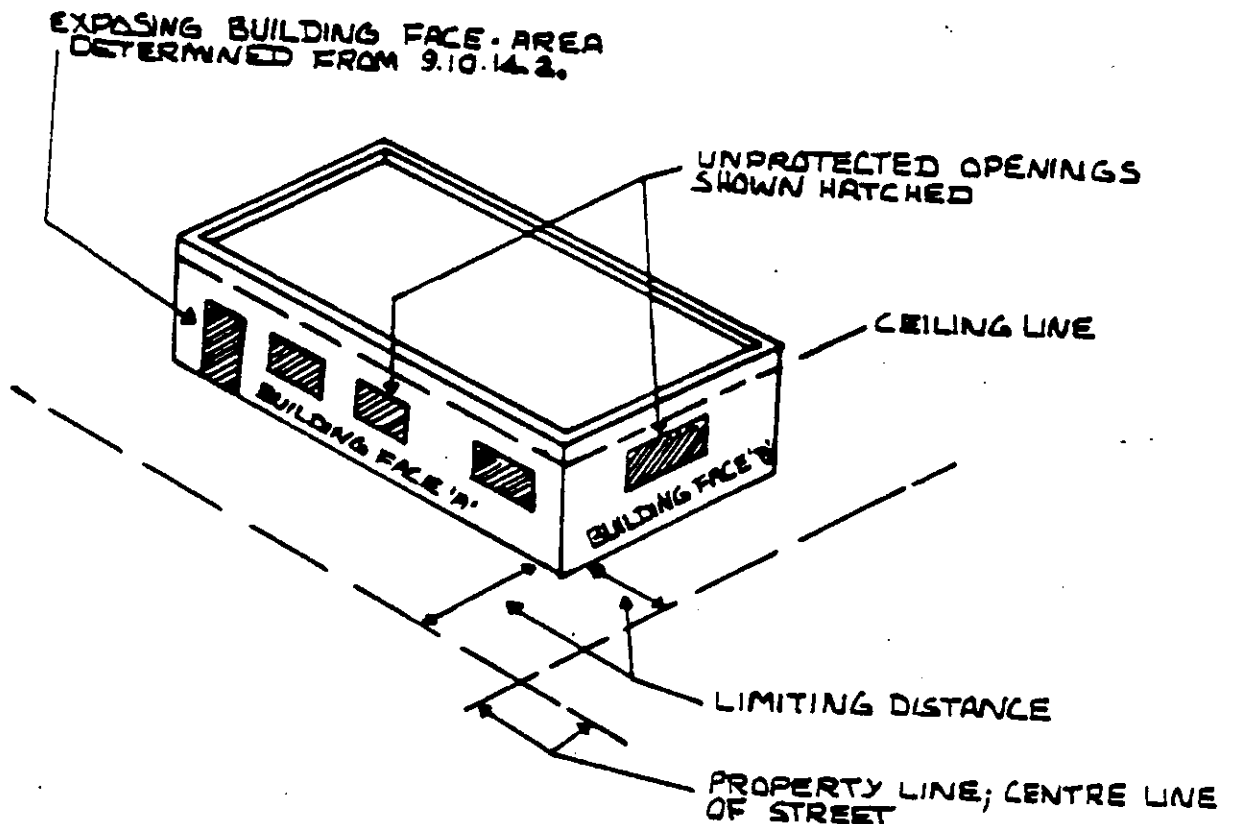
B) MULTI-COMPARTMENT TYPE BUILDING



III

Area of Unprotected Openings

The areas of all unprotected openings in the exposing building face are added together and the total expressed as a percentage of the exposing building face.



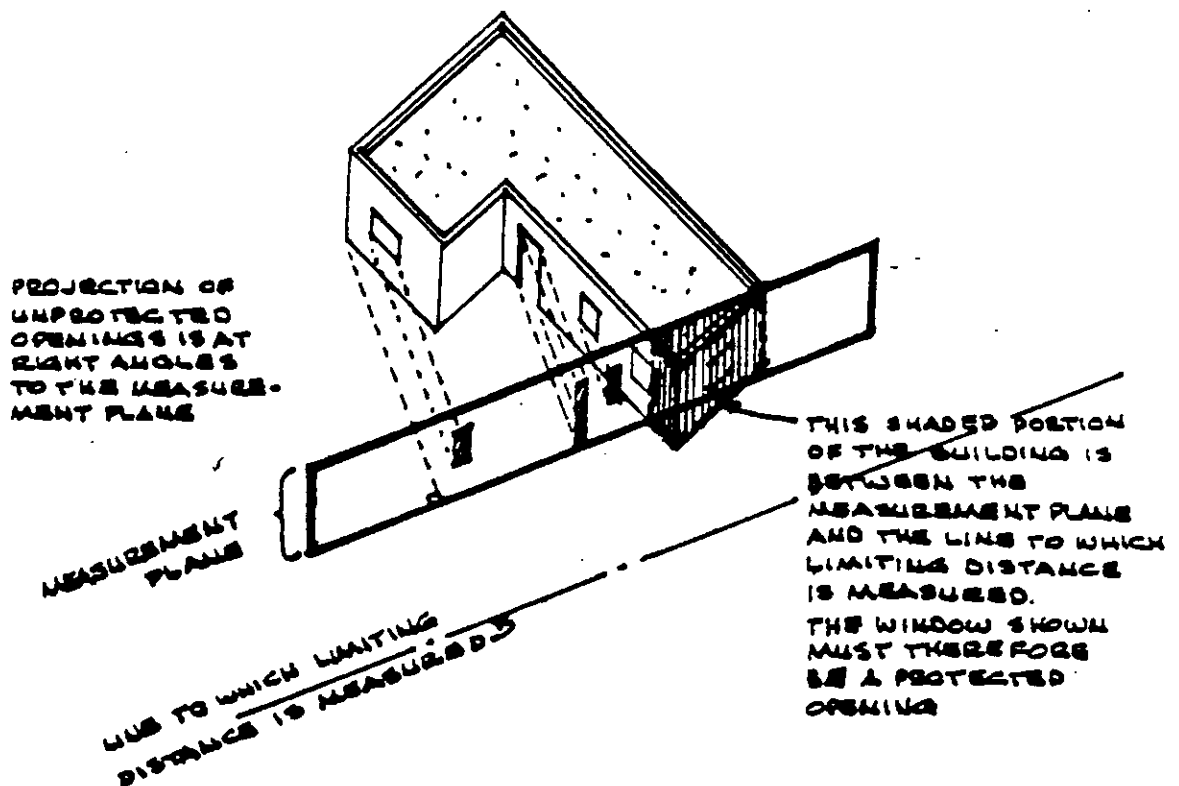
$$\% \text{ OF UNPROTECTED OPENINGS} = \frac{\text{AREA OF UNPROTECTED OPENING}}{\text{EXPOSING BUILDING FACE AREA}} \times 100$$

IV Determination of Allowable Percentage of Unprotected Openings for Irregular - shaped Buildings

For the purpose of determining the allowable percentage of unprotected openings, the limiting distance is measured from the closest unprotected opening in an exposing building face.

Article 9.10.14.8.

For the purpose of using Table 9.10.14.A. to determine the actual percentage of "unprotected openings" permitted in an exterior wall, the location of the "exposing building face" is permitted to be taken at a vertical plane located so that there are no "unprotected openings" between the vertical plane and the line to which "limiting distance" is measured.

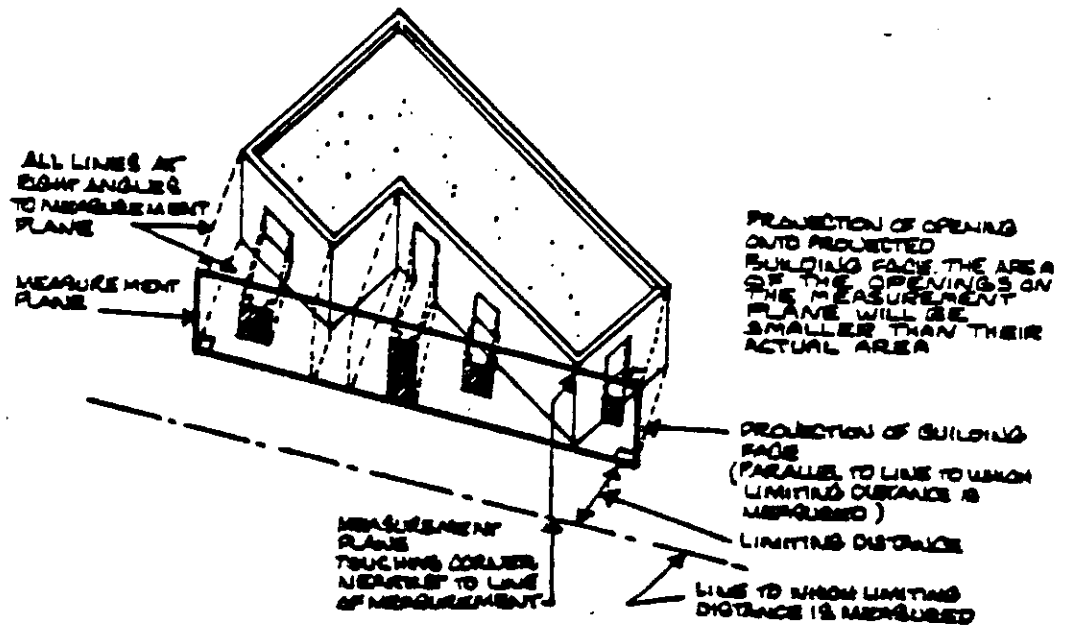


V Determination of Exterior Wall Construction for
Irregular - shaped Buildings

For the purpose of determining the required type of construction, cladding and fire resistance rating for an exterior wall, the limiting distance is measured from the closest part of the wall forming the exposing building face.

Article 9.10.14.7.

For the purpose of using Table 9.10.14.B. to determine the required type of construction, cladding and "fire-resistance rating" for an exterior wall, the "exposing building face" shall be taken as the projection of the exterior wall onto a vertical plane located so that no portion of the exterior wall of the "building" is between the vertical plane and the line to which the limiting distance is measured and, for these purposes, the permitted area of "unprotected openings" shall be determined from Table 9.10.14.A. or Article 9.10.14.4., using the "limiting distance" measured from this "exposing building face".



VI Maximum percentage of Unprotected Openings in Exterior Walls

Sentence 9.10.14.1.(1) states that except as provided in Sentence 9.10.14.1.(2) and Articles 9.10.14.3. to 9.10.14.11., the maximum percentage of "unprotected openings" in an "exposing building face" shall conform to Table 9.10.14.A. or to Subsection 3.2.3., whichever is the least restrictive for the "occupancy" being considered.

Therefore, use Table 3.2.3.A. or Table 3.2.3.B. and Table 9.10.14.A. to determine the least restrictive percentage of unprotected openings for a given occupancy.

Table 3.2.3.A.
Forming Part of Subsection 3.2.3

EXPOSING BUILDING FACE		AREA OF UNPROTECTED OPENING FOR GROUPS A, B, C, D AND F, DIVISION 3 OCCUPANCIES PER CENT																										
Min. Area, m ²	Area (L, W or HxL) ¹	Limiting Distance, m																										
		0	12	15	20	25	3	4	5	6	7	8	9	10	11	12	13	14	16	18	20	25	30	35	40	45	50	
10	Less than 3 x 1	0	8	10	18	29	46	61	100																			
	3 x 1 to 10 x 1	0	8	12	21	33	50	66	100																			
	Over 10 x 1	0	11	18	32	46	66	100																				
15	Less than 3 x 1	0	7	9	14	22	33	43	100																			
	3 x 1 to 10 x 1	0	8	10	17	25	37	47	100																			
	Over 10 x 1	0	10	15	26	38	53	67	100																			
20	Less than 3 x 1	0	7	9	12	18	26	34	81	100																		
	3 x 1 to 10 x 1	0	8	10	15	21	30	39	88	100																		
	Over 10 x 1	0	9	14	23	33	46	72	100																			
25	Less than 3 x 1	0	7	8	11	16	23	31	86	98	100																	
	3 x 1 to 10 x 1	0	8	9	13	19	26	35	78	100																		
	Over 10 x 1	0	9	13	21	30	38	62	98	100																		
30	Less than 3 x 1	0	7	8	11	15	20	28	83	100																		
	3 x 1 to 10 x 1	0	7	9	12	17	23	30	81	100																		
	Over 10 x 1	0	8	12	19	27	36	56	79	100																		
40	Less than 3 x 1	0	7	8	10	13	17	20	44	64	80	100																
	3 x 1 to 10 x 1	0	7	8	11	15	20	32	46	60	83	100																
	Over 10 x 1	0	8	11	17	24	31	47	66	86	100																	
50	Less than 3 x 1	0	7	8	9	12	15	24	37	53	72	96	100															
	3 x 1 to 10 x 1	0	7	8	10	14	18	26	41	57	77	100	100															
	Over 10 x 1	0	8	10	15	21	28	41	57	76	97	100																
60	Less than 3 x 1	0	7	8	9	11	14	21	32	46	62	81	100															
	3 x 1 to 10 x 1	0	7	8	10	13	16	25	38	49	66	86	100															
	Over 10 x 1	0	8	10	14	20	28	38	51	67	86	100																
80	Less than 3 x 1	0	7	7	8	10	12	18	26	36	46	62	79	96	100													
	3 x 1 to 10 x 1	0	7	8	9	11	14	21	29	40	52	67	84	100														
	Over 10 x 1	0	8	9	13	17	22	30	44	56	70	86	100															
100	Less than 3 x 1	0	7	7	8	9	11	16	22	30	40	51	64	80	97	100												
	3 x 1 to 10 x 1	0	7	8	9	11	13	18	25	34	44	56	69	84	100													
	Over 10 x 1	0	7	9	12	16	20	29	38	49	61	74	88	100														
150	Less than 3 x 1	0	7	7	8	9	10	13	17	22	29	37	46	56	67	79	93	100										
	3 x 1 to 10 x 1	0	7	7	8	9	11	15	20	26	33	41	50	60	71	84	97	100										
	Over 10 x 1	0	7	8	11	13	17	24	31	39	48	57	68	79	91	100												
250	Less than 3 x 1	0	7	7	7	8	8	10	13	16	20	25	30	36	43	51	59	66	87	100								
	3 x 1 to 10 x 1	0	7	7	8	9	10	12	15	19	24	28	34	40	47	56	63	72	82	100								
	Over 10 x 1	0	7	8	9	11	14	19	24	30	36	43	50	57	66	73	82	92	100									
350	Less than 3 x 1	0	7	7	7	8	8	9	11	14	18	20	24	28	33	38	44	50	64	81	98	100						
	3 x 1 to 10 x 1	0	7	7	8	8	9	11	13	16	19	23	27	32	37	42	48	56	68	86	100							
	Over 10 x 1	0	7	8	9	10	12	16	21	25	30	36	41	47	53	59	66	73	80	90	100							
500	Less than 3 x 1	0	7	7	7	7	8	9	10	12	14	16	19	22	25	29	33	37	47	59	71	100						
	3 x 1 to 10 x 1	0	7	7	7	8	8	10	12	14	16	19	22	25	29	33	37	41	52	63	76	100						
	Over 10 x 1	0	7	7	8	9	11	14	18	22	25	30	34	38	43	48	53	58	70	82	96	100						
1 000	Less than 3 x 1	0	7	7	7	7	7	8	9	9	10	12	13	14	16	18	20	22	27	33	38	50	100					
	3 x 1 to 10 x 1	0	7	7	7	7	8	9	10	11	12	14	15	17	19	21	23	26	31	37	43	63	86	100				
	Over 10 x 1	0	7	7	8	8	9	11	13	16	19	21	24	27	30	33	36	38	46	53	60	82	100					
2 000	Less than 3 x 1	0	7	7	7	7	7	8	8	8	9	9	10	11	12	13	14	15	17	20	23	33	44	56	74	93	100	
	3 x 1 to 10 x 1	0	7	7	7	7	7	8	8	9	10	11	12	13	14	15	16	17	20	23	27	37	48	63	79	97	100	
	Over 10 x 1	0	7	7	7	8	8	9	11	12	14	16	18	19	21	23	25	27	32	36	40	53	66	82	99	100	100	

Note to Table 3.2.3.A
¹L = Length of Exposing Building Face
²H = Height of Exposing Building Face
 (Apply whichever ratio is greater)

Use of Table 9.10.14:A.

To use Table 9.10.14.A, the area of exposing building face for the building wall under consideration must be determined. Knowing the area of exposing building face and limiting distance, a Code user may then determine the maximum percentage of unprotected openings allowed in the exposing building face.

Conversely, if a designer has established a percentage of unprotected openings in an exposing building face, he can determine the necessary setback of the exposing building face from a property line or centreline of a street, i.e. the limiting distance.

Table 9.10.14.A.
Forming Part of Article 9.10.14.1.

MAXIMUM PERCENTAGE OF UNPROTECTED OPENINGS IN EXTERIOR WALLS													
<i>Occupancy Classification of Building</i>	<i>Maximum Area of Exposing Building Face, m²</i>	<i>Limiting Distance</i>											
		<i>Less than 1.2 m</i>	<i>1.2 m</i>	<i>1.5 m</i>	<i>2.0 m</i>	<i>4.0 m</i>	<i>6.0 m</i>	<i>8.0 m</i>	<i>10.0 m</i>	<i>12.0 m</i>	<i>16.0 m</i>	<i>20.0 m</i>	<i>25.0 m</i>
<i>Residential, business and personal services, low hazard, industrial</i>	30	0	7	9	12	39	88	100	—	—	—	—	—
	40	0	7	8	11	32	69	100	—	—	—	—	—
	50	0	7	8	10	28	57	100	—	—	—	—	—
	100	0	7	8	9	18	34	56	84	100	—	—	—
	Over 100	0	7	7	8	12	19	28	40	55	92	100	—
<i>Mercantile and medium hazard industrial</i>	30	0	4	4	6	20	44	80	100	—	—	—	—
	40	0	4	4	6	16	34	61	97	100	—	—	—
	50	0	4	4	5	14	29	50	79	100	—	—	—
	100	0	4	4	4	9	17	28	42	60	100	—	—
	Over 100	0	4	4	4	6	10	14	20	27	46	70	100
Column 1	2	3	4	5	6	7	8	9	10	11	12	13	14

VII

Exceptions to Table 9.10.14.A.

- 9.10.14.3. - Requires the doubling of the limiting distance if complete fire protection services are not available.
- 9.10.14.4. - Allows the reduction of limiting distance from that required in Table 9.10.14.A. on the basis of calculations.
- 9.10.14.6. - The allowable area of unprotected openings may be doubled where openings are glazed with wire glass or glass block or where the building is sprinklered.
- 9.10.14.9. - Allows unlimited unprotected openings in a storey which faces a street and is at approximately the same level as the street and has at least a 9 m limiting distance.
- 9.10.14.10. - Allows the exposing face of an open-air storey in a storage garage to have unlimited unprotected openings where the limiting distance is at least 3 m.

Added Requirements:

- 9.10.14.11. - Requires the construction of exposing building faces and walls enclosing attic or roof spaces to conform to Table 9.10.14.B. and Subsection 9.10.8.

Note that unprotected openings are usually doors or windows, although by definition portions of an exposing building face which have a fire resistance rating less than required for the exposing building face, per Table 9.10.14.B., would also be considered as unprotected openings.

VIII Minimum Construction Requirement for Exposing Building Face

Article 9.10.14.11. states that "except as permitted in Articles 9.10.14.12. to 9.10.14.16., each exposing building face and any exterior wall located above an exposing building face that encloses an attic or roof space shall be constructed in conformance with Table 9.10.14.B. and Subsection 9.10.8."

Table 9.10.14.B.

MINIMUM CONSTRUCTION REQUIREMENTS FOR EXPOSING BUILDING FACES				
<i>Occupancy Classification of Building</i>	<i>Maximum Percentage of Unprotected Openings permitted</i>	<i>Minimum Required Fire-Resistance Rating, h</i>	<i>Type of Construction Required</i>	<i>Type of Cladding Required</i>
<i>Residential, business and personal services and low hazard industrial</i>	not more than 10	1	<i>Noncombustible</i>	<i>Noncombustible</i>
	more than 10 but not more than 25	1	<i>Combustible or noncombustible</i>	<i>Noncombustible</i>
	more than 25 but not more than 100	$\frac{3}{4}$	<i>Combustible or noncombustible</i>	<i>Combustible or noncombustible</i>
<i>Mercantile and medium hazard industrial</i>	not more than 10	2	<i>Noncombustible</i>	<i>Noncombustible</i>
	more than 10 but not more than 25	2	<i>Combustible or noncombustible</i>	<i>Noncombustible</i>
	more than 25 but not more than 100	1	<i>Combustible or noncombustible</i>	<i>Combustible or noncombustible</i>
Column 1	2	3	4	5

IX DWELLING UNITS - no dwelling unit above another dwelling unit

Article 9.10.14.12. Exposing Building Face of houses

- (1) Except as required in Article 9.10.14.3., in "buildings" containing only "dwelling units" in which there is no "dwelling unit" above another "dwelling unit", the requirements of Article 9.10.14.11. do not apply provided that the "exposing building face" has a "fire-resistance rating" of not less than 45 min where the "limiting distance" is less than 1.2 m, and when the "limiting distance" is less than 0.6 m, the "exposing building face" is clad with "noncombustible" material.
- (2) Window openings in the "exposing building face" referred to in Sentence (1) shall not be permitted if the "limiting distance" is less than 1.2 m and shall be limited in conformance with the requirements for "unprotected openings" in Article 9.10.14.1. where the "limiting distance" is 1.2 m or greater.
- (3) Where the spatial separation between "dwelling units" on adjoining properties is registered on the titles of both properties, the spatial separation may be calculated as if the "dwelling units" were constructed on the same property.

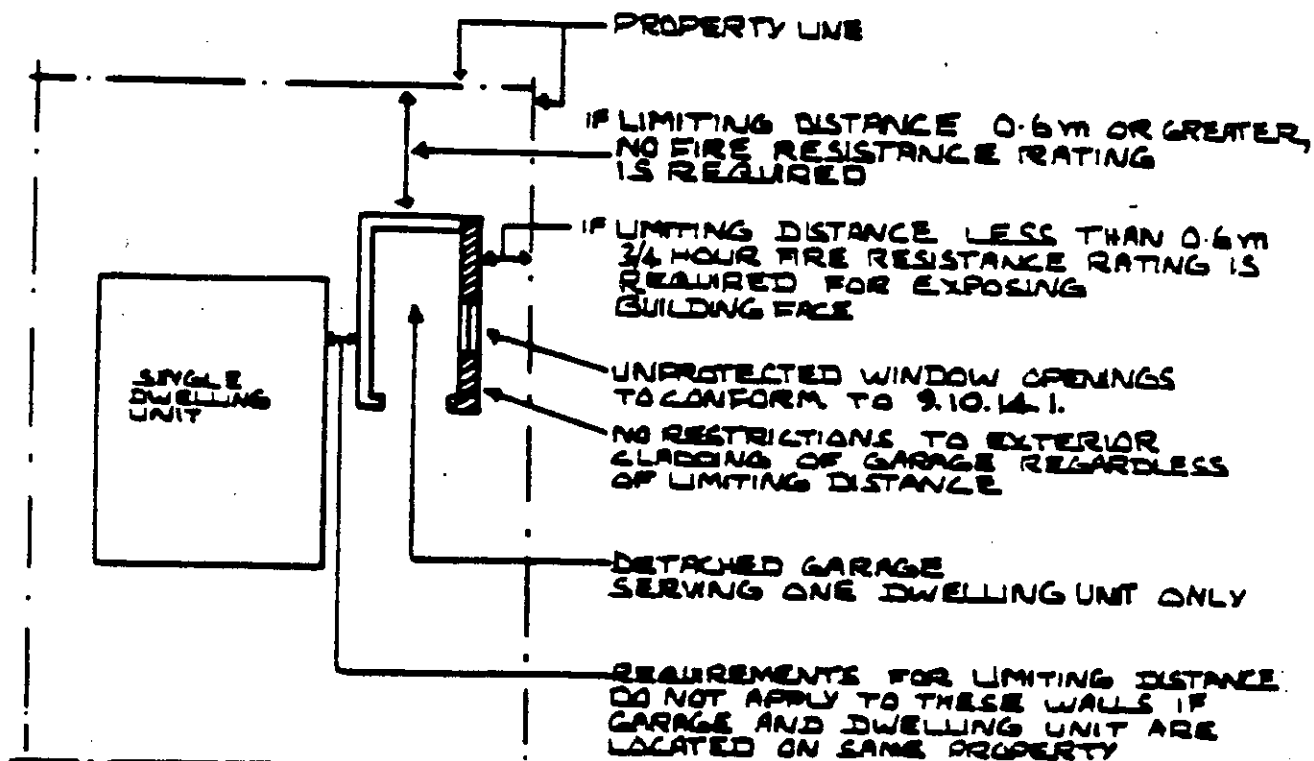
LIMITING DISTANCE (meters)	EXPOSING BUILDING FACE CONSTRUCTION			UNPROTECTED OPENINGS
	COMBUSTIBLE CONSTRUCTION	NON-COMBUSTIBLE CLADDING	FIRE-RESISTANCE RATING (Hr.)	
0 to < 0.6m	yes	yes	3/4	none
0.6 ≤ to < 1.2	yes	no	3/4	none
≥ 1.2m	yes	no	none	see Article 9.10.14.1

NOTE: Applies to buildings containing only dwelling units in which there is no dwelling unit above another dwelling unit.
Paid or volunteer fire department is available.

X Fire Resistance of a Detached Garage Serving a Dwelling Unit

Article 9.10.14.14.

"Except as required in Article 9.10.14.3., the exposing building face of a detached garage that serves 1 dwelling unit only shall have a fire resistance rating of at least 45 min except that no fire-resistance rating is required where the limiting distance is 0.6 m or greater. The exterior cladding of such detached garages is not required to be noncombustible regardless of the limiting distance. The percentage of window openings permitted in the exposing building face of such detached garages shall conform to the requirements for unprotected openings in Article 9.10.14.1. Where a detached garage serves only one dwelling unit and is located on the same property as that dwelling unit, the requirements for limiting distance shall not apply between the garage and the dwelling unit".



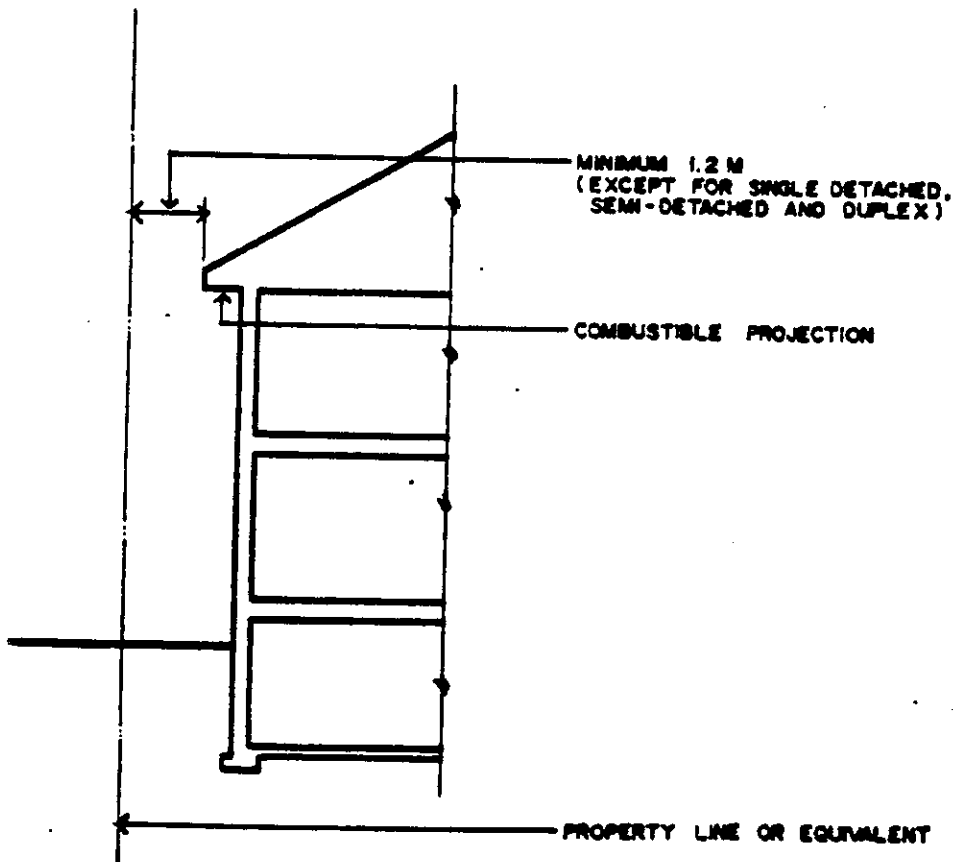
Note: Per 9.10.14. 3. where no fire department is available, limiting distances must be doubled when calculating permitted openings.

XI

Combustible Projections

Article 9.10.14.13. states that except for "Buildings" containing 1 or 2 "dwelling units" only, "combustible" projections on the exterior of a wall that are more than 1 m above ground level, such as balconies, platforms, canopies, eave projections and stairs, and that could expose an adjacent "building" to fire spread, shall not be permitted within 1.2 m of a property line or the centreline of a "public way", or within 2.4 m of a "combustible" projection on another "building" on the same property.

COMBUSTIBLE PROJECTIONS



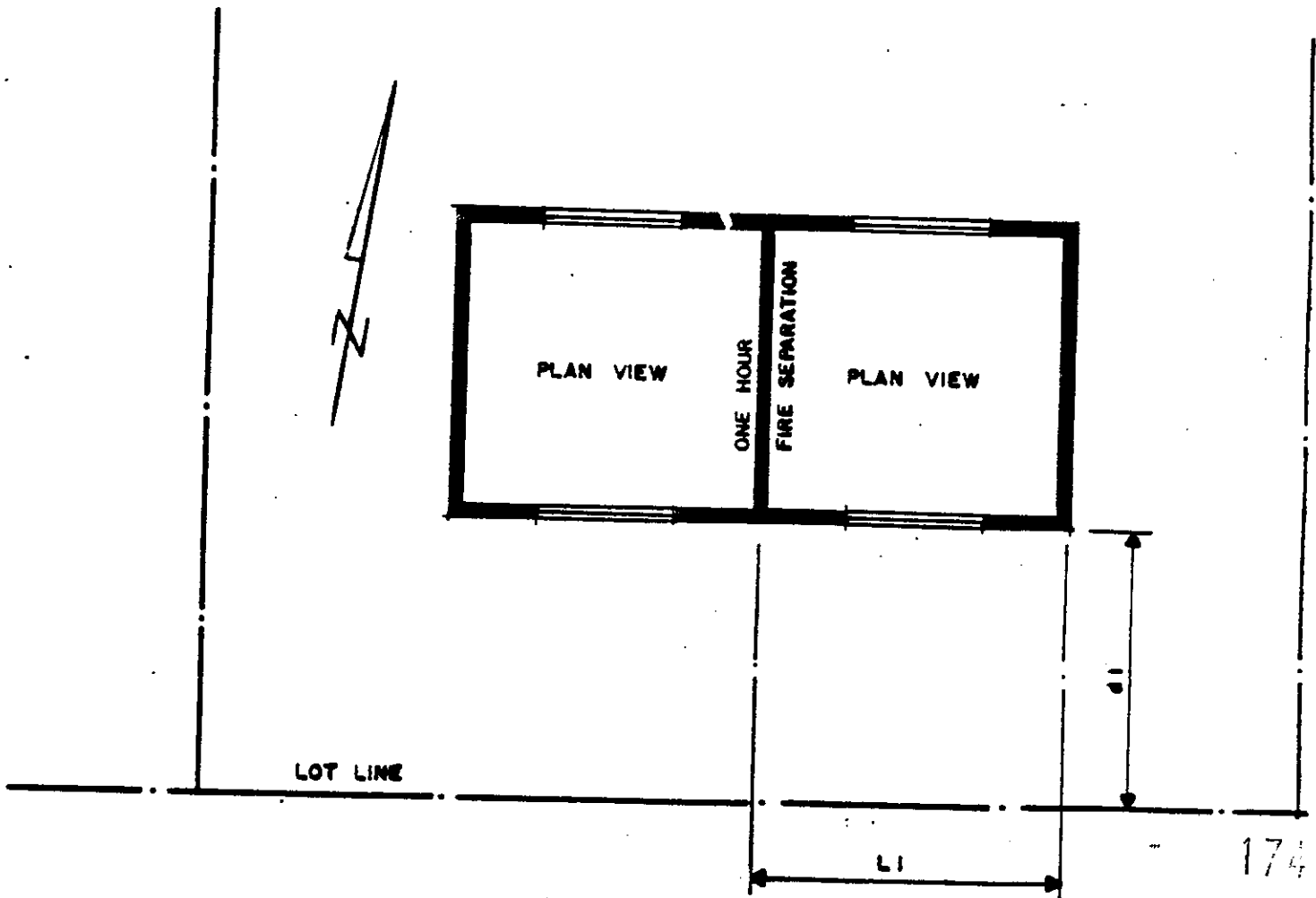
XII

Step by Step Example

Determine the permitted percentage of unprotected openings and the construction requirements for the south exterior wall.

Assume:

- . Length of each fire compartment = 10 m
- . Height of each fire compartment = 3 m
- . Classification = office building
- . Unsprinklered
- . Limiting distance = 4.0 m



(i) Permitted Percentage of Unprotected Openings

- STEP 1** Determine the limiting distance from the site plan that is applicable to the percentage of permitted unprotected openings. This limiting distance may be different from the limiting distance used to calculate the construction requirements for the same exterior wall.
- STEP 2** Determine the floor to ceiling height from the architectural sections and the fire compartment length from the architectural floor plans. Calculate the exposing building face and the L/H ratio.
- STEP 3** Determine the use (occupancy) of the building from the architectural plans.
- STEP 4** Use Table 3.2.3.A or Table 3.2.3.B. or Table 9.10.14.A. to determine the least restrictive percentage of unprotected openings for a given occupancy.
- STEP 5** If in accordance with 9.10.14.6. the building is sprinklered or where the unprotected openings are glazed with wired glass in steel frames or glass blocks as described in Articles 9.10.13.5. and 9.10.13.7., the percentage of unprotected openings that are permitted may be doubled.
- STEP 6** If both wired glass in fixed steel frames and a sprinklered system are used, the permitted percentage of unprotected openings may be increased by a factor of 4. This principle is documented in the National Research Council's Commentary on the National Building Code.

STEP 7 Confirm that the unprotected openings shown on the architectural floor plans and elevations are equal to or less than the permitted percentage of unprotected openings as calculated. Confirm the use of wired glass and/or sprinkler system.

(ii) CONSTRUCTION REQUIREMENTS:

Step 1 Determine the percentage of unprotected openings using the limiting distance to the closest part of the wall forming the exposing building face. (follow previous steps 2 to 7)

Step 2 Depending upon occupancy, apply the percentage of unprotected openings to Table 9.10.14.B. to determine cladding type, construction type, and the fire-resistance rating required for the exposing building face (exterior wall). Confirm that the architectural details for the exterior wall meet or exceed these requirements.

N.B. These procedures may not apply to buildings containing only dwelling units in which there is no dwelling unit above another dwelling unit (see Sentence 9.10.14.12.)

CALCULATIONS

- (1) Limiting Distance = _____
- (2) Area of exposing Building Face = _____
- (3) L/h = _____
- (4) Occupancy: _____
- (5) Percentage of Unprotected Openings:
- (a) TABLE 3.2.3.A. = _____
- (b) TABLE 9.10.14.A = _____
- Answer (least restrictive) = _____
- (6) Construction Requirements and Fire Resistance Rating
(TABLE 9.10.14.B.)
- (a) Construction Requirements:
- (i) type of construction _____
- (ii) type of cladding _____
- (b) Fire Resistance Rating _____

Reference Material

1. **The Building Code,
Ministry of Housing.**
2. **Part 9 of the Building Code,
Guide and Illustrations,
Ministry of Housing.**
3. **Spatial Separation and Exposure Protection,
CWC Datafile FP-12, Canada Wood Council.**
4. **Commentary on Part 3,
Draft commentary on NBC,
National Research Council.**



Interoffice Correspondence

April 21, 1992

TO: STAFF
FROM: B. A. FRANSEN
SUBJECT: PLUMBING PERMIT PROCEDURES

ISSUANCE OF PLUMBING PERMITS

1. Plumbing Permits are not to be issued where the project requires a Building Permit, until the building permit is issued.
2. Plumbing Permits are to be checked against the Building Permit to make certain that the number of units coincide exactly. The Plumbing Permit is not to be issued unless the issuer is satisfied that the number of units shown on the Plumbing Permit matches the number of units shown on the Building Permit.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs



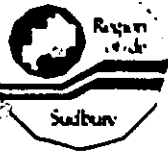
1992.04.22

↳ would you
please ensure that
each of our
employees have
a copy —

Thanks.

Bernie.

26



Regional Municipality of Sudbury

From G. Skirda, Regional Treasurer

Date 10 December 1991

For Action For Information

File No. _____

Planning Committee

Sudbury Regional Development Corporation

Engineering Committee

Finance Committee

Health and Social Services Committee

Council

Committee of the Whole

Other

Dec 13/91
BAF
DB
LM
These increases are effective Jan. 1/92

SUBJECT:

1992 USER FEES

cc Julie

M. Deacon

G. Skirda
G. Skirda, Regional Treasurer

BACKGROUND:

In accordance with Finance Committee Resolutions #89-68 and #87-58, user fees have been adjusted for 1992 by an inflationary factor of 4.4 percent.

The attached fee schedule outlines the present rates as well as the new rates that will come into effect as of January 1st, 1992.

Attach.

DEPARTMENT	1991 FEES	1992 FEES
-----	-----	-----
	\$	\$
BUILDING CONTROLS		

BUILDING PERMIT FEES		
-FOR THE FIRST \$1000 VALUE OF CONSTRUCTION OR FRACTION THEREOF	13.50	14.10
-PLUS, PER \$1000 VALUE OF CONSTRUCTION OR FRACTION THEREOF IN EXCESS OF \$1000	7.78	8.10
-DEMOLISH BUILDING	44.00	46.00
-AUTHORIZE OCCUPANCY BEFORE COMPLETION	44.00	46.00
-MINIMUM PROCESSING PERMIT FEE	44.00	46.00
PLUMBING PERMITS		
BASIC FEE	7.50	7.80
PLUS - FOR EACH FIXTURE	3.67	3.80
- FOR EACH STACK INCLUDING RAINWATER LEADERS	1.50	1.60
- FOR EACH FLOOR DRAIN	1.50	1.60
- FOR EACH BUILDING DRAIN	5.00	5.20
- FOR EACH HOT WATER TANK	1.50	1.60
- SEWAGE LIFT PUMP	5.00	5.20
CONVERSION FROM SEPTIC TO COMMUNAL SEWERS	8.00	8.50
SIGN PERMITS		
PORTABLE SIGN	18.00	19.00
PORTABLE SIGN USED FOR NON-COMMERCIAL PURPOSES ON RESIDENTIAL LOTS FOR A PERIOD NOT EXCEEDING 2 DAYS	N/C	
ANY OTHER SIGN		
-BASIC FEE	11.50	12.00
-PLUS FOR EACH SQUARE FOOT OR .09 SQUARE METRE OF SIGN AREA	0.30	0.35
LAWYERS LETTERS		
- SEARCH REQUEST FOR OUTSTANDING WORK ORDERS AND OCCUPANCY ONLY	29.00	30.00
- SEARCH REQUEST FOR ZONING, OUTSTANDING ORDERS, OCCUPANCY AND LOCATION COMPLIANCE	60.00	63.00
SITE PLAN CONTROL APPLICATION FEE	55.00	57.00
LICENCES (ANNUAL)		
BUILDING RENOVATOR - LEGISLATED	10.00	10.00
CHIMNEY REPAIRMAN - LEGISLATED	10.00	10.00
FUEL OIL DEALER - LEGISLATED	5.00	5.00
DRAINLAYER & SEPTIC TANK INSTALLER	45.00	47.00
ELECTRICAL CONTRACTOR	170.00	180.00
HEATING CONTRACTOR	170.00	180.00
INSULATION INSTALLER	17.00	18.00
MASTER ELECTRICIAN	35.00	37.00
MASTER PLUMBER	35.00	37.00
MASTER STEAM AND HOT WATER HEATING INSTALLER	35.00	37.00
MASTER WARM AIR HEATING INSTALLER	35.00	37.00
MILK VENDOR	240.00	250.00
PLUMBING CONTRACTOR	170.00	180.00
SIGN PAINTER	45.00	47.00
MOBILE SIGN DEALER	170.00	180.00

DEPARTMENT -----	1991 FEES ----- \$	1992 FEES ----- \$
PLANNING =====		
REZONING		
-RECLASSIFICATION TO INDUSTRIAL	630.00	660.00
-RECLASSIFICATION TO COMMERCIAL	630.00	660.00
-RECLASSIFICATION OR AMENDMENT TO MULTIPLE FAMILY/RESIDENTIAL	630.00	660.00
-AMENDMENT FROM "R1" SINGLE RESIDENTIAL TO "R2" DOUBLE RESIDENTIAL OR ANY TEMPORARY USE PROVISION	260.00	270.00
ALL OTHER ZONING BY-LAW AMENDMENTS	360.00	375.00
OFFICIAL PLAN AMENDMENTS	630.00	660.00
DRAFT SUBDIVISION PLAN APPROVALS		
-PER HECTARE	130.00	135.00
-MINIMUM	630.00	660.00
DRAFT CONDOMINIUM PLAN APPROVALS	630.00	660.00
PROPERTY STANDARDS ENQUIRIES	29.00	30.00
DEFERRAL FEE		
-50% OF APPLICATION FEE		
-MINIMUM	105.00	110.00
ENGINEERING =====		
ENGINEERING & CONSTRUCTION -----		
SUBDIVISION ADMIN FEE - PER LOT/BLOCK	55.00	57.00
LAWYERS' LETTERS	30.00	31.00
SEWER & WATER CONNECTION PERMITS	8.50	9.00
OPERATIONS -----		
ASPHALT REPAIRS (PER SQUARE FOOT)	3.60	3.80
CURB DEPRESSION (PER LINEAR FOOT)	19.30	20.00
CURB CUT CLOSING (PER LINEAR FOOT)	19.30	20.00
GUIDE POST REPLACEMENT (EACH)	115.00	120.00
SIDEWALK DEPRESSION (PER SQUARE FOOT)	5.10	5.30
SIDEWALK REPAIR (PER SQUARE FOOT)	5.10	5.30
WATER SERVICE (DISCONNECT)	130.00	135.00
WATER SERVICE THAWING (EACH)	300.00	315.00
ENTRANCE CULVERT INSTALLATION (PER LINEAR FOOT)	36.00	38.00
CULVERT RESETS	250.00	260.00

DEPARTMENT	1991 FEES	1992 FEES
-----	-----	-----
	\$	\$
COMMITTEE OF ADJUSTMENT		

MINOR VARIANCE	190.00	200.00
CONSENT	190.00	200.00
APPRAISAL FEES	130.00	135.00
DEFERRED APPLICATIONS	105.00	110.00
ADMINISTRATION		
=====		
TREASURY DEPARTMENT		

WATER CERTIFICATES	13.00	14.00
SOLICITOR'S DEPARTMENT		

LEGAL SERVICES - PER HOUR	165.00	170.00
APPRAISAL SERVICES - PER HOUR	130.00	135.00
PREPARATION OF AGREEMENTS		
-SITE PLAN CONTROL AGREEMENT	250.00	260.00
-CONSOLIDATION OF LOTS AGREEMENT	250.00	260.00
-REMOVAL OF BUILDING AGREEMENT	250.00	260.00
-POTABLE WATER AGREEMENT	250.00	260.00
-REDRAFTS OF THE AGREEMENTS	27.00	28.00
-SUBDIVISION AGREEMENT	1000.00	1050.00
-REDRAFTS OF SUDDIVISION AGREEMENTS	110.00	115.00
CLERK'S DEPARTMENT		

ANNUAL SUBSCRIPTIONS		
COUNCIL - AGENDA & REPORTS	80.00	84.00
AGENDA LISTING OR INDEX	31.00	32.00
MINUTES	80.00	84.00
PLANNING - AGENDA & REPORTS	130.00	135.00
AGENDA LISTING OR INDEX	31.00	32.00
MINUTES	80.00	84.00
ENGINEERING - AGENDA & REPORTS	130.00	135.00
AGENDA LISTING OR INDEX	31.00	32.00
MINUTES	52.00	54.00
FINANCE - AGENDA & REPORTS	80.00	84.00
AGENDA LISTING OR INDEX	26.00	27.00
MINUTES	31.00	32.00
H&SS - AGENDA & REPORTS	80.00	84.00
AGENDA LISTING OR INDEX	26.00	27.00
MINUTES	31.00	32.00
LAND DIVISION COMMITTEE & COMMITTEE OF		
ADJUSTMENT - AGENDA LISTING OR INDEX	26.00	27.00
MINUTES	280.00	290.00
PHOTOCOPIES		
BY-LAW / RESOLUTION / AGREEMENT		
- PER PAGE	0.50	0.55
CERTIFIED COPY	5.25	5.50
OTHER - PER PAGE	0.50	0.55



Interoffice Correspondence

September 10, 1991

TO: BUILDING CONTROLS STAFF

FROM: B. A. FRANSEN

**SUBJECT: PROCEDURE FOR DEALING WITH AREA MUNICIPALITY
DEVELOPMENT CHARGES**

*Development Charges have been implemented in Walden, Valley East, Nickel Centre and Sudbury.

PROCEDURES

1. All "Roads & Drainage" forms should have a blue form for "Development Charges" stapled to it. (See Attached)
2. Special "Development Charge" forms are to be stapled to left inside front portion of all folders. (See Attached)
3. A letter from the City Solicitor should be given to all applicants for Building Permits from the City of Sudbury at the time they apply.
4. Inspectors taking applications are to fill out one copy of the "Development Charge Certificate". They are to sign the certificate for "Chief Building Official" and do not fill in the date. A photocopy of the application form should be attached to the certificate. Place this certificate inside the folder.
5. When the Permit Application Reviewer sees that all conditions other than Development Charges have been met, he will date the certificate and place them in Stenographer's basket for all area municipalities except Sudbury. Once a day he will deliver Sudbury Certificates to Dan Chmara (City Treasurer). The application file should be initialed and dated by the Permit Application Reviewer so that we can see that forms have been delivered to City.

6. The Stenographer will FAX the Development Charges Certificate and attachment to the area municipalities and return copies to box for filing by Permit Application Reviewer.
7. When Permit Application Reviewer is filing Roads & Drainage forms, he will check to see if the area municipalities have commented on development charges. If they say "Not Applicable" or "Not Required" he will update the form stapled to inside of folder. (Noted as 2.)
8. When City Certificates are returned to Building Controls, the Receptionist will date stamp them and put them in the Permit Application Reviewer's basket for filing.
9. When Area Municipalities Certificates are returned by FAX, the Stenographer will put them in the Permit Application Reviewer's basket for filing.
10. The Permit Application Reviewer will discard unsigned file copy of Development Charges Certificate and replace with signed copy.
11. When all conditions and approvals have been complied with, the Permit Application Reviewer will transfer the file to computer basket for issuing.
12. The Building Controls Clerk will only issue permits when she has written confirmation in the file that Development Charge conditions are satisfied or exempt.

B. A. FRANSEN, P. ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/dd



Interoffice Correspondence

April 28, 1992

TO: INSPECTORS
FROM: B.A. FRANSEN
SUBJECT: LETTERS FROM ENGINEERS AND ARCHITECTS

It is important that the inspectors have an opportunity to review the comments prepared by the engineers and architects. These letters will usually advise on the progress of construction and, more important, advise on outstanding deficiencies.

The inspector is to review carefully each of the engineer's/architect's comments and adopt the following procedures:

1. If the engineer/architect has identified flaws or deficiencies in the building and these are described in the engineer's/architect's reports, the inspector is not to issue an occupancy permit until all of the flaws and deficiencies have been corrected to the extent that the building complies with section 2.4.3 (1) and (2) of the Ontario Building Code.
2. If there are major flaws or major deficiencies identified in the architect's/engineer's reports that affects the safety of the building, the inspector must issue an Order to Comply if it has been determined that the architect/engineer and/or the owner are not carrying out the repair work in a prompt and expeditious manner.
3. If the owner fails to obey the Order to Comply, a Stop Work Order is to be issued forthwith and the issue referred to the Chief Building Inspector and/or Director of Building Controls.
4. Copies of all orders to comply are to be forwarded to the Chief Building Inspector.

B. A. Fransen.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

cc: D. Noel de Tilly
R. O'Malley



Ministry of Housing
Ministère du Logement

Ontario Buildings Branch
777 Bay Street
Floor 2
Toronto, Ontario
M5G 2E5

Telephone: (416) 585-6666
Facsimile: (416) 585-4029

August 1991

TO ALL ONTARIO PLUMBING CODE HOLDERS

Enclosed are amendments to the 1984 Ontario Plumbing Code (Ontario Regulation 815/84). The amending Regulation (Ontario Regulation 401/91) is effective September 2, 1991.

The Code amendments are editorial and technical. Highlights of the amendments include Separation of Services in Subsection 1.4, Private Sewers and Watermains in Subsection 1.6 and Protection from Contamination in Article 6.2.9.

Any provision of Ontario Regulation 815/84 that is revoked by the Ontario Regulation 401/91 shall be deemed to continue in force with respect to construction for which a permit has been issued before September 2, 1991 and where construction has commenced within six months thereafter.

Sincerely,

Judith Robertson
Director (Acting)

78. Items C27 and C36 of Table 11.2.3.C. of the Regulation are revoked and the following substituted:

C27 3.3.1.4. (1); 3.3.4.2. (1)

30 min is acceptable to separate *public corridor* or *exits* in *buildings* not exceeding 6 *storeys* in *building height*, except that 45 min is required for *exits* in *buildings* exceeding 3 *storeys* in *building height*.

For *buildings* exceeding 6 *storeys* in *building height*, 30 min is acceptable between *suites* and between *suites* and *public corridors* where *smoke detectors* are installed in *corridors*, except 1 h is required in *exits*.

C36 Reserved

79. Subsection 12.1.1. of the Regulation is amended by adding the following:

12.1.1.2. This Code as it reads on the 29th day of September, 1991, shall be deemed to continue in force with respect to *construction*

- (a) for which a permit has been issued before the 30th day of September, 1991 or,
- (b) for which the working drawings, plans and specifications are substantially completed before the 30th day of September, 1991, and for which an application for a permit is made before the 1st day of January, 1992, under this Code as it read on the 29th day of September, 1991,

on condition that the *construction* is commenced within six months after the permit is issued.

80. This Regulation comes into force on the 30th day of September, 1991.

ONTARIO WATER RESOURCES ACT

O. Reg. 401/91.
Plumbing Code.
Made—July 9th, 1991.
Approved—July 18th, 1991.
Filed—July 19th, 1991.

REGULATION TO AMEND ONTARIO REGULATION 815/84 MADE UNDER THE ONTARIO WATER RESOURCES ACT

1. Article 1.1.2. of Ontario Regulation 815/84 is revoked and the following substituted:

1.1.2. Notwithstanding Article 1.1.1., this Regulation as it reads on the 1st day of September, 1991 continues in force in respect of any *plumbing* system,

- (a) for which a permit has been issued before the 2nd day of September, 1991; or
- (b) for which the working drawings, plans and specifications are substantially completed before the 2nd day of September, 1991 and for which an application for a permit under this Regulation as it reads on the 1st day of September, 1991 is made before the 2nd day of December, 1991,

on condition that the *plumbing* system is commenced within six months after the permit is issued.

2. Sentence 1.2.1. (6) of the Regulation, as remade by section 1 of Ontario Regulation 675/85, is revoked and the following substituted:

(6) In a row housing complex, no *plumbing* serving a dwelling unit shall be installed under another unit of the building unless the *pipng* is located in a tunnel, *pipe* corridor, common basement or parking garage, so that the *pipng* is *accessible* for servicing and maintenance throughout its length without encroachment on any private living space, but this Sentence does not prevent *plumbing* serving a unit located above another unit from being installed in or under the lower unit.

3.—(1) Article 1.3.2. of the Regulation is amended by adding the following paragraph:

21a. *Clear water waste* — means waste water containing no impurities or contaminants that are harmful to a person's health, plant or animal life or that impair the quality of the natural environment.

(2) Paragraph 27 of Article 1.3.2. is revoked.

(3) Paragraph 30 of Article 1.3.2. is revoked and the following substituted:

30. *Drainage piping* — means all *piping* that conveys *sanitary sewage* to a place of disposal, including the *building drain*, *building sewer*, *soil pipe*, *soil stack*, *waste stack* and *waste pipe* but not the main sewer or *piping* in a sewage treatment plant.

(4) Article 1.3.2. is further amended by adding the following paragraph:

63a. *Listed* — means equipment or materials included in a list published by a certification organization accredited by the Standards Council of Canada.

(5) Paragraph 74 of Article 1.3.2. is revoked and the following substituted:

74. *Plumbing* — includes,

(a) a system of connected *piping*, fittings, valves and appurtenances that receives water from a *private water supply* or from a public water main and conveys the water into and within a building or to a place of use on a property and where the source is on the property, that commences at the source of supply or at the property line including all tanks, pumps, heaters, coils, strainers and treatment devices designed to make physical, chemical or bacteriological changes in the water being conveyed;

(b) *fixtures* and *fixture trim*;

(c) *drainage piping*, including all *traps*, fittings and appurtenances;

(d) *storm drainage piping*; and

(e) a *venting system*, including all fittings and appurtenances,

but does not include,

(f) a system of *piping*,

(i) for space heating in which water is used as a medium to transfer heat,

(ii) in which liquids or vapours are circulated for the purpose of cooling or refrigeration,

(iii) through which air is passed for the purpose of controlling the temperature, humidity or motion of air passing through the system,

(iv) that consists of *piping* that conveys water primarily for the purpose of fire control,

(v) that conveys water for the purpose of providing water or nutrients to the soil,

(vi) that conveys water for the purpose of landscaping or for the care of animals, birds or fish,

(vii) that transmits force by means of water or by means of a liquid other than water in which water is used for cooling,

(viii) that conveys liquids for the purpose of melting ice or snow, or

(ix) that uses water in the conveyance of flammable gas or fuel; or

(g) a well, a well pump installed for the purpose of conveying water from a well, a pressure tank and pump if the tank and pump are combined as a unit, the *piping* between any well pump and the well, the *piping* between a well pump and a pressure tank that is installed separate from the pump and the connection of the *piping* to such pressure tank and, when there is no well pump, any *piping* connected to the well for a distance of three feet from the outside of the well.

(6) Paragraph 77 of Article 1.3.2., as amended by section 2 of Ontario Regulation 675/85, is revoked and the following substituted:

77. *Private sewer* — means a sewer other than a *building sewer* or a *building storm sewer* that,

(a) is not owned or operated by a municipality, the Ministry of the Environment or other public agency;

(b) receives drainage from more than one *building drain* either directly or through more than one *building*

sewer or receives drainage from more than one building storm drain either directly or through one or more building storm sewers, and connects to a main sewer; or

(c) serves as a place of disposal on the property,

but does not include,

(d) a sewer that carries only the sanitary waste or storm sewage from two semi-detached dwelling units;

(e) a sewer that carries only the sanitary waste or storm sewage from one main building that is of industrial, commercial or institutional occupancy and one ancillary building; or

(f) a sewer that carries only sanitary waste or storm sewage from a row housing complex having five or fewer single family residences.

(7) Article 1.3.2. is further amended by adding the following paragraph:

77a. *Private water supply* — means piping that serves as a source of supply on the property to more than one service pipe.

(8) Paragraph 84 of Article 1.3.2., as remade by section 2 of Ontario Regulation 675/85, is revoked and the following substituted:

84. *Sanitary sewage* — means waste of domestic origin which is human body waste, toilet or other bathroom wastes, wastes from showers, tubs, liquid or water borne culinary, sink or laundry waste.

(9) Paragraph 97 of Article 1.3.2. is revoked and the following substituted:

97. *Storm drainage piping* — means all the connected piping that conveys storm water to a place of disposal and includes the *building storm drain*, *building storm sewer*, *rain water leader* and *area drain* installed to collect surface water from the area of a building and the piping that drains water from a swimming pool or from water cooled air conditioning equipment but does not include,

(a) a main storm sewer;

(b) a *sub-surface drain*; or

(c) a *foundation drain*.

4. Article 1.3.3. of the Regulation is amended by adding the following paragraph:

110a. NFPA — National Fire Protection Association
Batterymarch Park
Quincy, Massachusetts
02269 USA

5.—(1) Paragraph 5 of Article 1.3.4. of the Regulation is revoked.

(2) Article 1.3.4. is amended by adding the following paragraph:

13a. kPa kilopascal(s)

6. Section 1 of the Regulation is amended by adding the following subsection:

Subsection 1.4. Separation of Services

1.4.1.(1) Except as permitted in Sentence (2), a buried water *service pipe* shall be separated from the *building drain*, *building sewer*, *building storm drain* and *building storm sewer* by not less than 8 ft. measured horizontally of undisturbed or compacted earth.

(2) The *service pipe* may be closer than 8 ft. or be placed in the same trench with the *building drain*, *building sewer*, *building storm drain* or *building storm sewer* if,

(a) (i) the bottom of the *service pipe* at all points is at least 20 in. above the top of the *building drain*, *building sewer*, *building storm drain* or *building storm sewer*, and

(ii) when in a common trench with the *building drain*, *building sewer* or *building storm sewer*, the *service pipe* is placed on a shelf at one side of the common trench;

(b) the *service pipe* is constructed of a single run of pipe with no joints or fittings between the street line or source of supply on the property and the inside face of the building; or

(c) the *building drain*, *building sewer*, *building storm drain* or *building storm sewer* is constructed of piping which meets the standard for pressure pipe and is pressure tested in accordance with Subsection 3.7. at 50 psi.

(3) The minimum separation distance between a buried *service pipe* and a sewage system subject to Part VII of the *Environmental Protection Act* shall be at least 50 ft.

(4) The minimum separation distance between a buried *service pipe* and a source of pollution, other than a sewage system subject to Part VII of the *Environmental Protection Act*, shall be at least 50 ft.

7. Subsection 1.6. of the Regulation is amended by adding the following Article:

1.6.4. *Private sewers* and *private water supply pipes* shall be installed according to the Guidelines for the Design of Sanitary Sewage Work Systems, Guidelines for the Design of Storm Sewers and Guidelines for the Design of Water Distribution Systems issued by the Environmental Approvals and Projects Engineering Branch of the Ministry of the Environment, July, 1985.

8. Sentences 2.4.2. (2) and (3) of the Regulation are revoked and the following substituted:

(2) A 1/4 bend of 4 in. *trade size* or less that has a centre-line radius that is less than the size of the *pipe* shall not be used to join two soil or *waste pipes*.

(3) A 1/4 bend of 4 in. *trade size* or less shall not be used on a *horizontal building drain* except to change direction from *horizontal* to *vertical*.

9.—(1) Sentence 2.5.8. (1) of the Regulation, as amended by section 8 of Ontario Regulation 675/85 and section 1 of Ontario Regulation 588/88, is revoked and the following substituted:

(1) Plastic *pipe*, fittings and solvent cement used underground outside a building or under a building in a *drainage system* shall be certified to,

- (a) CSA B181.1-M85 ABS Drain, Waste and Vent (ABS-DWV Pipe and Pipe Fittings);
- (b) CSA B181.2-M85 PVC Drain, Waste and Vent Pipe and Pipe Fittings;
- (c) CSA B181.3-1971 Polyolefin Laboratory Drainage Systems;
- (d) CSA B182.1-M1987 Plastic Drain and Sewer Pipe and Pipe Fittings;
- (e) CSA B182.2-M1987 PVC Sewer Pipe and Fittings (PSM) Type;
- (f) CSA B182.4-M90 Large Diameter, Ribbed PVC Sewer Pipe and Fittings;
- (g) CSA B137.2-M89 PVC Injection Moulded Gasketed Fittings for Pressure Applications; or
- (h) CSA B137.3-M1981 Rigid PVC Pipe for Pressure Applications.

(2) Sentence 2.5.8. (2) of the Regulation is revoked and the following substituted:

(2) Plastic *pipe* used as described in Sentence (1) shall have a stiffness equal or greater than 320 kPa (46 psi).

10. Article 3.3.1. of the Regulation is revoked and the following substituted:

3.3.1.(1) Except as provided in Sentences (2) to (4), no water *distributing pipe*, *drainage pipe* or fittings shall be drilled, tapped or swaged.

(2) A water *distributing pipe* may be drilled or tapped to provide for a mechanically extracted T in copper tubing of Type L or K provided that all branch connections shall be notched and dimpled to limit depth of insertion and conform to the inner contour of the main.

(3) A copper water *distributing pipe* of 1 in. *trade size* or larger may be mechanically swaged to permit the forming of other *pipe* of equal size.

(4) A *drainage pipe* or fittings may be drilled or tapped,

- (a) to provide for the connection of a *trap seal* primer line;
 - (b) to connect a device designed to dispense germicidal or odour control chemicals or *trap seal* water to a *floor drain* downstream of a *vacuum breaker* or *flush valve* in a flush tube connected to a *sanitary unit*;
 - (c) to provide a hole for a branch connection to a *drainage pipe*, where the branch connection is made with a saddle hub as permitted by Article 2.9.5. and where the hole is drilled to provide a smooth clean hole of the required size and orientation; or
 - (d) to provide for the connection of *pipe* or fittings to metal or rigid plastic *pipe* and fittings where the *pipe* or fittings are thick enough to be threaded or are bossed for tapping.
- (5) No *pipe* adaption shall be made by the use of a bushing that leaves a square edge or shoulder on the inside of the *pipe* or fitting.

11. Sentence 4.2.1. (4) of the Regulation is revoked and the following substituted:

(4) *Fixtures or appliances, other than floor drains, that discharge only clear water waste may be connected to a storm drainage piping.*

12. Article 4.2.2. of the Regulation is amended by adding the following Sentences:

(3) *No foundation drain or sub-surface drain shall connect to a sanitary drainage piping.*

(4) *Notwithstanding Sentence (3), where storm drainage piping is not available or soil conditions prevent drainage to a culvert or drywell, a foundation drain or sub-surface drain may connect to a sanitary drainage piping in accordance with Sentence 4.5.3.(2).*

13. Subsection 4.4. of the Regulation is amended by adding the following Articles:

4.4.2. *Where a fixture that discharges sewage that includes grease is located in a public kitchen or restaurant or in an institution, a grease interceptor shall be installed.*

4.4.3. *Where the discharge from a fixture may contain oil or gasoline, an oil interceptor shall be installed.*

4.4.4. *Where a fixture discharges sand, grit or similar materials, an interceptor designed for the purpose of trapping such discharges shall be installed.*

4.4.5. *Every interceptor shall have sufficient capacity to perform the service for which it is provided.*

14. Clause 4.5.1. (8) (c) of the Regulation, as remade by section 23 of Ontario Regulation 675/85, is revoked and the following substituted:

(c) *the fixture drain from the trap connects to a building drain; and*

15. Sentences 4.5.2. (5) and (6) of the Regulation are revoked.

16. Paragraphs 4 and 5 of Article 5.2.1. of the Regulation are revoked and the following substituted:

4. *Where two water closets are installed they are connected at the same level to a vertical part of the stack.*

5. *Where there are two water closets in a stack vented group and they are installed as described in paragraph 4, the remaining fixtures of the group are connected directly and independently to the stack above the centre line of the connection of the two water closets and the uppermost fixture is connected to the vertical portion of the stack.*

17. Sentence 6.1.2. (1) of the Regulation is revoked and the following substituted:

6.1.2.(1) *All water piping shall be installed so that the system can be drained or blown out with air and outlets for this purpose shall be provided.*

18. Article 6.2.9. of the Regulation, as made by section 46 of Ontario Regulation 675/85 and amended by section 1 of Ontario Regulation 588/88, is revoked and the following substituted:

6.2.9. *Where a potable water supply serves a fire protection system, the fire protection systems shall be isolated from the potable water supply in the following manner:*

1. *A wet sprinkler fire protection system containing water only shall be provided with a listed alarm check valve installed in conformance with NFPA 13.*
2. *A wet standpipe fire protection system containing water only shall be provided with a resilient seated check valve.*
3. *A wet sprinkler or wet standpipe fire protection system containing anti-freeze or chemicals shall be provided with a reduced pressure principle backflow preventer.*
4. *A dry sprinkler or dry standpipe fire protection system does not require isolation.*
5. *A water storage tank fire protection system shall be provided with a backflow preventer on the water supply to tank.*
6. *A fire hydrant fire protection system does not require isolation.*

19. Clause 7.2.1. (1) (g) of the Regulation, as remade by section 48 of Ontario Regulation 675/85 and amended by section 1 of Ontario Regulation 588/88, is revoked and the following substituted:

(g) *PVC certified to CSA Standards CAN3-B181.2-M85, B137.3-M1981, B182.1-M87 or B182.2-M1983 that shall have a stiffness equal or greater than 320 kPa (46 psi); or*

20. Clauses 7.2.1. (2) (e) and (f) of the Regulation, as remade by section 48 of Ontario Regulation 675/85 and amended by section 1 of Ontario Regulation 588/88, are revoked and the following substituted:

- (e) ABS certified to CSA Standards CAN3-B181.1-M85 or B182.1-M1983 that shall have a stiffness equal to or greater than 320 kPa (46 psi);
- (f) PVC certified to,
 - (i) CSA Standard CAN3-B181.2-M85,
 - (ii) CSA Standard CAN3-B182.1-M87 that shall have a *pipe* stiffness equal to or greater than 320 kPa (46 psi),
 - (iii) CSA Standard CAN B182.2-M1983 that shall have a *pipe* stiffness equal to or greater than 320 kPa (46 psi),
 - (iv) CSA Standard B182.3-M1983 that shall have a *pipe* stiffness equal to or greater than 320 kPa (46 psi),
 - (v) CSA Standard B182.4-M90 that shall have a *pipe* stiffness equal to or greater than 320 kPa (46 psi), or
 - (vi) CSA Standard B137.3-M1981;

21. Clause 7.2.1. (3) (d), as remade by section 48 of Ontario Regulation 675/85 and amended by section 1 of Ontario Regulation 588/88, and clause 7.2.1. (3) (e), as amended by section 48 of Ontario Regulation 675/85, of the Regulation are revoked and the following substituted:

- (d) ABS certified to CSA Standards CAN3-B181.1-M85 or B182.1-M1983 that shall have a *pipe* stiffness equal to or greater than 320 kPa (46 psi);
- (e) PVC certified to,
 - (i) CSA Standard CAN3-B181.2-M85,
 - (ii) CSA Standard CAN3-B182.1-M87 that shall have a *pipe* stiffness equal to or greater than 320 kPa (46 psi),
 - (iii) CSA Standard CAN B182.2-M1983 that shall have stiffness equal to or greater than 320 kPa (46 psi),
 - (iv) CSA Standard B182.3-M1983 that shall have a stiffness equal to or greater than 320 kPa (46 psi),
 - (v) CSA Standard B182.4-M90 that shall have a *pipe* stiffness equal to or greater than 320 kPa (46 psi), or
 - (vi) CSA Standard B137.3-M1981;

22. This Regulation comes into force on the 2nd day of September, 1991.

DAVE COOKE
Minister of Housing

Dated at Toronto, this 9th day of July, 1991.

31/91

PENSION BENEFITS ACT, 1987

O. Reg. 402/91.
General.
Made—July 18th, 1991.
Filed—July 19th, 1991.

REGULATION TO AMEND
ONTARIO REGULATION 708/87
MADE UNDER THE
PENSION BENEFITS ACT, 1987

1. Form 2 of Ontario Regulation 708/87 is revoked and the following substituted:



Interoffice Correspondence

May 13, 1992

TO: INSPECTORS
R. O'MALLEY

FROM: B. A. FRANSEN

SUBJECT: SIDE YARD SET BACKS

This is to serve as a reminder that the Building Inspectors are obligated to determine adequacy of the set backs at the time that the footing inspection is being performed.

Several memos have been prepared on this same subject, and procedures defined for the Inspectors so that we are assured that the buildings are being located in their proper position on the lot. If the Inspector is not satisfied with the site plan/plot plan submitted, then the owner/constructor should be made aware immediately of the information required.

Should you have any questions whatsoever in connection with this matter, please discuss with Roger O'Malley or myself at your earliest convenience.

B. A. Fransen

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

cc: B. Gutjahr
D. Noel de Tilly

P. MOYROW

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Interoffice Correspondence

May 13, 1992

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: TIES FOR MASONRY VENEER
CODE SECTIONS 9.20.9.5 AND 9.20.16.1
PROCEDURES/ONTARIO BUILDING CODE

Would you please review the current requirements for masonry veneer, as outlined in the Ontario Building Code.

I was recently made aware that there are significant Code changes with respect to ties for masonry veneer that has resulted in brick walls being dismantled because the ties were improper in the Toronto area. We were shown the new ties, and it is evident that the revised requirements necessitate substantially larger ties to support the masonry veneer.

Please review the appropriate sections and take whatever action is necessary to ensure that the constructors are using the proper materials.

B. A. Fransen

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attach.

cc: R. O'Malley



9.20.9.5. Ties for Masonry Veneer

(1) Masonry veneer 70 mm (2¾ in) or more in thickness and resting on a bearing support shall be tied to masonry back-up or to wood framing members with not less than 0.76 mm (0.030 in) thick, 22 mm (¾ in) wide corrosion-resistant straps spaced in accordance with Table 9.20.9.A. and shaped to provide a key with the mortar.

Table 9.20.9.A.
Forming Part of Sentence 9.20.9.5.(1)

Veneer Tie Spacing	
Maximum Vertical Spacing, mm (in)	Maximum Horizontal Spacing, mm (in)
400 (15¾")	800 (31½")
500 (19¾")	600 (23¾")
600 (23¾")	400 (15¾")
Column 1	2

(2) Masonry veneer individually supported by masonry or wood-frame back-up shall be secured to the back-up in conformance with Subsection 4.3.2.

9.20.9.6. Reinforcing for Glass Block

(1) Glass block shall have horizontal joint reinforcement of 2 corrosion-resistant bars of not less than 3.76 mm (5/32 in) or expanded metal strips not less than 75 mm (3 in) spaced at vertical intervals not exceeding 600 mm (23¾ in) for units 190 mm (7½ in) or less in height and in every horizontal joint for units higher than 190 mm (7½ in).

(2) Reinforcement required in Sentence (1) shall be lapped not less than 150 mm (5¾ in).

9.20.10. Lateral Support

9.20.10.1. Lateral Support Required

(1) Masonry walls shall be supported at right angles to the wall by floor or roof construction or by intersecting masonry walls or buttresses.

(2) The maximum spacing of supports in Sentence (1) shall be

- (a) 20 times the wall thickness for all loadbearing walls and exterior non-loadbearing walls, and
- (b) 36 times the wall thickness for interior non-loadbearing walls.

(3) In applying Sentence (2), the thickness of cavity walls shall be taken as two-thirds of the sum of the thicknesses of the wythes.

(4) Floor and roof constructions providing required lateral support for walls as required in Sentence (1) shall be constructed to transfer lateral loads to walls or buttresses approximately at right angles to the laterally supported walls.

9.20.11. Anchorage of Roofs, Floors and Intersecting Walls

9.20.11.1. Anchorage of Floor or Roof Assemblies

(1) Where required to provide lateral support (see Subsection 9.20.10.), masonry walls shall be anchored to each floor or roof assembly at maximum intervals of 2 m (6 ft 7 in), except that anchorage of floor joists not more than 1 m (3 ft 3 in) above grade may be omitted.

(2) Anchors required in Sentence (1) shall be corrosion-resistant and be not less than the equivalent of 40 mm (1½ in) by 4.76 mm (3/16 in) thick steel straps.

(3) Anchors required in Sentence (1) shall be shaped to provide a mechanical key with the masonry and shall be securely fastened to the horizontal support to develop the full strength of the tie.

(4) When joists are parallel to the wall, anchors required in Sentence (1) shall extend across not less than 3 joists.

9.20.11.2. Anchorage of Intersecting Walls

(1) Where required to provide lateral support, intersecting walls shall be bonded or tied together.

(2) Fifty per cent of the adjacent masonry units in the intersecting wall referred to in Sentence (1) shall be embedded in the laterally supported wall, or corrosion-resistant metal ties equivalent to

9.20.13.12. Caulking at Door and Window Frames. The junction of door and window frames with masonry shall be caulked in conformance with Subsection 9.27.4.

9.20.13.13. Drips Beneath Window Sills. Except for wall openings located less than 150 mm (5 7/8 in) above ground level, where a concealed flashing is not installed beneath window and door sills, such sills shall be provided with an outward slope and a drip located not less than 25 mm (1 in) from the wall surface.

9.20.13.14. Solid Bearing Surface for Pliable Flashings. The horizontal portion of any concealed pliable type flashings shall be installed upon a continuous solid bearing surface to prevent sags and water accumulation on the flashing.

9.20.14. Protection

9.20.14.1. Laying Temperature of Mortar and Masonry

(1) Mortar and masonry shall be maintained at a temperature not below 5°C (41°F) during installation and for not less than 48 h after installation.

(2) No frozen material shall be used in the mix.

9.20.14.2. Protection from Weather. The top surface of uncompleted masonry exposed to the weather shall be completely covered with a waterproofing material when construction is not in progress.

9.20.15. Reinforcement for Earthquake Resistance

9.20.15.1. Amount of Reinforcement. Where reinforcement is required in this Section, masonry walls shall be reinforced horizontally and vertically with steel having a total cross-sectional area of not less than 0.002 times the cross-sectional area of the wall, so that not less than one-third of the

required steel area is installed either horizontally or vertically and the remainder in the other direction.

9.20.15.2. Installation Standard. Where reinforcement for masonry is required in this Section, it shall be installed in conformance with the requirements for reinforced masonry as contained in CAN3-A371, "Masonry Construction for Buildings".

9.20.16. Corrosion Resistance

9.20.16.1. Carbon steel connectors required to be corrosion-resistant shall be galvanized to at least the minimum standards in Table 9.20.16.A.

Table 9.20.16.A.
Forming Part of Article 9.20.16.1.

Minimum Requirements for Galvanizing		
Connector Material	ASTM Standard	Coating Class
Wire ties and continuous reinforcing (hot-dipped galvanizing)	A153	Class B2 458 g/m ² (0.094 lb/ft ²)
Hardware and bolts	A153	See A113
Strip, plate, bars, and rolled sections (not less than 3.18 mm (0.125 in) thick)	A123	619 g/m ² (0.126 lb/ft ²)
Sheet (less than 3.18 mm (0.125 in) thick)	A123	305 g/m ² (0.062 lb/ft ²) on material 0.76 mm (0.030 in) thick ⁽¹⁾
Column 1	2	3

Notes to Table 9.20.16.A.:

(1) ASTM A123 does not apply to metal less than 3.18 mm (0.125 in) thick. Galvanizing coatings may be interpolated for thicknesses between 3.18 mm (0.125 in) and 0.76 mm (0.030 in).



Interoffice Correspondence

May 21, 1992

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: BUILDING SECURITY

The Ontario Building Code currently includes provisions for a building's security. These are, for the most part, included in Section 9.6.6 and Section 9.7.6, under the heading, "Resistance to Forced Entry".

The preamble to the Ontario Building Code reads as follows:

"A new subsection in Part 9 addresses the issue of forced entry into residential units and the problem of security of doors and windows. A new standard is referenced for window design."

Examples of these changes include:

- length and size of screws for fastening;
- door view for each door leading into the house;
- solid jam blocking to prevent spreading;
- provision of hinge pins which cannot be removed when door is closed, and
- provision of dead bolt lock for added lock protection.

The Inspectors are to ensure that these items are included in the building prior to permitting occupancy.

Your assistance and co-operation in ensuring that the homes built in the Sudbury Region have these features is appreciated.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

cc: D. Noel De Tilly
R. O'Malley

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Interoffice Correspondence

April 15, 1992

TO: INSPECTORS
D. NOEL DE TILLY
R. O'MALLEY
PLANS EXAMINERS

FROM: B. A. FRANSEN

SUBJECT: ACCEPTANCE OF DRAWINGS WITH
BUILDING PERMIT APPLICATIONS

Would you please review the plans that are submitted along with a building permit application to ensure that the notation "unfinished space" is not included on the drawings.

We expect the applicant to be able to describe the use of the space, even if it is in general terms, so that a determination can be made as to whether the zoning by-law and building by-law requirements are being met.

I trust that you will act on this promptly.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs



Interoffice Correspondence

June 1, 1992

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: CORROSION RESISTANCE
 BRICK TIES

As a result of the determination of the requirements for corrosion resistance/brick ties, you will, no doubt, be requested to explain where the requirements are listed in the Code.

This memo is intended to assist you with your response.

1. Article 9.20.9.5.(1) requires strap type brick veneer ties to be:
 - (a) 0.76 mm thick and,
 - (b) corrosion resistant.
2. Article 9.20.16.1 requires any steel connector (strap or rod type), which must be corrosion resistant, to be galvanized as per Table 9.20.16.A.

Table 9.20.16.A. reads as follows:

<u>Connector Material</u>	<u>ASTM Standard</u>	<u>Coating Class</u>
Sheet (less than 3.18 mm (0.125 in) thick)	A123	305 g/square metre (0.062 lb/square foot) on material 0.76 mm (0.030 in) thick

3. It is agreed that ASTM Standard A123 does not apply to metal less than 3.18 mm (0.125 in) thick, however, there is still the requirement that the ties for masonry veneer have a coating which is 305 g/square metre, which is galvanized.



COMMENT

Admittedly, this Section of the Code should be written in a different format to make it more clear, however, the content of our position on hot dipped galvanized brick veneer ties has been verified with a member of the committee that was formed to establish the requirements.

I trust that this will provide you with some assistance in dealing with this matter.

B. A. Fransen.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

cc: R. O'Malley
Plans Examiners
P.J. Morrow



Alfio Mazzuch

Interoffice Correspondence

July 8, 1992

TO: All Inspectors
FROM: B. A. Fransen
SUBJECT: **RESTAURANT
PATIOS**

BACKGROUND:

From time to time applications are received for the construction of a patio deck which serves as an extension to a restaurant and is made available to costumers during the summer months. There is a question with respect to the zoning implication of these structures and this memo is intended to advise on the zoning application.

PROCEDURES:

Where an application is received for a patio that serves as an extension to a restaurant use, the area of the patio is to be included with the calculation for PUBLIC FLOOR AREA (P.F.A.), which reads as follows:

That floor area of a restaurant used to accommodate patrons and shall include all dining areas, lounge areas, takeout waiting areas, banquet halls and any such room used either regularly or occasionally to accommodate the public. This area shall not include washrooms, hallways, kitchen or other areas used and/or required for the storage and/or preparation of food and/or beverages (80-46).

Furthermore, the applicant will be required to provide additional parking spaces which accommodate the public based on the provisions of the zoning bylaw. *One parking space for every 3.70 metre square of public floor area (P.F.A.).*



DISCUSSION:

It is understood that the City of Sudbury zoning bylaw is currently under review and will include a provision for patios that are used in conjunction with a restaurant. The above listed procedures and/or requirements will be in effect until such time as the zoning bylaw is amended.

It is understood that the patios are not to occupy any required parking space unless the applicant/owner has made provision to relocate the parking space in an alternate acceptable area.



B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS
BAF/lb

TROUBLE-SHOOTING MASONRY PROBLEMS

— By GARTH W. MILLER —

Polydent Stains

Some people live in buildings where the face of their masonry home is streaked with vertical ingrained grim stains. Unfortunately, it tends to be a fairly regular occurrence on many residential and office projects.

I was taken to one such project where we photographed the walls with their dirty stains, directionally vertical, starting immediately below window sills and also at the end of the window sills.

The reason for this unsightly appearance on the masonry wall was self apparent, and after reviewing the photographs, there were logical reasons and logical corrective measures possible.

LOGICAL REASONS

It all starts as the rain hits the window glass and frames.

Any dust, dirt or grime on the glass and window frame will be washed down its face onto the window sill.

The sill area will be a further source of contaminates where the moisture will wash it along with the rest of the grime.

Correctly installed sills with

drips will allow the moisture to flow over the sill onto the drip and drop free of the wall below.

The sad part of the story starts here.

Observation and photographic backup indicated that the stains occurred where the sill butt joints were not tight-fitting or not kept in line by proper supports.

Other stains occurred immediately below the sill line where the sill piece has been damaged which allowed directional runoff over the sill.

Another source of staining was at the end of the window sills where the moisture had spilled over the end of the sill unit directly onto the masonry wall.

The staining on the masonry did not have to occur.

In this building, and others like it, poorly installed sills were the culprit.

PROBLEM SUMMARY

(1) Sill butt joints were not properly installed or supported.

(2) The ends of the sills were not raised or did not have an up-standing lip to direct the flow of

moisture over the front of the sill.

(3) Damaged and bent sills created directional flow of the rain water onto the masonry below.

(4) Some sills without drips allowed the free-flow of moisture onto the masonry directly below the window.

LOGICAL CORRECTIVE MEASURES

Provision of the correct type of sill containing a drip mould with correctly butted or keyed sill joints, all moisture accumulated on the sill will then flow over the front of the sill, onto the drip moulding and into space in front of the wall face.

The ends of any sill must be upturned, have end caps or a raised portion to allow any moisture upon the sill to be directed to its front edge preventing possible sill moustache stains.

Sills should have a definite slope away from the building, flat sills tend to slope toward the building through building movement causing other serious concerns such as moisture saturation or penetration.



Alfio Mazzeo

Interoffice Correspondence

July 14, 1992

TO: INSPECTORS
FROM: B. A. FRANSEN
**SUBJECT: PART 9 - RESIDENTIAL BUILDINGS
PERMISSION TO OCCUPY**

It has come to my attention that the inspectors are issuing permits to occupy when one or more of the primary inspections have not been performed.

The inspectors are reminded that they are not to issue a permit to occupy, of any kind, if it is established that one or more of the primary inspections have not been performed, or;

there are any outstanding deficiencies or building code requirements.

The inspectors are to exercise extreme caution when determining if a building is ready to be occupied.

Should you have any questions whatsoever in connection with this issue, please discuss it with me at your earliest possible convenience.

Very truly yours

B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS
BAF/lb

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Interoffice Correspondence

June 25, 1992

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: ORDERS TO COMPLY - PROCEDURES REMINDER

This is to serve as a reminder that a copy of each Order to Comply is to be deposited with the Chief Building Inspector. This procedure was adopted to provide some assurance that the work was done within the time frame allotted.

A brief review of our files reveals that the Inspectors will need to give this procedure their consideration.

If you have any questions whatsoever, please discuss with Roger or myself at your earliest possible convenience.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs





Interoffice Correspondence

July 2, 1992

TO: INSPECTORS

FROM: B. A. FRANSEN

SUBJECT: ORDER OF THE CHIEF BUILDING OFFICIAL TO STOP WORK
MANDATORY THAT SUCH AN ORDER BE POSTED ON THE
SITE - PROCEDURES

I would ask each of you to review the content of the attached document so that you are familiar with the procedures connected with the issuance of Stop Work Orders.

It is of utmost importance that the Chief Building Official's Order be POSTED ON THE SITE OF THE CONSTRUCTION.

Furthermore, the Order is to be served upon those persons that the Chief Building Official specifies, and they should include the owner of the property, the contractor and his workmen, and the mortgagees. These persons can be served personally or by registered mail.

It is extremely important that the Inspectors understand these procedures so that the proper steps are taken when orders are issued.

Should you have any questions whatsoever, please discuss with me at your earliest possible convenience.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attach

cc: Donna Noel de Tilly
R. O'Malley
Permit Control Clerks



BERNIE:
PLEASE READ
BAYAN

(b) Order of the Chief Building Official to Stop Work

Section 8(5) of the Act provides that where an order of the inspector made under Section 8(2) is not complied with, the chief building official may order that all or any part of the construction or demolition cease. The previous comments made in regard to an inspector's order relating to the issuance, form and contents of the order would be equally applicable to a chief official's order under Section 8(5). However, in regard to service of this order, the section makes it mandatory that such an order be posted on the site of the construction. Proof of such posting for future court purposes can be provided by way of an affidavit or statutory declaration containing as an exhibit therein a photograph showing the order posted on the site. The order is to be served upon those persons that the chief building official specifies and they should include the owner of the property, the contractor and his workmen and the mortgagees. These parties can be served personally or by registered mail. The above comments concerning appeal from the inspector's order under Section 8(2) to the county court judge and to the Building Code.

Commission are also applicable to a chief building official's order under Section 8(5).

* even assuming that a prosecution arose out of such an incident, it shouldn't succeed because the lack of specific information would act as a bar to a defendant's ability to prepare an adequate defence, a denial of natural justice if you will.

- this shortcoming, coupled with the fact that the Inspector had failed to execute an Order in accordance with the Act, can only lead to a loss of credibility before the Court, and, the whole affair contradicts our contention and intention, which is, to achieve conformance through meaningful information exchange and mutual co-operation.
- the only solution then is to issue the appropriate Order as prescribed by the Act, and in those cases where we have issued an Order that doesn't meet the requirements of the Act for service and information, withdraw the Order.

8. - (4) Affixing Copy of an Order (Order to Comply)

The Act is clear that OTC's + SWO's are treated differently SWO's must be posted

"Where an inspector gives an order under this section, he may affix a copy thereof to the site of the construction or demolition, and no person, except an inspector or the chief official, shall remove such copy unless authorized by the inspector or the chief official."

- this is simply the extension of discretionary authority whereby the Inspector can respond as he sees fit, using situational circumstances as guide, to post or not to post an Order.
- however, if there is no one on the site whom the Inspector feels is in authority or he cannot identify as the "contravener", he must post a copy of an Order.
- the Inspector should bear in mind that, once posted, an Order can only be legally removed by the Inspector, or the Chief Official, or someone authorized by either one of them.

Commentary:

- while the posting is a discretionary action, there are several reasons why it should be viewed as mandatory towards the success of the whole exercise of code compliance, for example
 - it is another (added) way of informing responsible persons of a project violation
 - in the event a mailed notice should go astray, the posted Order will serve to inform of the existence of a violation
 - where the issuance of a Stop Work Order subsequently becomes necessary, the posting action re-inforces the position that every effort to provide information had been taken
- the Courts look for this degree of effort by the Inspector, and when it is evident, his credibility is seen by them as being positive - likewise we can expect that the Courts would have difficulty in accepting a claim from a defendant that he had failed to receive a mailed notice and had also failed to take note (visually) of a posted copy.

* 8. - (5) Stop Work Order

"Where an order of an inspector made under this section is not complied with within the time specified therein, or where no time is specified, within a

reasonable time in the circumstances, the chief official may order that all or any part of the construction or demolition respecting the building cease and such order shall be served on such persons affected thereby as the chief official specifies and a copy thereof shall be posted on the site of the construction or demolition and no person except an inspector or the chief official shall remove such copy unless authorized by an inspector or the chief official."

- type of Order required

- Stop Work Order

- person authorized to Issue

the Chief Official

- form of service required

the Act does require specific forms of service i.e., registered mail or personal service (see Sec. 17 of the Act) and also by posting (mandatory).

- pre-conditions for issuing/not issuing

that an Order to Comply issued by the Inspector has not been complied with, within the time specified by the Order.

the Criterion is applied - see Chapter I

Commentary:

- the chief official has discretionary authority to decide to issue, or to not issue based on his evaluation of the Inspector's request for the Stop Work Order.
- that decision will be based on the application of the criterion to the existing circumstances as they are known to the Inspector, plus upon the fact that an Order to Comply that has been properly authored and issued as prescribed by the Act has not been complied with and that we can show proof of proper service and posting.
- if the decision is to issue the Order, the Chief Official may order all or any part of the work to cease, but he must in reality order one or the other!
- the posting of a copy of the Order on the site is mandatory, and again, removal of the Order by anyone other than the Inspector, Chief Official or someone authorized by either one of them, is an offence under the Act.
- note that the Chief Official must specify upon whom this Order must be served - this could include the owner, contravener and those persons performing work on the site: e.g. contractors, sub-contractors, etc.
- as with the Order To Comply, specificity and sufficient information are important requisites of the Act, and failure by the Inspector and/or the Chief Official to observe them can lead to the same set of problems of enforceability as discussed in the Commentary, under 8. - (3) - idem, in this Chapter.



Interoffice Correspondence

June 25, 1992

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: BUILDING SECURITY

The current edition of the Ontario Building Code includes a provision for building security. Section 9.6.6, **Resistance to Forced Entry** and 9.7.6, **Resistance to Forced Entry**, includes the requirements, listed as follows:

Section 9.6.6.1	Glazing in Doors and Sidelights
Section 9.6.6.5(1)	Door Fasteners
Section 9.6.6.7	Huge Doors
Section 9.6.6.10	Resistance of Doors to Forced Entry
Section 9.7.6.1	Resistance of Windows to Forced Entry.

You will want to familiarize yourself with these sections and remind the builders of the need to include the components in their buildings.

If it is determined that the components are not being installed, then the appropriate Orders are to be issued and proper action taken.

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

cc: R. O'Malley
M. Shlemkevich





Interoffice Correspondence

June 25, 1992

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: LIGHTING FIXTURES IN INSULATED CEILINGS

Would you please review the attached reports from Leslie Stoch, Electrical Inspection Superintendent, Ontario Hydro, and Walter E. Burningham, Building Code Advisor, Ministry of Housing.

You will note that Mr. Burningham states as follows:

"Recessed fixtures are not to be located in an insulated ceiling unless the fixture is designed for such installation.

Cellulose insulation and recessed fixtures which operate in excess of 80 [degrees celsius] are not compatible."

This issue gives cause for concern, since there is a mixed jurisdiction that has not been resolved.

So that we are functioning to provide the safest building possible, the Inspectors will want to advise the builders, owners and designers of the requirements whenever the opportunity arises.

If it is evident that the recessed fixtures are installed so that they are in contact with the cellulose insulation, they should not be accepted.

I trust that you will make certain that these requirements are maintained to Code standard.

B.A. FRANSEN, P. ENG.
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attach

cc: B. McNicholl

214



Ontario Hydro



Bldg. Controls

30-15-12

Bernie Franssen
MAY 20 1992

700 University Avenue, Toronto, Ontario M5G 1X6

May 21, 1992

Gar

Memorandum to: Electrical Inspection Managers

LIGHTING FIXTURES IN INSULATED CEILINGS

RECEIVED
Please distribute the attached memorandum to your inspection offices.

JUN 8 1992
BUILDING
Leslie Groch
Electrical Inspection Superintendent

* For your info
Brian McNeill

Copy for each Inspn office - your files & mine.
Thanks.
Gar

(2 memos attached with paper clip)



700 University Avenue, Toronto, Ontario M5G 1X6

May 19, 1992

30-13-92

Memorandum to: Electrical Inspectors

LIGHTING FIXTURES IN INSULATED CEILINGS

The Ministry of Housing, Buildings Branch has advised us that cellulose fibre insulation, which has a maximum temperature limitation of 80C, must not be subjected to higher temperatures. Recessed lighting fixtures approved for insulated ceilings have a maximum temperature of 90C, and therefore, must not be in contact with cellulose fibre insulation. The Ministry's letter of explanation is attached.

When this combination of materials is found in the field, the contractor should be advised that the installation will be unacceptable to the Building Inspectors.

Various methods may be used to correct installations after the fact. One simple solution is to blanket the fixtures with fibre glass insulation so as to avoid contact with cellulose fibre.

Les.

Leslie Stoch
Electrical Inspection Superintendent



Ontario

Ministry
of
Housing

Ministère
du
Logement

Ontario Buildings Branch
777 Bay Street, 2nd Floor
Toronto, Ontario
M5G 2E5
Tel: 585-6666
Fax: 585-4029

May 12, 1992

Ontario Hydro
Electrical Inspection Department
700 University Avenue
Toronto, Ontario
M5G 1X6

Attention: Roy Hicks, P.Eng.
Chief Electrical Inspector

Re: Installation of Recessed Fixtures in Ceilings
Insulated with Cellulose Fibre Insulation

Dear Roy,

Your letter addressed to Ali Arlani has been routed to me for a reply.

There is presently an article in the Building Code which deals with the installation of recessed fixtures which states that they are not to be located in an insulated ceiling unless the fixture is designed for such installation. If the fixture temperature could exceed the maximum allowable temperature limitation of the insulation the building official could order the fixture removed. In the next edition of our Building Action Newsletter we will advise the Building Officials of the need to bring to the attention of builders, installers and others involved in construction, the incompatibility of cellulose insulation and recessed fixtures which operate in excess of 80°C.

However just as the installation of insulation is not the responsibility of the electrical inspector, the installation of the recessed fixtures is not the responsibility of the building inspector and both inspectors should advise their respective clients of the problem.

In answer to your specific questions I would comment as follows:

1. I do not know the specific reason for the 80°C limitation, however I would expect it is related to the flammability of the material.
2. The standard for insulation of this type in residential buildings regulated by Part 9 is CGSB 51-GP-60M.

.../2


Mr. Hicks

- 2 -

3. When cellulose fibre insulation is used in Part 9 residential buildings it must conform to the CGSB Standard. This standard restricts the temperature to 80°C.

I trust this is satisfactory, however if further information or clarification is needed please do not hesitate to contact me.

Yours truly,



Walter E. Burningham
Building Code Advisor

cc: Ali Arlani

Ontario Hydro's Basement Insulation Pilot Project

Ontario Hydro has embarked upon its latest energy conservation pilot program. The Village of Rockwood just east of Guelph is the site of the latest pilot program. In order to encourage homeowners to install full height basement

insulation in the electrically heated

Ontario Hydro incentive of \$500 per household. Work is being done by the Corporation of Eramosa Building

Thom Roberts, Director of Rockwood Energy Services, Ontario Hydro, to offer a simple and effective package to reduce their energy consumption by insulating their basement.

In order to qualify for the incentive the cost of the insulation must be at least 50% of the total cost of the Hydro service.

The insulation must be installed through the entire basement.

As part of the effort, Thom Roberts has gone out of his way to assist in this pilot program. During the process, the homeowner will apply for a permit. Once the permit is issued, Thom will visit the house prior to the work commencing. This will allow for an evaluation of the existing conditions so as to prevent any possible compounding of existing problems. If everything is in order, the homeowner can proceed with insulating the

basement. Once the job is complete, the homeowner will contact Thom, who will verify that the job is complete and that it meets the requirements of the Ontario Building Code and Ontario Hydro incentive guidelines. Once this is done, Hydro will issue the homeowner their \$500 incentive.

The program has a six month window of opportunity running from December 1, 1991 to May 31, 1992. The work can



Unsafe Buildings

The legislative history of s. 1(m) of the Building Code Act (the "BCA" provides an indication of what the Legislature intended to mean by "unsafe".

When the BCA was introduced for First Reading in 1974 as Bill 62, s. 1(m) read as follows:

"unsafe", when used in respect of a building, means inadequate or faulty for the purposes for which it is or is likely to be used or otherwise unsafe.

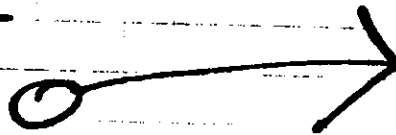
The word "structurally" was added to the definition by way of amendment at Second Reading of Bill 62. Hansard (November 28, 1974 at page 5811) records that the Minister of Consumer and Commercial Relations explained this amendment as follows:

We added the word "structurally" in [section 1(m)]... to modify "inadequate or faulty"

In 1978, the definition of "unsafe" contained in s. 1(m) of the BCA was amended to its present working, which reads as follows:

INSPECTORS

o please review the definition of unsafe, contained herein.



addressing the interests of the profession. Thanks for letting us be part of it.

Judith Robertson
Director (Acting)
Ontario Buildings Branch

219 Cont'd on page 6

"unsafe" when used in respect of a building means,

- (i) structurally inadequate or faulty for the purposes for which it is used, or
- (ii) in a condition that could be hazardous to persons in the normal use of the building.

The Legislature thus appears to have intended that a building would be "unsafe" for the purposes of the BCA only if its condition meets a certain threshold of potential risk to health or safety resulting from

- (i) a structural element which is either inadequate or faulty in relation to the building's use, or
- (ii) some other hazard to which persons will be exposed in the normal use of the building.

The foregoing is not intended to be taken as legal advice. Reader's requiring a legal opinion on this matter should consult their solicitor"

ff Levitt
Legal Counsel
Ontario Buildings Branch

The OBOA Journal
welcomes
contributions
and submissions
from the members of
the building industry.
Send your Comments
or contributions by
mail or fax.

Chapter News

Christmas is over and a New year has arrived! What's New for 1992???

- We are dedicating a section of the Newsletter to profile a Chapter and its Chairman. Who will be next??? Coming your way soon, in the next issue of the Newsletter.
- Questions, Answers and Comments - Look for this in future issues. Send in your questions or unique comments regarding the Building Code and we will research and try to establish a consensus of opinion which will reflect the O.B.O.A. and Buildings Branch views.
- I would like to develop a Directory which will contain contact people, telephone numbers, guest speakers from the private sector, government sector and form our Association and/or other Associations, hot topics and general information on conducting Chapter meetings and Chapter business.
- The Land of Lakes Chapter has approved a motion to support the Private Members Bill to adopt the O.B.O.A. Act and has sent a letter, supporting said motion, to Mr. Fred Wilson, MPP. This Chapter is asking for support from other Chapters to approve similar motions and to write to their MPP showing their support; I will forward to each Chapter Chairman a copy of the Land of Lakes motion and letter.
- Remember send in those ballots!!!
- I would like to take this opportunity to wish all Chapters a Season's Greetings and all the best in the New Year!!

Brian Horsman
Chapter Chairman Update

Comments

Continuing Education

I recently attended a discipline hearing for a professional association as a witness who had filed a complaint regarding the professional manner in which one of its members had performed his service. The complaint was two fold.

Firstly, evidence submitted by an independent consultant working for a potential purchaser of a condominium unit indicated that the design did not comply with the current standards referenced by the Building Code.

Secondly, the building as constructed did not comply with the permit drawings and the owner's consultant had already verified that it did.

After bringing the concerns to the attention of the owner's consultant, he agreed there were some construction deficiencies but was silent on any design deficiencies.

My municipality hired its own consultant to review the drawings and found that in fact there were design deficiencies. A complaint was then filed with the professional association.

Their investigation found that the member, soon approaching retirement age, had failed to keep himself current with the changing standards and regulations. Instead of attending courses and seminars for upgrading, he had continued to do business "the old way". It didn't take long for technology and design standards to surpass his understanding.

This issue is a legitimate concern for many professional associations including our own. Senior members often lose the

Branch Facts

Misunderstanding Regarding Graded Lumber Requirements for Farm Buildings



Chung Li

misinterpretation of its intent and to ensure that the code requirements are enforced uniformly across Ontario. The Ontario Federation of Agriculture, Canadian Farm Builders' Association, A.M.O. and O.B.O.A. were among the organizations consulted on this matter.

The OBC does not prohibit the use of lumber from private wood lots or small sawmills. It only requires that such lumber, when intended for structural purposes, be graded by qualified graders. The material used for siding farm buildings, for example, need not be graded.

It appears the real issue is not the grading of lumber so much as the inconvenience and extra costs incurred in having it graded.

For small buildings, Article 9.3.0.01 of the 1990 OBC provides building officials with the discretion to accept construction on the basis of past performances or tests.

Therefore, regarding the use of ungraded lumber, a building official may accept it if in his/her judgement it has performed satisfactorily under identical conditions in the past.

Through cooperative efforts among the operators of private wood lots, small sawmills and local municipal building officials, the issue of ungraded lumber can be resolved satisfactorily. If more information is required please contact Mr. Chung Li, P.Eng., at the Branch at (416) 585-6453.

Ontario Building Code Interpretation Committee

In October 1991, the Ministry of Housing announced the establishment of The Ontario Building Code Interpretation Committee (OBCIC) to assist in resolving major Building Code interpretation problems.

The Committee will be chaired by the Manager of the Code Development and Advisory Services of the Ontario Buildings Branch. It will consist of representatives from the Ontario Building Officials Association, Toronto Area Chief Building Officials Committee, Ontario New Home Warranty Program and the Ontario Buildings Branch.

The OBCIC will meet monthly starting in May 1992 to discuss major Code items. Findings of this Committee will be published and distributed through such organizations as the Ontario Building Officials Association, Ontario New Warranty Program, Ontario Home Builders Association, Ontario Association of Architects as well as the Ministry of Housing.

HELP WANTED

The Simcoe County Chapter has given birth to a library committee. The members are responsible to acquiring books, documents, approvals, brochures, leaflets and any items that are code related to assist a building official in performing his

up-to-date
ation.

any member of
embers of the
and our Associate
ry: Please help by
for any duplicate
publications that
greatly appreciated.
of: Chris Spanis,
rie, ON L4M 1P4.

INSPECTORS.

• PLEASE REVIEW.

• THE LEGISLATION

W.R.T. GRADING LIMITED
IS QUITE CLEAR.

221

current events



ONTARIO
MASONRY
INDUSTRY
PROMOTION
FUND

RECEIVED

JUL 7 1992

BUILDING CONTROLS
DEPARTMENT

Inspectors

July 1992

Enclosed

- A) 4C-9207 Flashing & Sealing for your edification.
- B) 4M (Forum) sheet regarding masonry restoration.
- C) Reply form if you wish to receive a copy of our "Annual Masonry Magazine".

ONTARIO PROVINCIAL CONFERENCE OF THE INTERNATIONAL UNION OF BRICKLAYERS AND ALLIED CRAFTSMEN
ONTARIO MASONRY CONTRACTORS ASSOCIATION

222

4**C**

**CAPSULE
COMMENTS
ABOUT
COMMON
CONCERNS**



**ONTARIO
MASONRY
INDUSTRY
PROMOTION
FUND**

THIS FORESEE - IS ONE OF A SERIES

9207

FLASHING AND STREAKING

There is a difference what is the difference?

It depends upon whom you are, and what your interests are in life ... as a Lay Person, a Masonry Tradesperson or a Masonry Material Manufacturer.

FLASHING

- a) To a Masonry Tradesperson, it suggests a material placed within or on a wall in such a way as to exclude moisture penetration or direct any moisture to the building exterior.
- b) To a Brick Manufacturer it is the name given to the introduction of excess gas during the kiln firing process to create a variegated colour effect on the brick unit face.
- c) To a Lay Person, the word vividly indicates the showing of what is available at any particular moment in time.

STREAKING

- a) To a Lay Person, it conjures up dashing from point A to point B with much to do about nothing in particular.
- b) To a Brick Manufacturer, a phenomenon that may occur when the production change over is made from one colour clay body to another. The units produced during this period are normally culled out.
- c) To a Masonry Tradesperson, it usually means that there are vertical stains showing on a masonry wall. The stains are usually caused from moisture run off or spillage onto a masonry wall. The stains can be caused from poorly installed or damaged caps, capings, window sills or where other products come in contact with masonry products.

To control FLASHING AND STREAKING masonry wall concerns 4C-8411 Maintenance of Masonry Walls says it all.

4M (FORUM)

A PUBLIC DISCUSSION ON QUESTIONS OF COMMON INTEREST

9207

MASONRY RESTORATION

In the recent past and in the foreseeable future, restoration will be a very important part of the masonry industry activities.

The Masonry Contacts Booklet issued yearly by the Ontario Masonry Contractors Association lists the members, across the Province that have been, that are and that will be interested in being involved in Restoration and Repair work. (The 1992 edition shows the listing on page 13).

Members of the Association will have constructed the Masonry building or a similar structure, will know the necessary retrofit requirements and action required to eliminate the problems or concerns that will have caused the necessity to restore a project. The building will then be restored to its original condition and the causes of the present damage eliminated.

It may also be of interest that a restoration segment is included for individuals attending the 42 week apprenticeship course at the Ontario Masonry Training Centre.

Masonry Restoration Recommendations

- Use a member of the Ontario Masonry Contractors Association
- Review relative 4C Sheets
 - 4C-8401 - Repointing of Mortar
 - 4C-8411 - Maintenance of Masonry Walls
- Discuss the project concerns or problems with the Director of Promotion.

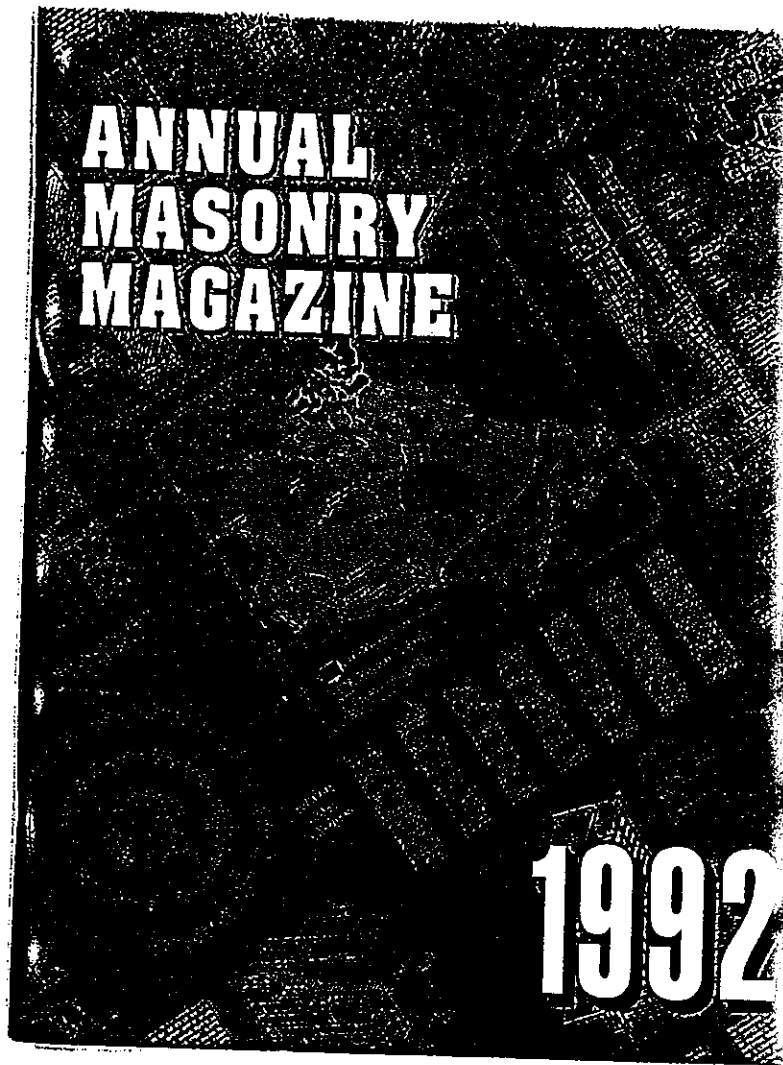
YOURS FOR THE ASKING
MASONRY

ARTICLES AND STORIES

TO GIVE YOU THE UP TO DATE
SITUATION OF WHAT IS GOING
ON IN THE MASONRY INDUSTRY

EDITORIAL INDEX

Any Drip Can Prevent Growing Moss
Canadian Concrete Masonry Producers Association Executive and
Board of Directors
Canadian Masonry Contractors Association
Canadian Masonry Contractors Association Outstanding
Achievement Award
Canadian Masonry Contractors Association Executive and
Board of Directors
Canadian Masonry Contractors Association
Clay Brick Association of Canada
Codes and Standards Update
Masonry Council of Canada
Masonry Guide Specification, Masonry Institute of British Columbia
Masonry Promotion - Canada
New CMC Building, The
Ontario Masonry Training Centre, The
Provincial listing of 1992 Annual Masonry Magazine Advertisers
Quality Assurance in the '90's
Sheartruss Cavity Wall System
Vulnerability Assessment



REQUEST FORM

I wish to receive a copy of the magazine (if available) or a copy of the appropriate articles.

This will be your mailing label

NAME	_____
ORGANIZATION	_____
ADDRESS	_____
CITY	_____ (P.C.) _____

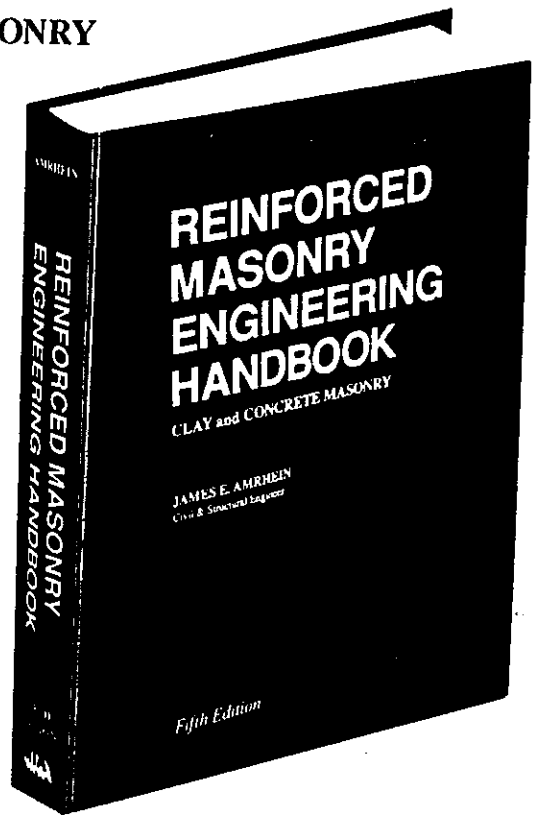
Return request form to:

DIRECTOR OF PROMOTION
ONTARIO MASONRY CONTRACTORS ASSOCIATION
360 SUPERIOR BOULEVARD, MISSISSAUGA, ONTARIO L5T 2N7
TELEPHONE: (416) 564-6622 FAX: (416) 564-5744

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CLAY and CONCRETE MASONRY



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1991 Masonry Codes and Specifications

With 1992 Supplements

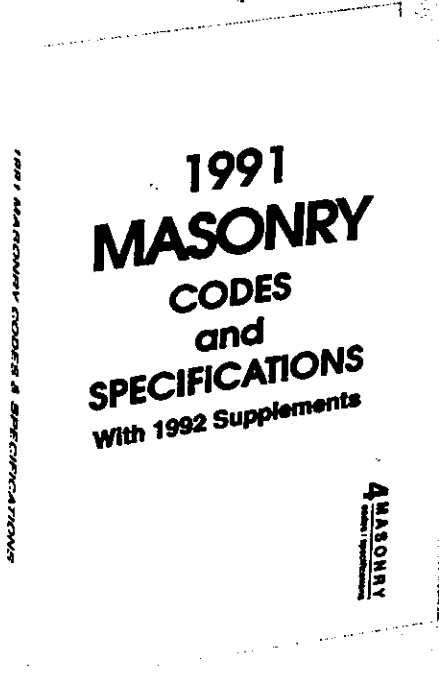
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A 560-page reference manual on masonry codes and specifications, which includes information for:

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Design professionals, construction inspectors, and contractors will find this book useful.

By James E. Amrhein, S.E.
and
Phillip J. Samblanet, P.E.



Masonry Information From:

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- 1991 Uniform Building Code Standards
- Evaluation Report Numbers for ICBO Approved Products
- Building Codes for the State of California
- Standard Specifications for Public Works Construction
- 17 Current ASTM Standards
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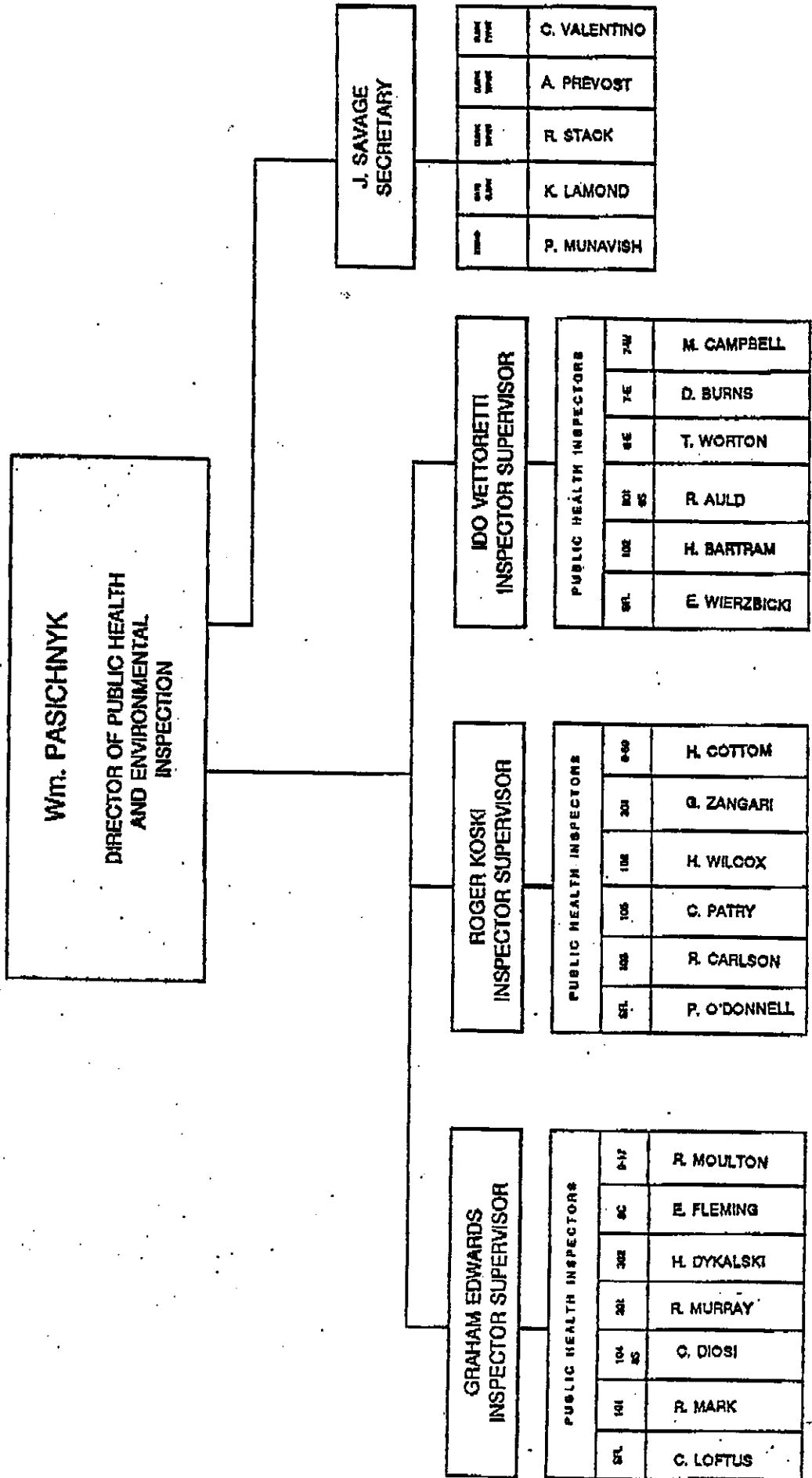
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\$200 & up	5%	20%	

PUBLIC HEALTH AND ENVIRONMENTAL INSPECTION DEPARTMENT
1992

AREA	NUMBERS	MUNICIPALITY/TOWNSHIPS	INSPECTOR
1	101	NORTHWEST SECTION CITY OF SUDBURY	R. MARK
	102	NORTHEAST SECTION CITY OF SUDBURY	H. BARTRAM
	103	EAST CENTRAL SECTION CITY OF SUDBURY	R. CARLSON
	104	SOUTH CENTRAL SECTION CITY OF SUDBURY	C. DIOSI
	105	WEST SECTION CITY OF SUDBURY	C. PATRY
	106	SOUTH SECTION CITY OF SUDBURY	H. WILCOX
2	201	RAYSIDE BALFOUR	R. MURRAY
	202	ONAPING FALLS	C. PATRY
3	301	VALLEY EAST	G. ZANGARI
	302	CAPREOL	H. DYKALSKI
4	401	NICKEL CENTRE	H. DYKALSKI
5	501	WALDEN	R. AULD
6S	610	UNORGANIZED TOWNSHIPS	R. AULD
	601	NAIRN	
	602	BALDWIN	
	604	WEBBWOOD	
6E	600	UNORGANIZED TOWNSHIPS	T. WORTON
	603	ESPANOLA	
	605	MASSEY	
	606	UNITED TWP. OF THE SPANISH RIVER	
7E	700	UNORGANIZED TOWNSHIPS (PART VIII)	R. AULD D. BURNS
	700	UNORGANIZED TOWNSHIPS (PUBLIC HEALTH) (MCGREGOR BAY & BAY OF ISLANDS)	
	701	LITTLE CURRENT	
	702	HOWLAND	
	703	ASSIGINACK	
	704	TEHKUMMAH	
	705	SANDFIELD	
7W	710	UNORGANIZED TOWNSHIPS	M. CAMPBELL
	711	GORE BAY	
	712	CARNARVON	
	713	BILLINGS & ALLAN EAST	
	714	GORDON & ALLAN WEST	
	715	BURPEE	
	716	BARRIE & COCKBURN ISLANDS	
8S	810	UNORGANIZED TOWNSHIP (CARTIER/GOGAMA) (NOBLE & JACK TWP. IS GOGAMA)	C. DIOSI
8C	800	UNORGANIZED TOWNSHIPS (FOLEYET/SULTAN/RANSEY)	E. FLEMING
	801	CHAPLEAU	
9-17	900	UNORGANIZED TOWNSHIPS	R. MOULTON
	901	HAGAR	
	902	RATTER DUNNET (WARREN)	
	903	CASIMIR, APPLEBY & JENNINGS (ST. CHARLES)	
	912	RUTHERFORD & GEORGE ISLAND (KILLARNEY)	
9-69	910	UNORGANIZED TOWNSHIPS	H. COTTOM
	911	COSBY, MASON & MARTLAND (NOELVILLE)	
	914	FALCONER, LATCHFORD & BERTRAM	

PUBLIC HEALTH & ENVIRONMENTAL INSPECTION DEPARTMENT

ORGANIZATIONAL CHART





Interoffice Correspondence

July 16, 1992

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: ACCEPTANCE OF PLOT PLANS

I am attaching for your information a copy of a Plot Plan that was accepted for the purpose of acquiring a building permit.

You will note that the site plan lacks sufficient information.

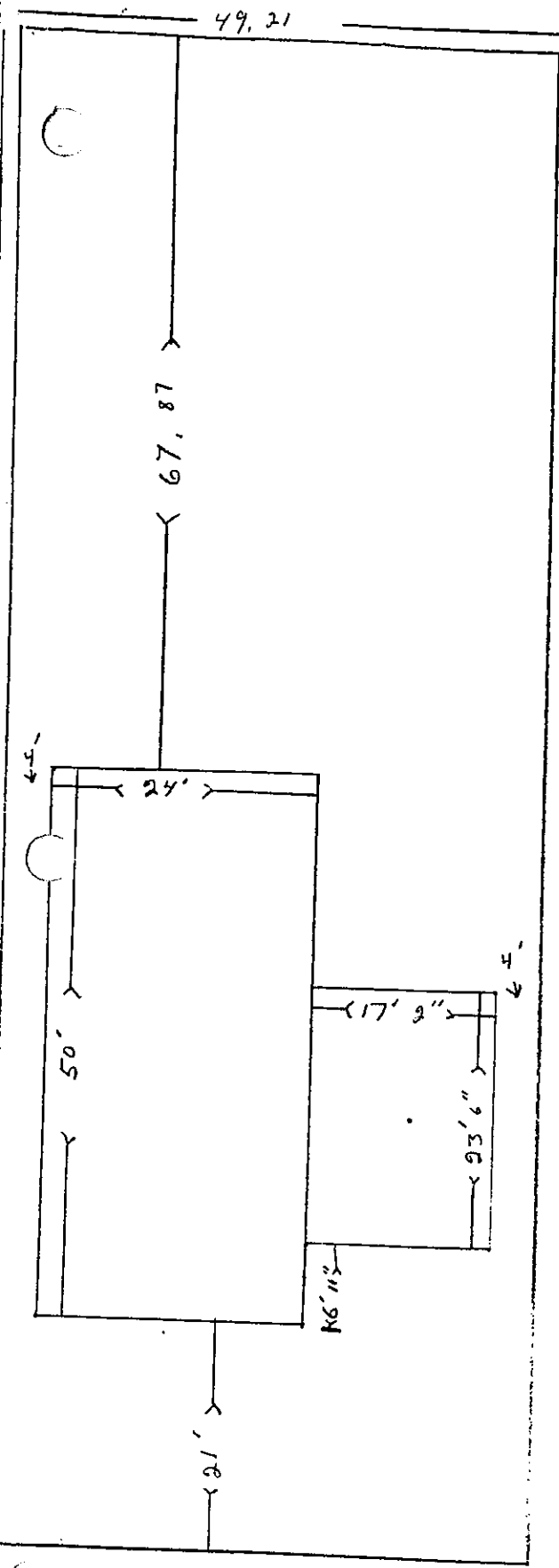
These kinds of submissions are not acceptable and it is left to the inspector to make absolutely certain that information is submitted in an acceptable and appropriate form. Should you have any questions whatsoever with respect to this matter please contact me at your earliest possible convenience.

Very truly yours

B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS
BAF/lb

230

Attachment



LOT 24 MARQUIS CRT

REVISED

PLOT PLAN

SCALE 1/16" = 1'

→ DRAINAGE

○ FINISH ELEV

LOT #24 MARQUIS COURT

PLAN M-1113

LOT 24 CONCESSION 2

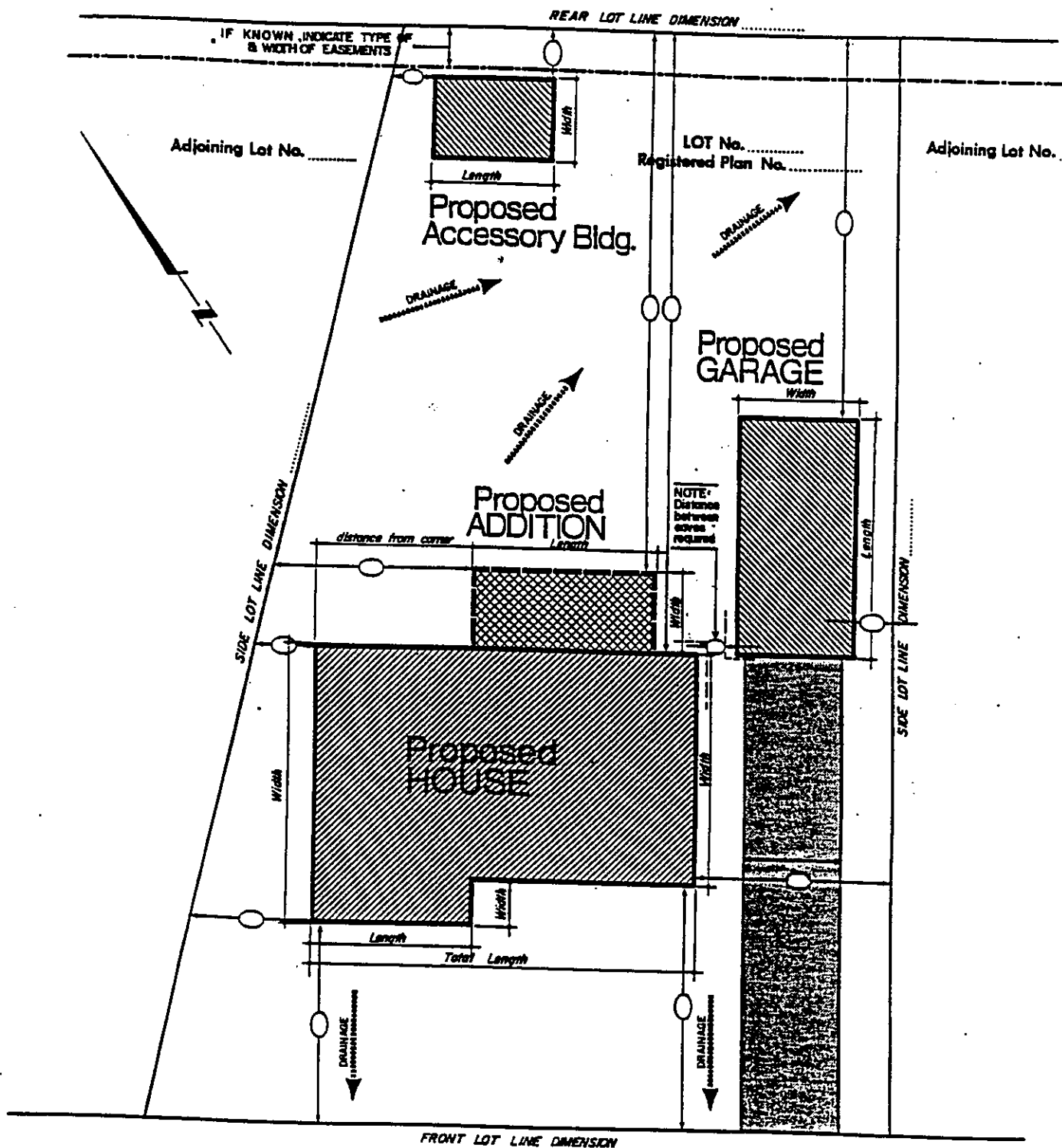
TOWNSHIP OF HANMER

TOWN OF VALLEY EAST

Driveway?
Drainage?

DAN FOUCAULT CONST. LTD.
1070 Hwy. 69 N., Box 518,
Hanmer, Ont. N0M 1Y0

Proper setbacks
North Arrow.
Description of Buildings.



STREET NAME

Name of Community Located in:

Scale

232

LEGEND

- REQUIRED DIMENSION from Building to Lot Line
- REQUIRED EXTERIOR DIMENSION of BUILDING
- EASEMENT LINE
- DRAINAGE
- North direction

**Typical PLOT PLA
required for a
Building Permit**



Interoffice Correspondence

July 20, 1992

TO: INSPECTORS

FROM: B. A. FRANSEN

SUBJECT: PART 9 - RESIDENTIAL BUILDINGS PERMISSION TO OCCUPY

Several questions have arisen as a result of my memo to you dated July 14, 1992, wherein we have described the procedures to be adapted with respect to the issuance of Occupancy Permits.

The memo read:

The inspectors are reminded that they are not to issue a Permit to Occupy, of any kind, if it is established that one or more of the primary inspections has not been performed, or;

there are any outstanding deficiencies or building code requirements.

In some instances we will accept a report from a professional engineer or architect that provides an unqualified statement that the works described in the report have been installed in compliance with the provisions of the Ontario Building Code. We will not accept reports that are incomplete and/or filled with qualifications that leave doubt as to the quality of the work.

If, a project file indicates that one or more of the required inspections was not conducted it is not possible for the Region to issue an Occupancy Permit without it knowing the status of all of the required inspections.

The constructor/owner will have to do whatever is necessary to establish the suitability of the buildings components. This may result in the weeping tiles having to be exposed if the weeping tile inspection was not performed. Also, it could result in drywall having to be removed in order to expose the insulation, if the insulation was not inspected.

Once, it has been determined that the file can be placed in safekeeping and all of the inspections have not been performed, then, it is a requirement that a notation be added to the project file indicating that the required inspections were not performed and a brief reason why this occurred.

COMMENTS

We must adopt these procedures so that when Diane Kyrzakos, Project Research Clerk, responds to lawyers wanting information about a project, she can identify any concerns that we may have had about the project during its being constructed.

Should you have any questions whatsoever in connection with this matter, please contact me at your earliest possible convenience.

Very truly yours



B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS
BAF/lb

Branch Facts

Misunderstanding Regarding Graded Lumber Requirements for Farm Buildings



Chung Li

The Ontario Buildings Branch has received numerous inquiries regarding the Building Code requirements for using graded lumber in farm buildings.

There seems to be a major misunderstanding.

The Ontario Building Code has always required that lumber used for structural purposes in all buildings, farm buildings included, must be graded. No new legislation related to the Building Code of farm buildings was introduced in January, 1992.

Prior to the 1990 edition of the Code, municipalities were not required to issue building permits for the construction of farm buildings that were not to be used for residential purposes. Although permits were not mandatory, the construction of those buildings was still required to meet the regulations stated in the OBC.

The 1990 OBC removes the building permit exemption in order to eliminate the

misinterpretation of its intent and to ensure that the code requirements are enforced uniformly across Ontario. The Ontario Federation of Agriculture, Canadian Farm Builders' Association, A.M.O. and O.B.O.A. were among the organizations consulted on this matter.

The OBC does not prohibit the use of lumber from private wood lots or small sawmills. It only requires that such lumber, when intended for structural purposes, be graded by qualified graders. The material used for siding farm buildings, for example, need not be graded.

It appears the real issue is not the grading of lumber so much as the inconvenience and extra costs incurred in having it graded.

For small buildings, Article 9.3.0.01 of the 1990 OBC provides building officials with the discretion to accept construction on the basis of past performances or tests.

Therefore, regarding the use of ungraded lumber, a building official may accept it if in his/her judgement it has performed satisfactorily under identical conditions in the past.

Through cooperative efforts among the operators of private wood lots, small sawmills and local municipal building officials, the issue of ungraded lumber can be resolved satisfactorily. If more information is required please contact Mr. Chung Li, P.Eng., at the Branch at (416) 585-6453.

INSPECTORS:

• PLEASE REVIEW.

• THE LEGISLATION

W.R.T. GRADING LIMITED
IS QUITE CLEAR.

Ontario Building Code Interpretation Committee

In October 1991, the Ministry of Housing announced the establishment of The Ontario Building Code Interpretation Committee (OBCIC) to assist in resolving major Building Code interpretation problems.

The Committee will be chaired by the Manager of the Code Development and Advisory Services of the Ontario Buildings Branch. It will consist of representatives from the Ontario Building Officials Association, Toronto Area Chief Building Officials Committee, Ontario New Home Warranty Program and the Ontario Buildings Branch.

The OBCIC will meet monthly starting in May 1992 to discuss major Code items. Findings of this Committee will be published and distributed through such organizations as the Ontario Building Officials Association, Ontario New Home Warranty Program, Ontario Home Builders Association, Ontario Association of Architects as well as the Ministry of Housing.

HELP WANTED

The Simcoe County Chapter has given birth to a library committee. The members are responsible to acquiring books, documents, approvals, brochures, leaflets and any items that are code related to assist a building official in performing his job using reasonable up-to-date

information.

any member of members of the

and our Associate

ry: Please help by

s for any duplicate

publications that

greatly appreciated.

of: Chris Spanis,

rie, ON L4M 1P4.

235



Interoffice Correspondence

July 15, 1992

TO: ROGER O'MALLEY
DONNA NOEL DE TILLY
JULIE FORGET
INSPECTORS

FROM: B. A. FRANSEN

SUBJECT: PROCEDURES
MINISTRY OF THE ENVIRONMENT
BUILDING PERMIT APPROVAL PROCESS

You will want to review the attached report.

In brief, it confirms that the environmental legislation is "applicable law", thus, must be dealt with prior to the issuance of a Building Permit.

I have also attached a brief from the Ministry of Environment that explains what projects they want to review before a permit is issued.

Please ensure that all Part 3 buildings receive Ministry of Environment approval and those Part 9 buildings that fall under the Ministry guidelines.



- 2 -

Should you have any questions whatsoever please discuss with me.

B. A. Fransen

B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS
BAF/lb

Attachment

cc: P. J. Morrow
Jim Rule



A. Mazzuchin

Interoffice Correspondence

September 22, 1992.

TO: P. J. MORROW
FROM: B. A. FRANSEN
SUBJECT: REVIEW OF PLANS
FIRE DEPARTMENT PARTICIPATION

Further to your memo dated September 11, 1992, wherein you reiterate the need to acquire the respective Fire Department's approval, I can assure you that building permits will be issued only after the respective Fire Department's have confirmed in writing that they approve the proposal.

B. A. Fransen

B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS.
BAF*fas

cc: J. L. Rule

*cc. Roger
Plans &
Inspectors*

*Donna
Jlan*

Sept. 28/92

BAF - this looks good

[Signature]

GENERAL PART 9 RESIDENTIAL FOOTING REVIEW REPORT

Date: _____

Job Number: _____

Permit Number: _____

Owner of Property: _____

Address of Property: _____

ZONING REQUIREMENTS:

Zoning: _____

Front Yard: _____

Side Yard(Drive): _____

Rear Yard: _____

Side Yard(Other): _____

ONTARIO BUILDING CODE:

As a result of observations made at the project named above, footings were found to conform to the permit approved drawings and are deemed to be in conformance with Section 9.15 of the Ontario Building Code.

The location of the building on the site was compared with the plot plan approved by the Building Controls Department, and found to be in conformance with these drawings.

The contractor was advised of his/her responsibility to position the building so that all of its components satisfy the applicable zoning by-laws and site plan approved by Building Controls.

ADDITIONAL OBSERVATIONS AND/OR COMMENTS:

Footings Reviewed By: _____

Signed: _____



Interoffice Correspondence

October 27, 1992

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: FOOTING REVIEW REPORT

The attached document is to be used for footing inspections on residential buildings, and only when Building Controls has authorized the footings to be inspected by an engineer.

B. A. Fransen

B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS.
BAF*kcs

Attach.

cc: D. Noel de Tilly
R. O'Malley
Plans Examiners

After discussing the matter with Donna Noel de Tilly, it was agreed that we would have the owner write to Sudbury Hydro, acknowledging the condition and advising them that he would seek Hydro approval before occupying the building.

It should also be noted that, so long as the conditions remain unfulfilled, the decision rendered by the Committee of Adjustment is null and void.

CONCLUSION

It is only by scrutinizing the Committee's decisions carefully that we will be able to establish what their intentions are when they render a minor variance decision. These intentions must be made known to the applicant **BEFORE** a permit is issued.



**B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS.
BAF*kcs**

cc: R. Nelson - Sudbury Hydro



Interoffice Correspondence

December 2, 1992

**TO: INSPECTORS
PERMIT CONTROL CLERKS**

FROM: B. A. FRANSEN

**SUBJECT: DECISIONS RENDERED BY THE COMMITTEE OF ADJUSTMENT
MINOR VARIANCES**

On occasion, the Committee of Adjustment will render a decision on a minor variance that contains a condition affecting the variance.

Prior to the issuance of a Building Permit, these conditions should be reviewed very carefully, since they may have an effect on the issuance of the permit.

I am attaching for your information a decision rendered on October 19, 1992, A288/92, that includes a condition that reads as follows:

- "2) That the owner maintain proper clearance from overhead conductors to the satisfaction of Sudbury Hydro; should line relocation be necessary in this regard, the owner/applicant will be responsible for all costs to relocate the existing plant, including engineering and legal fees."

You will note that the condition cannot be satisfied prior to construction.

It is obvious that some measures must be taken so that the Constructor is alerted to the content of the condition.

....cont'd

240



COMMITTEE OF ADJUSTMENT
THE REGIONAL MUNICIPALITY OF SUDBURY

LAST DAY OF APPEAL NOV 18 1992

SUBMISSION NO. A288/92

October 19, 1992

OWNERS:

TONY GUIDOCCIO AND JUDY GUIDOCCIO, SS #1, Site 20, Box 9, Sudbury, Ontario P3E 4S8

LOCATION:

Parcel 6905 S.E.S., Part 8, Plan SR-3327, in Lot 1, Concession 1, Township of McKim, being premises at 2060 South Bay Road, CITY OF SUDBURY

SUMMARY:

Zoning:

The property is Zoned G-2 (Limited Greenbelt District) according to By-Law 62-192, as amended.

Application:

Relief is requested in order to construct a 1-storey addition to the south and west sides of the existing 1-storey dwelling on the property, providing a south side yard at variance to the by-law. The owners indicated that the addition will measure approximately 23 x 60 feet.

Comments concerning this application were submitted as follows:

The Nickel District Conservation Authority:

"No objection"

The Sudbury & District Health Unit:

"As this minor variance would not affect the properties ability to support a subsurface sewage disposal system, the Sudbury and District Health Unit would not have any objections to this application."

Sudbury Hydro:

"As a condition of consent, Sudbury Hydro will require the following:
1) An Encroachment Agreement registered on title as the proposed addition to the west side will encroach on a Sudbury Hydro unregistered easement. 2) The owner must maintain proper clearance from overhead conductors. These clearances will be determined by Sudbury Hydro's Engineering Department. If a line relocation is necessary to maintain these clearances, the owner/applicant will be responsible for all costs to relocate the existing plant, including Engineering and legal fees. Please have the owner/applicant contact the Engineering Department for further details/direction. Ref. Files: D.P. 92-45-04 / W.O. -92385-."

Manager of Technical Services - City of Sudbury:

"We have no objection to this application with respect to our areas of concern."

/2

No objectors were present and the following decision was reached:

DECISION:

THAT the application by TONY GUIDOCCIO AND JUDY GUIDOCCIO, the owners of Parcel 6905 S.E.S., Part 8, Plan SR-3327, in Lot 1, Concession 1, Township of McKim, being premises at 2060 South Bay Road, in the CITY OF SUDBURY, for relief from Section 6.3.3 of By-Law 62-192, as amended, in order to construct an irregular maximum approximate 7.01 by maximum approximate 18.29m (23 x 60') one storey addition to the south and west sides of the existing one storey dwelling on the subject property providing a minimum south side yard of approximately 3.36m (11') with a 0.31m (1') eave projection into same where 4.50m (14.77') are required; be granted, subject to the following conditions:

- 1) That an Encroachment Agreement be registered on title, to the satisfaction of Sudbury Hydro.
- 2) That the owner maintain proper clearance from overhead conductors to the satisfaction of Sudbury Hydro; should line relocation be necessary in this regard, the owner/applicant will be responsible for all costs to relocate the existing plant, including engineering and legal fees.

Consideration was given to Section 45(1) of the Planning Act. In our opinion the variance is minor in nature and is desirable for the appropriate development and use of the land and building. The general intent and purpose of the By-Law and the Official Plan are maintained.

Concurring Members: R. RINALDI, T. LEE, N.J. GAUTHIER,
R.A. DELORME, S. BACCIAGLIA

ISO - before
occupancy
Sud Hydro to
review

1992. 11. 20
Owner to write Sud-
Hydro acknowledging
the conditions and
committing to maintain
the clearances in
during costi

Municipality
of
Sudbury

Municipalité
Régionale
de
Sudbury

Bag 3700
Station 'A'
Sudbury, Ontario
P3A 5W5

Sac 3700
Succursale 'A'
Sudbury, Ontario
P3A 5W5

(705) 673-2171

(705) 673-2171

COMMITTEE OF ADJUSTMENT

(705) 673-2171 Ext. 376, 346
(705) 673-3094 FAX

FINAL NOTICE

No Notice of Appeal
The Planning Act, Statutes of Ontario 1983, Chapter 1,
Section 45, Subsection 14

Reference:

Application Number A288/92

Take notice that whereas the Committee of Adjustment
of the Regional Municipality of Sudbury gave its decision
on Monday, October 19, 1992 regarding the application
for Minor Variance or Permission in respect of:

Description of Property:

Parcel 6905 S.E.S., Part 8, Plan SR-3327, in Lot 1,
Concession 1, Township of McKim, being premises at
2060 South Bay Road, CITY OF SUDBURY

Registered Owner(s):

TONY GUIDOCCIO AND JUDY GUIDOCCIO

Therefore you are hereby notified that the
aforementioned decision respecting the above application
is final and binding, there having been no notice of
appeal to the Ontario Municipal Board within thirty days
of the making of the decision.

Dated this 19th day
of November 1992


Secretary-Treasurer, Committee of Adjustment

Building Permits and the Environment

"Other Applicable Law"

Harry Poch
Gardiner, Roberts
Barristers & Solicitors
Toronto, Ontario

Many Chief Building Officials do not consider the impact of environmental legislation when they receive applications for building permits. This should change following the October 8, 1991 decision of the Ontario Court of Justice (General Division) in *Leeds and Grenville County Board of Education v. Gerrard and Township of Oxford-On-Rideau* (Court file no. 1178-91 - Brockville).

In that decision, the court dismissed an application appealing the refusal of a building permit for a proposed heating, ventilating and air conditioning (HVAC) system for an elementary school. The basis for the decision was that a Certificate of Approval had not been obtained from a Ministry of the Environment Director under section 8(1) of the Environmental Protection Act (now section 9(1)). The building permit was denied because the HVAC system was part of a building that would contravene "other applicable law" within the meaning of section 6(1)(a) of the Building Code Act.

The effect of this decision will no doubt be that Chief Building Officials under the Building Code Act should more closely review whether all

environmental approvals and permits have been obtained before deciding whether or not to issue a building permit.

Facts of the Case

The applicant through its consulting engineer applied for a building permit to construct a school in Kempville in Oxford-On-Rideau Township. Part of the heating, ventilation and air conditioning system for the school was proposed to be provided by a closed-loop geothermal heat pump system. The HVAC system was designed to remove natural heat from the earth, and then use this heat to provide space and water heating in the school. The process also was designed to operate in reverse so as to provide air conditioning in the summer. The heat pumps to be located inside the school would be connected to a circuit of underground piping adjacent to the building. Also, 104 wells, 200 feet deep, were proposed within a few metres of the perimeter of the school, feeding various pumps in the school.

The external underground piping would be sealed, through which a heat transfer fluid would pass to and from the various heat pumps. This heat transfer fluid would have been a widely used toxic solution. The court learned that there are approximately 22,000 installations of heat pumps in Canada using this solution, presumably in compliance with CSA and other standards.

The Chief Building Official expressed a number of concerns respecting the design of the heat pump system. Test bore holes were drilled and a hydrogeological study was undertaken. However, the Chief Building Official's concerns were not resolved by this work.

Issues decided by the Court

The Court found that the proposed heat pump system, including the underground piping, was appurtenant to the

building. Therefore, as part of the building, the system was subject to a building permit. The Court also found that the Environmental Protection Act is "other applicable law". As such, the Chief Building Official had to take into account whether the appropriate permits and approvals under the Environmental Protection Act had been issued in coming to his decision as to whether the building permit should issue.

The Court found that the heat pump system required the approval of the Ministry of Environment Director under what was then section 8(1) of the Environmental Protection Act as the fluid in the system was a contaminant which potentially could leak or discharge into the surface ground or rock. Since that Certificate of Approval had not been issued, and as the Environmental Protection Act is "other applicable law", the Chief Building Official had no authority to issue the building permit.

Also, the Court noted that the role of a Chief Building Official performing his duties pursuant to section 6(1)(a) of the Building Code Act requires that he act reasonably and that the official has a duty of care to persons whose relationship was sufficiently close that they ought to have been reasonably within contemplation as likely to be injured by a breach of that duty. In this case the court found that the duty was owed to the future students of the school and the residents of the municipality. In other words, given that there was a toxic chemical which could leak into the natural environment, the Chief Building Official had to review the building permit application with caution.

What Should a Chief Building Official be Looking For?

The following is an initial but not comprehensive list of environmental approvals and permits that may be required before a building permit can issue, although judicial pronouncements have not been made in all cases.

- 1) a Certificate of Approval issued by the MOE Director under the Environmental Protection Act where any plant, structure, equipment, apparatus, mechanism or thing that may discharge or from which may be discharged a contaminant into the air or land is to be constructed, altered, extended or replaced. This would include HVAC systems as mentioned in the court case, as well as air emission systems and stacks;
- 2) the Approval of the Minister of the Environment under the Environmental Protection Act for the use of land or land covered by water which has been used for the disposal of waste within a period of 25 years from the year in which that land ceased to be so used (e.g. where a building is proposed to be constructed on top of some waste);
- 3) a sewage system or sewage works approval that has been issued under the Environmental Protection Act or the Ontario Water Resources Act. This would include septic systems and sewer lines;
- 4) a water extraction permit where more than 50,000 litres per day are to be extracted and/or a waterworks approval under the Ontario Water Resources Act for a pumping and/or filtration "building" for which a building permit is sought;

5) an approval from the Minister of Natural Resources under the Lakes and Rivers Improvement Act where a proposed dam is a "building" within the meaning of the Building Code Act;

6) a permit to construct a "building" in an area susceptible to flooding, issued by the executive of a conservation authority under the Conservation Authorities Act, where required in order to allow construction to occur;

7) in the case of gasoline storage tanks, approvals or orders under the Gasoline Handling Act and Code (e.g. where gasoline contaminated soil has to be removed prior to construction of a building).

There are other approvals and permits too numerous to mention which may be relevant on the reasoning in the *Leeds* case. Many of these matters are not routinely looked at by Chief Building Officials.

By not reviewing which environmental approvals and permits have been issued, the ramifications could be far reaching. For example, where a third party appeals, a permit may be revoked by the courts. Similarly a third party may suffer damage where construction occurs for which all approvals are not in place. These situations could lead to civil responsibility on the part of the Chief Building Official or the municipality that employs him or her, particularly where no attempt has been made to ensure conformity with all "applicable law". Damage could relate to expenditures made by the applicant on the faith of the building permit or to third party losses resulting from the unlawful undertaking.



The
Regional
Municipality
of
Sudbury

La
Municipalité
Régionale
de
Sudbury

Bag 3700
Station 'A'
Sudbury, Ontario
P3A 5W5

Sac 3700
Succursale 'A'
Sudbury, Ontario
P3A 5W5

(705) 673-2171

(705) 673-2171

January 7, 1993.

TO: INSPECTORS

FROM: B.A. FRANSEN

**SUBJECT: NBC/NFC NEWS - PUBLICATION OF
NATIONAL RESEARCH COUNCIL CANADA**

The attached information may be of interest to you.

**B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS.
BAF*jlf**

Attach.

The Alberta Safety Codes Act

Construction inspections are no longer the sole domain of local governments or their inspection staff.

After several years of public discussion, Bill 36 - The Safety Codes Act - received Royal Assent in the Province of Alberta on June 25, 1991, and will come into force on proclamation. This will be a phased process. The Safety Codes Council provisions are planned to come into force in late 1992, the Building and Fire provisions, in late 1992 or early 1993. The Electrical, Elevator, Gas and Plumbing provisions will come into force in mid-1993, and the Boiler provisions, in mid-1994.

This legislation provides for the accreditation of municipalities, corporations and agencies, and the certification of inspectors. The Safety Codes Council will set the final policies and procedures for accreditation and certification and will administer these functions when they are fully operational.

Accreditation

In order for a municipality, corporation or agency to become accredited, they must submit a Quality Management Plan to the Council. Upon acceptance of the plan, the accredited organization must provide for Safety Codes Officers (either on staff or through an accredited agency) to monitor code compliance.

Construction inspections are no longer the sole domain of local governments or their inspection staff. Inspection agencies, independent of engineering or architectural firms so there is no conflict of interest, can become accredited to provide inspection services for the governments or corporations. Where municipalities choose not to become accredited in any or some disciplines, the province will undertake enforcement and supplement municipal staff through accredited agencies.

Gypsum Board Standards

A new edition of CAN/CSA A82.27-M91, "Gypsum Board," has been issued, but code committees have not yet agreed to reference it.

The version of the Canadian Standards Association standard for gypsum board products that is referenced in the National Building Code of Canada 1990 is CSA A82.27-M1977, "Gypsum Board."

To accommodate technical and editorial changes that have been introduced since that edition was published, a new edition of the standard has been issued. This new edition, CAN/CSA A82.27-M91, "Gypsum Board," was not included in the annual list of revised standards referenced by the National Building Code that was issued by the Canadian Commission on Building and Fire Codes in January 1992.

Committees responsible for the technical content of the National Building Code have not yet agreed to reference the new standard. They intend to further assess the impact of changes in the new edition that eliminate a control on the density of gypsum board products and change the testing procedures for Type X gypsum board. The committees are concerned that the change affecting density control will permit the production of products that are substantially lighter than those

Certification

One of the basic principles of the Safety Codes Act is competency. People who are presently or who wish to become Safety Codes Officers, will be required to demonstrate a minimum competency level. Some grandfathering is under consideration for existing qualified municipal and provincial staff, but all inspectors will have to take at least one course to know how to operate under the new Act. A five-year period of grace is anticipated for staff presently performing inspection and enforcement to become certified.

Course material for the building discipline is being developed by the Southern Alberta Institute of Technology. The Fire Training School of Alberta Labour is preparing material for the Fire discipline. Challenge examinations will be offered to any who feel their experience affords them enough background to pass the test without first going through the program.

Building discipline courses will be delivered through the technical institute and college system in the province and Fire discipline courses, through the Fire Training School. However, if a municipality or other group has the capability to deliver the courses, special arrangements may be made to delegate this responsibility.

Training in building regulations divisions will become more important and challenging than ever, but Alberta citizens may look forward to an even more consistent and knowledgeable inspection staff. For more information, contact: Dave Mosen, Project Director
Safety Codes Act Implementation
Alberta Labour
10808 - 99th Avenue
Edmonton, Alberta T5K 0G5 ♦

produced under the 1977 version of the standard. This could adversely affect the sound transmission and fire resistance of building assemblies, determined in accordance with Chapter 2 of the Supplement to the National Building Code and with Part 9, which rely on the gypsum board to develop suitable performance.

For applications where fire and sound properties are not involved, the use of gypsum board products produced to the new edition of the standard should have negligible impact on the intent of the National Building Code.

Research is being undertaken at the Institute for Research in Construction to examine the extent to which the properties of products conforming to the new edition of the standard would affect the performance expectations of the National Building Code. When the research is complete, the committees will be able to evaluate the extent to which the new edition of the standard is acceptable for reference and to resolve any changes that affect fire and sound ratings.

Contact: A.J.M. Aikman ♦

Residential Roof Truss Design at a Crossroads

The provisions of Article 9.23.13.11. are based on the intention that residential roof trusses need not be as heavy as those designed in accordance with CSA O86

There are two principal ways of building house roofs: rafters and joists (usually cut on site) and roof trusses (usually prefabricated).

The rafter-and-joist approach is the traditional method and is still used for roofs with unusual configurations. However, since their introduction in the 1960s, prefabricated trusses have gradually taken over the bulk of the market. Provisions introduced into the National Building Code (NBC) in the 60s, by permitting residential roof trusses to be lighter than trusses for other types of buildings, have played a major role in their growing use and, in the process, have saved the housing industry hundreds of thousands of dollars per year.

When prefabricated roof trusses were first explored in the early 60s, trusses designed according to the normal wood design codes required much larger members than the rafters and joists they were supposed to replace, whereas structural theory says that truss chords should be lighter than rafters and joists for any given span. While the rafter and joist tables in the NBC did not satisfy standard wood design procedures as set forth in CSA Standard O86 "Engineering Design in Wood," they had been developed from many years of experience and had proven satisfactory.

A series of full-scale tests on conventionally framed roofs to determine just what loads these roofs could sustain, showed a wide variety of performance depending upon the details of the construction. As a result of these tests, the roof framing requirements in the Code were rewritten to eliminate the worst types of conventional framing. Another result was that a new testing procedure for trusses, which required that trusses have strength equal to the better forms of conventional framing, was developed. Thus it was no longer necessary for residential wood trusses to satisfy CSA Standard O86 "Engineering Design in Wood." It was only necessary that they be capable of passing a specific test. That remains the situation in the current NBC. The test is described in CSA Standard S307 "Load Test Procedure for Wood Roof Trusses for Houses and Small Buildings."

It is, of course, impossible to test all of the wide variety of custom truss designs the housing industry demands. The industry eventually developed a procedure to design residential trusses which they could be confident would pass the test. This procedure is the same as that used to design normal trusses, except that the allowable stresses are increased by 33%. CSA O86 permits allowable stresses to be increased by 33% for structures supporting loads which only last 24 hours. Since CSA S307 calls for the test to last 24 hours, it all seems to tie together; however, this is something of an illusion since the actual loads that the trusses must support in service can last for months. Design strictly in accordance with O86 would not use the 33% factor.

This apparent correlation between the 33% higher stresses the industry uses to design residential trusses and the 24 hour load duration factor in CSA O86 has allowed the industry to avoid a lot of unnecessary

testing when its designs have been challenged by building officials or sometimes, by consulting engineers who observe that trusses designed under Part 9 (Housing and Small Buildings) do not necessarily meet the requirements of Part 4 (Structural Design).

There is nothing wrong with this of course. The provisions of Article 9.23.13.11. of the NBC are based on the specific intention that residential roof trusses need not be as heavy as those designed in accordance with CSA O86 (referenced in Part 4). Nor is it intended that all truss designs be tested. According to Sentence 9.23.13.11.(8), the truss need only be capable of passing the test and the test need only be invoked in cases of doubt.

Things are going to change in 1995, when the 33% load-duration factor will disappear from a rewritten CAN3-O86, as the working-stress approach to design is abandoned in favor of limit-states design. The revised standard will mean that designers won't have that "crutch" that the 33% factor has provided.

As the change draws nearer, staff at the Canadian Codes Centre are working with the Truss Plate Institute of Canada (TPIC) and the Canadian Wood Council (CWC) to identify new approaches so that truss design practices can maintain the economy of the proven and reliable light residential truss without having to rely on such "crutches." TPIC plans a major research project and CWC is exploring the effects of the limit states version of CSA O86 on normal truss designs. Recent discussions indicate that TPIC, CWC, the Standing Committee on Housing and Small Buildings (the committee responsible for Part 9 of the NBC) and the Canadian Home Builders' Association all agree that there is no need for any increase in the size of lumber used in residential roof trusses. The challenge is to avoid such a change while remaining within the framework of changing design standards.

Contact: J.C. Haysom ♦



National Research
Council Canada

Conseil national
de recherches Canada

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Canada

ISSN 0848-600X

Ce document est aussi publié en français.



Interoffice Correspondence

January 28, 1993

TO: P. Morrow
FROM: P. Philion
RE: Occupancy Permits - Building Control Procedures

The following resolution 93-20 was passed by the Engineering Committee on January 21, 1993 and ratified by Regional Council on January 27, 1993:

The Regional Municipality of Sudbury through its Building Controls Division should discontinue the issuance of Occupancy Permits, except as provided for in the Ontario Building Code.

Paul Philion

PP/sh

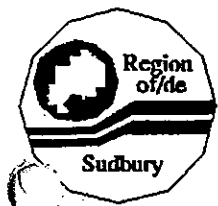
c.c. B. Fransen
R. Swiddle

*1993. 01. 31.
- Please copy for all staff
- include w/ memo to staff
- Arrange meeting w/ Inspectors and Permit Control Clerks.*

RECEIVED

JAN 29 1993

BUILDING CONTROLS
DEPARTMENT



Interoffice Correspondence

February 23, 1993

TO: ALL PLANS EXAMINERS AND INSPECTORS

FROM: B. A. FRANSEN

**SUBJECT: CONDUCTING OCCUPANCY INSPECTIONS
PART 3 BUILDINGS**

The mutual concerns of both the area municipality fire departments and the Building Controls division will be helped if both the fire inspectors and building inspectors attended at the site, at the same time, to conduct the occupancy inspection.

This has been discussed with the area municipality fire chiefs and they are enthused about this arrangement. There appears to be some merit in these co-ordinated inspections since the two inspection teams will get a better grasp on what is being approved.

This procedure will apply to all of the buildings, under Part 3, and more specifically subject to the provisions of the Ontario Building Code under Section 2.4.3.1. (2), where the list of requirements prior to occupancy is outlined.

This procedure does not necessarily apply to small residential buildings.

Should there be any questions whatsoever in connection with this matter, please advise promptly.

**B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS.**
BAF*kcs



Alfio Mazzuchin

Interoffice Correspondence

July 23, 1992

TO: INSPECTORS

FROM: B. A. FRANSEN, P. ENG.

**SUBJECT: MOVING BUILDINGS FROM ONE AREA INTO THE
REGIONAL MUNICIPALITY OF SUDBURY**

BACKGROUND

There are a number of buildings that have been moved into the Regional Municipality of Sudbury after having been occupied in other areas. Unfortunately, a number of these buildings appear as though they have not received a great deal of maintenance and are quite shabby. There is little doubt that they do not comply with the provisions of the Ontario Building Code and in some cases may not even live up to the requirements of our minimum standards bylaws. This situation is cause for concern and has resulted in numerous complaints being registered with the building controls department.

PROVISIONS OF THE ONTARIO BUILDING CODE

Section 2.1.1.7, Existing Buildings, reads as follows:

- (1) Except as provided in Part 11, where an existing building is extended or subject to material alteration or repair, the code is applicable only to the design and construction of the extensions and those parts of the building that are subject to the material alteration or repair.
- (2) Where an existing previously occupied building is moved from the original location to be installed elsewhere, or is dismantled at the original location and moved to be reconstituted elsewhere, the code applies only to changes

to the design and construction of the building required as a result of moving the building.

COMMENTARY

The Ontario Building Code places few restrictions on those parts of the building that are being moved and it is as a result of these provisions that the building official is left with little authority to ensure that the structure complies with building code standards.

We will continue to require building permits for all of those components of the building that are "extensions" to the building being moved, such as, plumbing, foundations, porches, etc., etc.

PROPOSAL

Because a number of these buildings take on such an unsightly appearance, we will require that the applicant receive an approval from the following agencies before a permit is issued for the foundation:

- (1) **Building Inspectors** - to ensure that the safety of the occupants is maintained insofar as the primary observable structured members are affected.
- (2) **Municipal Fire Department** - to ensure that local fire authorities are familiar with the kinds of buildings that are entering their area and assisting in determining whether there are any fire hazards connected with these structures.
- (3) **Property Standards** - to ensure that the structure meets the requirements of the Region's minimum standards by-laws.

CONCLUSION

These procedures will provide The Regional Municipality of Sudbury and the Area Municipality with an opportunity to review and comment on the suitability of buildings that arrive in our Region under the provisions of Section 2.1.1.7, "Existing Buildings", Ontario Building Code.

Should there be any question whatsoever in connection with this set of procedures, please discuss with me at your earliest convenience.

B. A. Fransen.

B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS
BAF/lb

cc: Roger O'Malley
Donna Noel de Tilly
Glenn Lewis
Keith Anderson



Interoffice Correspondence

July 24, 1993

TO: **INSPECTORS**
FROM: B. A. FRANSEN
SUBJECT: **PROCEDURES**

The Ontario Building Code Act reads as follows:

(5) NO CONSTRUCTION EXCEPT IN ACCORDANCE WITH PERMIT

No person shall construct or cause to be constructed a building in a municipality except in accordance with the plans, specifications, documents and any other information on the basis of which a permit was issued or any changes thereto authorize by the chief official. RSO 1980, Chapter 51, Section 6.

The inspectors are being alerted to this section of the Building Code Act since it forms an extremely important part of the approval and enforcement procedures.

When we proceed through the courts the building inspector must rely on the information that was submitted at the time that a building permit was being applied for.

SITE PLANS

It is incumbent upon the inspectors to insure that the information submitted on the site plan is proper so that the location of the property, zoning matters, drainage and access requirements can be determined.

BUILDING PLANS

The applicants plans must be complete and sufficiently detailed to enable the builder to construct a building that is in compliance with the regulations of the Ontario Building Code.

All of the approvals required for the purpose of the permit must be received prior to the building permit being issued.

COMMENTS

I am still finding that the site plans are poorly prepared and we are not getting the message to the applicants of the need that they provide a site plan that serves our purpose. If the inspector receives a site plan that is not properly detailed then he/she should not accept it. Furthermore, the applicant should be given a sample site plan and be requested to provide this department with a drawing that is as clear and concise as the sample that we provide.

The inspectors must review the plans at the time that they are conducting the inspection to make certain that what is being built resembles what was applied for. In far to many instances the builder has differed it from the original drawings without making the appropriate changes as required by the provisions of the Ontario Building Code.

CONCLUSION

These are specific procedures that the inspectors are requested to consider at the time that they are dealing with submissions for permits and conducting inspections. Our success in the courts is diminished if these practices are not maintained.

Should you have any questions whatsoever please discuss them with me at your earliest possible convenience.

Very truly yours



B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS
BAF/lb

cc: Bryan Gutjahr
Jim Wilkin
Roger O'Malley
Donna Noel de Tilly
Claude Trumble
Rheal Pitre
Ray Henri



Interoffice Correspondence

December 17, 1993.

TO: Bryan G.
Giselle M.
Plans Examiners
Inspectors
Julie F.

FROM: B.A. Fransen, P. Eng.

SUBJECT: Issuance of Permits
Seasonal Dwellings

From time to time, you will be requested to issue permits for buildings that are described as "Seasonal Dwellings", which are described as follows:

"Seasonal Dwelling", means a single detached dwelling or mobile home dwelling erected and used as a secondary place of residence for seasonal vacations and recreational purposes and not as the principal residence of the owner or occupant thereof. (83-300 series)

It is apparent that persons receiving permits to construct seasonal dwellings are using the buildings year round and have disregarded the provisions of the zoning by-law.

In an attempt to counter these activities it is proposed that persons taking out permits to construct seasonal dwellings be requested to sign an acknowledgement that reads as follows.

B.A. Fransen, P. Eng.
Director of Building Controls

BAF*pv
Attach.

ACKNOWLEDGEMENT
Seasonal Dwelling

I, _____, having applied to construct a seasonal dwelling at
(owner)
_____, Township of _____, acknowledge the
provisions of the zoning by-law which reads as follows:

"Seasonal Dwelling" means a single detailed dwelling or mobile home dwelling erected and used as a secondary place of residence for seasonal vacations and recreational purposes and not as the principal residence of the owner or occupant thereof.

My primary place of residence will be located at _____
Township of _____.

Date: _____

Permit No.: _____

Applicant: _____

SECTION 7 R7 ZONE- SEASONAL RESIDENTIAL

83 Series

(1) SCOPE

The provisions of this Section shall apply in all Seasonal Residential (R7) Zones in addition to the General Provisions set out in Part II hereof, except as otherwise provided in Part VII hereof.

(2) USES PERMITTED

No person shall, within any R7 Zone, use any lot or erect, alter or use any building or structure for any purpose except one or more of the following R7 uses, namely:

- (i) a seasonal dwelling;
- (ii) a private cabin accessory to a permitted dwelling; or
- (iii) any use permitted in all zones under Section 17 of Part II hereof.

(3) ZONE REQUIREMENTS

No person shall, within any R7 Zone, use any lot or erect, alter or use any building or structure except in accordance with the following provisions:

(a) LOT AREA (MINIMUM)

- in accordance with the residential density restrictions set out in Section 12 of Part II hereof.

(b) LOT FRONTAGE (MINIMUM) - 45 m

(c) WATER FRONTAGE (MINIMUM)

The minimum total water frontage required for all shorelines of a waterfront lot or any other lot adjacent to a navigable waterbody shall be 45 m.

(d) LOT DEPTH (MINIMUM) - 60 m

(e) FRONT YARD DEPTH (MINIMUM) - 10 m

(f) CORNER SIDE YARD WIDTH (MINIMUM) - 10 m

(g) INTERIOR SIDE YARD WIDTH (MINIMUM) - 3 m

(h) REAR YARD DEPTH (MINIMUM) - 10 m

(i) LOT COVERAGE (MAXIMUM) - 10%

83 Series

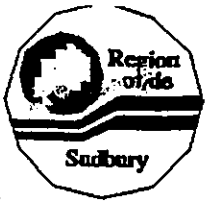
- (d) "GROUP DWELLING" means a multiple dwelling containing two or more dwelling units having private independent entrances directly to a yard and being attached together horizontally in whole or in part above grade and divided vertically from each other by common walls.
- (70) (a) "DWELLING, SINGLE" means a dwelling containing not more than one dwelling unit as the main use on a separate lot.
- (b) "SINGLE DETACHED DWELLING" means a freestanding single dwelling but does not include a mobile home dwelling.
- (c) "SEMI-DETACHED DWELLING" means one of a freestanding pair of single dwellings attached together horizontally in whole or in part above grade and divided vertically from each other by a common wall extending at least one storey above finished grade.
- (d) "ROW DWELLING" means one of a group of not less than three single dwellings which are located on distinct and separate registered lots but which are attached together horizontally in whole or in part above grade and divided vertically from each other by common walls extending at least one storey above finished grade.
- (e) "BOARDING HOUSE DWELLING" means a single detached dwelling containing three or more accessory guest rooms.
- (f) "MOBILE HOME DWELLING" means a freestanding single dwelling designed to be made mobile and constructed or manufactured to provide a permanent residence for one or more persons.
- (g) "~~SEASONAL DWELLING~~" means a single detached dwelling or mobile home dwelling erected and used as a secondary place of residence for seasonal vacations and recreational purposes and not as the principal residence of the owner or occupant thereof.
- (71) (a) "DWELLING UNIT" means a suite of one or more inter-connected habitable rooms which:
 - (i) is occupied and used in common by one or more persons as a single, distinct and self-contained housekeeping establishment; and
 - (ii) contains cooking and toilet facilities for the exclusive common use of the occupants thereof.
- (b) "ACCESSORY DWELLING UNIT" means a dwelling unit accessory to a permitted non-residential use on the same lot and occupied either by the owner of such lot or by a person employed thereon.

62-192

DEFINITIONS (CONT'D)

4.

- 1.13 COURT: An open, uncovered and unoccupied space appurtenant to a building and bounded on two or more sides thereby.
- 1.14 COURT - INNER: A court enclosed on all sides by exterior walls of a building or by exterior walls and lot lines on which walls are allowable.
- 1.15 COURT - OUTER: A court extending to a street line or opening upon any front, side or rear yard.
- 1.16 DWELLING UNIT: One or more rooms connected together but completely separate as a unit from all other rooms in the same structure and constituting an independent housekeeping unit for residential occupancy by humans with facilities for such humans to sleep, cook, and eat.
- 1.17 DWELLING - ONE FAMILY: A detached building containing one dwelling unit but shall not include a mobile home. (By-law 80-14)
- 1.18 DWELLING - TWO FAMILY: A detached building containing two dwelling units.
- 1.19 DWELLING - MULTIPLE: A building or portion thereof containing three or more dwelling units.
- 1.20 DWELLING ROW: A dwelling, one family, two (2) side walls of which are common with adjacent houses, not more than two and one-half (2½) storeys in height. When there are three (3) or more houses separated by common or party walls, the end houses shall each be considered a row dwelling for the purpose of this By-law.
- 1.21 DWELLING - SEMI-DETACHED: A detached building containing two (2) dwelling units where the common wall is situated on a lot line.
- 1.22 Deleted - By-law 63-79.
- 23 FAMILY: One or more persons whether or not related by blood, marriage, adoption and including domestic servants or gratuitous guests who live together in one dwelling unit and maintain a common household as distinguished from a group of persons occupying a boarding house,



Interoffice Correspondence

October 4th, 1993.

TO: ALL BUILDING CONTROLS STAFF

FROM: B. A. FRANSEN, P.ENG.

SUBJECT: PROCEDURE POLICY
CONDITIONAL CLOSING OF BUILDING PERMIT FILES

1. A Building Inspector, Plans Examiner, Chief Building Inspector or Director of Building Controls will complete the "CONDITIONALLY CLOSED FILE" form and attach it to the front of the permit. It is important that we can establish from reading this form at exactly what point the construction ceased and what was left outstanding in order to complete the file.
2. The file is then to be given to the Clerk-Typist/Receptionist. The Clerk-Typist/Receptionist will update the computer to indicate the file has been closed. The notes page must contain the information that the file was "CONDITIONALLY CLOSED". It should also be noted in the computer at exactly what point the construction ceased and what was left outstanding.
3. WHEN TO CONDITIONALLY CLOSE A BUILDING PERMIT PROJECT FILE:
 - (a) A file should be conditionally closed only after all attempts to complete the file have been exhausted. A letter should be sent out requesting that the present owners of the property contact our Department in order to complete the file. Also, we should attempt to contact the owners by telephone if possible and set up an inspection in order to determine the status of construction.
 - (b) A file should be conditionally closed if the construction or demolition of the building has been suspended or discontinued for a period of more than one year.
4. No reimbursement will be given for files that have been conditionally closed.

B. A. Fransen

B. A. FRANSEN, P.ENG.,
DIRECTOR OF BUILDING CONTROLS
/dn
att.

263



CONDITIONALLY CLOSED FILE

DATE FILE CLOSED: _____ BY: _____

ENTERED ON COMPUTER: YES ___ NO ___

PERMIT #: _____ PROJECT ADDRESS: _____

DESCRIPTION OF PROJECT: _____

APPLICANT/OWNER: _____ BUILDER: _____

ADDRESS: _____ ADDRESS: _____

CURRENT OWNER: _____ CURRENT PHONE # _____

CURRENT ADDRESS: _____

LEGAL DESCRIPTION:

TOWNSHIP	CONC.	LOT	PARCEL	REGISTERED PLAN	LOT	REFERENCE PLAN	PART
----------	-------	-----	--------	-----------------	-----	----------------	------

INSPECTIONS:	APPROVED			APPROVED	
	YES	NO		YES	NO
FOOTING	___	___	PLUMBING:		
WEEPING TILE	___	___	GROUNDWORK	___	___
FRAMING	___	___	ROUGH-IN	___	___
INSULATION	___	___	FINAL	___	___
FINAL	___	___			

OCCUPANCY PERMITTED: YES ___ NO ___ PARTIAL ___ DATE: _____

LAST INSPECTION DATE: _____ TYPE OF INSPECTION: _____

ORDER TO COMPLY: YES ___ NO ___ STOP WORK ORDER: YES ___ NO ___

OUTSTANDING ITEMS: _____

WHY FILE NOT COMPLETED: _____ 264



Interoffice Correspondence

November 22, 1993

**TO: INSPECTORS
GUIDO A. MAZZA**

FROM: B. A. FRANSEN

SUBJECT: MASONRY CONSTRUCTION

This is the time of year when construction is affected by the cold weather. Masonry, in particular, can suffer adversely if proper precautions are not carried out during the cold weather periods. Thus, would you please review the provisions of the Ontario Building Code with respect to cold weather masonry work and take the steps necessary to ensure that proper temporary heat is provided by the builders should the temperature drop below acceptable limits.

Another issue that should be addressed is the contractor's failure to clean the mud off of footings before erecting masonry blocks. The footings should remain clean and free of all debris. Inspectors should not accept masonry work or mortar that is placed over mud. It is only through your close scrutiny of the masonry work that we can be certain the work is progressing satisfactorily.

**B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS.
BAF*kcs**

92-1619



Interoffice Correspondence

October 4th, 1993.

TO: ALL BUILDING CONTROLS STAFF
FROM: B. A. FRANSEN, P.ENG.
SUBJECT: PROCEDURE POLICY
CONDITIONAL CLOSING OF BUILDING PERMIT FILES

1. A Building Inspector, Plans Examiner, Chief Building Inspector or Director of Building Controls will complete the "CONDITIONALLY CLOSED FILE" form and attach it to the front of the permit. It is important that we can establish from reading this form at exactly what point the construction ceased and what was left outstanding in order to complete the file.
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 - (b) A file should be conditionally closed if the construction or demolition of the building has been suspended or discontinued for a period of more than one year.
4. No reimbursement will be given for files that have been conditionally closed.

B. A. FRANSEN, P.ENG.,
DIRECTOR OF BUILDING CONTROLS
/dn
att.



CONDITIONALLY CLOSED FILE

DATE FILE CLOSED: _____

BY: _____

BUILDING APPLICATION NO. _____ MUNICIPALITY: _____

DESCRIPTION OF PROJECT: _____

LEGAL DESCRIPTION:

Municipal Address: _____

Township: _____ Conc.: _____ Lot: _____ Parcel: _____ Plan: _____

Lot: _____ Ref. Plan: _____ Part: _____

REGISTERED OWNER:

APPLICANT:

Name: _____ Name: _____

Address: _____ Address: _____

Phone: _____ Phone: _____

INSPECTIONS CONDUCTED AND APPROVED:

FOOTING _____	PLUMBING:	GROUNDWORK _____
WEEPING TILE _____		ROUGH-IN _____
FRAMING _____		FINAL _____
INSULATION _____		
FINAL _____		

LAST INSPECTION DATE: _____ TYPE OF INSPECTION: _____

OCCUPANCY PERMITTED: YES ___ NO ___ PARTIAL: _____ DATE: _____

ORDER TO COMPLY ISSUED: YES ___ NO ___

STOP WORK ORDER ISSUED: YES ___ NO ___

OUTSTANDING ITEMS: _____

WHY FILE NOT COMPLETED: _____

MINUTES OF INSPECTORS' MEETING

Thursday, December 15, 1994
Boardroom C-15, 3:00 p.m.

Attending: G. Mazza, M. Shlemkevich, G. Lewis, J. Dupuis, K. Anderson,
R. Beaudry, W. Skyba, R. Pitre, K. Kaltiainen, T. Pileggi,
A. Mazzuchin, M. Riopel
Absent: R. Henri, R. Vincent

The Inspectors indicated that there are many outstanding and active permit files for detached accessory buildings. In most instances, the application of the exterior cladding is required to complete the project file, however, this work is usually delayed and postponed by the property owner. Ideally, if these files were to be completed, more time may be allotted towards the much larger projects. *The following policy is now in full force and effect as a result of the discussion*

POLICY STATEMENT - ACCESSORY BUILDINGS

Active accessory building files are to be "conditionally closed" where only the exterior cladding remains to "fully complete" the file. The owner/applicant is to be given an **INSPECTION NOTICE** which describes the outstanding item with an advisory that a final inspection may be performed with notification by the owner of all work being fully completed.

Also, with respect to accessory buildings, the Inspectors explained that the structural framing components are often covered with sheathing prior to the owner requesting a framing inspection. The question was whether to issue an Order to Comply requiring the owner to expose the framing for the purpose of an inspection. *The following policy is now in full force and effect as a result of the discussion:*

POLICY STATEMENT - ACCESSORY BUILDINGS

An accessory building file can be fully completed, with the framing not being inspected and covered, providing there are no obvious defects. The owner must, however, provide a written declaration that the project is constructed in accordance with the plans and specifications that form part of the permit and the project is constructed in compliance with the Ontario Building Code.

Mike Shlemkevich will prepare a form letter which can be completed at the site by the owner, which may serve as this declaration.

....cont'd

With the exception of the Town of Rayside-Balfour, Building Controls is responsible for the inspection of swimming pool enclosures. Rayside-Balfour has chosen to enforce its own pool enclosure by-law. Building Controls is also responsible to ensure pool location conformity with the zoning regulations. *The following policy is now in full force and effect as a result of the discussion:*

POLICY STATEMENT - SWIMMING POOLS

Building Inspectors are to review the pool location and enclosure to ensure conformity with the regulations. In the event a violation is noted, the Inspector will immediately direct the file to Regional By-Law for enforcement. If a pool violation in Rayside-Balfour is noted, the Inspector is to advise Joe Steen, Rayside-Balfour By-Law Enforcement Officer. The file may then be closed.

PROCEDURES

In an effort to complete some of the active postdated files the Inspectors will be required to retrieve postdated files in the area where their assigned "called in" calls are scheduled on any given day. The Inspectors will allot time in the morning to telephone the property owner to make an appointment for an inspection. Each Inspector is to set up a postdated call box on their desk with postdated files; an accurate and up-to-date list of any files retained by the Inspector is to be provided and submitted to the front desk clerks for their records.

Meeting Adjourned at 4:25 p.m.

Minutes prepared by Mike Shlemkevich



cc: G.Y. Martin



The
Regional
Municipality
of
Sudbury

La
Municipalité
Régionale
de
Sudbury

Bag 3700
Station 'A'
Sudbury, Ontario
P3A 5W5

(705) 673-2171

Sac 3700
Succursale 'A'
Sudbury, Ontario
P3A 5W5

(705) 673-2171

_____, 1995

Owner's Name _____

Property Description _____

RE: BUILDING PERMIT # _____

Description of Work _____

I, _____, Owner of the above-referenced property certify and acknowledge that the work described and documented for the above work in the building permit file, has been completed as per the drawings and documents submitted by myself, and/or the assigned agent.

Owner's Signature

Please Print Name



Interoffice Correspondence

To: All Building Inspectors

From: Guido A. Mazza, P. Eng.
Chief Building Inspector

Subject: Annual Vacation
Building Inspection Section
Building Controls Division

In the past, a 10-week period has been established as a peak work period for the Building Controls Section. This period has included part of the last week of June, all of the months of July and August, and part of the first week of September. During this period Building Inspectors were allowed to schedule two weeks of vacation time and one Inspector at a time was permitted to be away on annual leave.

In order to allow all the Employees in the Building Inspection Section to enjoy time off during the prime summer period, that period which coincidence with the peak work period, a more equitable and beneficial formula will be put into effect to allow all Employees in the Building Inspection Section to schedule part of their annual vacation allotment during this peak work period. The following policy is hereby being implemented.

Each Building Inspector will be permitted to schedule a period of two weeks of vacation during the peak work period and, no more than two Building Inspectors will be permitted to be away on vacation at the same time during this established peak work period.

When all the Building Inspectors have scheduled their initial two-week vacation period according to Employee seniority, the balance of the vacation allotment can then be scheduled, again by order of seniority.

It is agreed that this policy is subject to review when deemed necessary by the Employer.

It is also agreed that all Employees in the Building Inspection Section will cooperate to the best of their ability to ensure that the demands of the work load in the Building Inspection Section will be met, and that all Inspectors agree to share equally in this obligation.

A handwritten signature in black ink, appearing to read "J. Han", with a long horizontal stroke extending to the right.

INSULATION FOR DWARF FOUNDATION WALLS

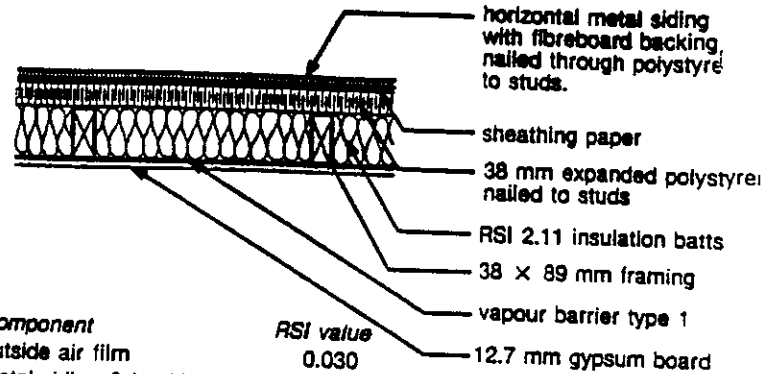
Question:

What is the minimum thermal resistance required for a dwarf stud wall located on top of a block or concrete foundation wall?

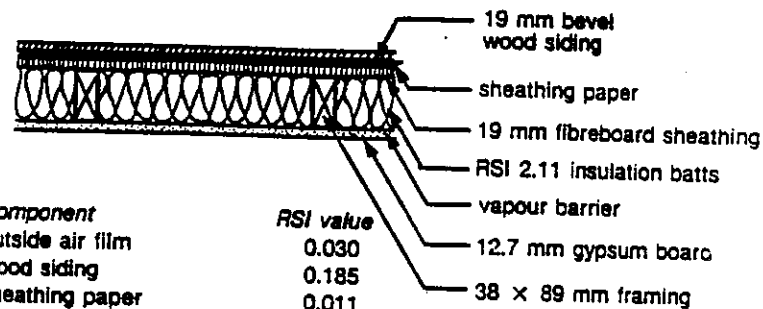
Answer:

The wood stud portion of the wall would require a minimum thermal insulation value of RSI 2.11 (R 12) as stated in Table 9.25.2.A. for foundation walls enclosing heated space. The Table does not establish differences in masonry, concrete or wood foundation walls.

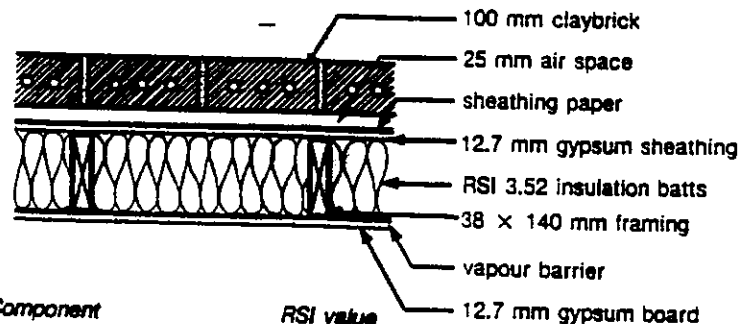
NOTE: When a foundation wall does not directly support the floor framing system (ie. the floor is supported by a dwarf wall bearing on top of the foundation wall) the block or concrete foundation wall is to be considered laterally unsupported for the determination of the maximum allowable backfill height in Table 9.15.4.A.



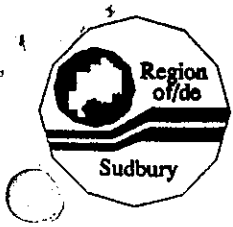
Component	RSI value
outside air film	0.030
metal siding & backing	0.248
sheathing paper	0.011
38 mm expanded polystyrene insulation	0.977
vapour barrier	—
12.7 mm gypsum board	0.081
inside air film	0.120
Total RSI value	3.575



Component	RSI value
outside air film	0.030
wood siding	0.185
sheathing paper	0.011
fibreboard sheathing	0.314
insulation	2.110
vapour barrier	—
gypsum board	0.081
inside air film	0.120
Total RSI value	2.851



Component	RSI value
outside air film	0.030
brick	0.074
air space	0.171
sheathing paper	0.011
gypsum sheathing	0.081
insulation compressed from 150 mm to 140 mm	3.380
vapour barrier	—
gypsum board	0.081
inside air film	0.120
Total RSI value	3.948



Interoffice Correspondence

May 1st, 1996

TO: INSPECTORS
PLANS EXAMINERS

FROM: GUIDO A. MAZZA, P. ENG.

SUBJECT: NOTICE OF MEETING

Your attendance is requested at an Inspectors' meeting on Friday, May 3rd, 1996, from 3:00 p.m. to 4:00 p.m. in Room C-10, SRDC Boardroom, main floor, Civic Square.

Please plan your schedules for Friday accordingly.

Thank you.

Kerry

for. GUIDO A. MAZZA, P. ENG.
CHIEF BUILDING OFFICIAL
REGIONAL MUNICIPALITY OF SUDBURY
*kcs

cc: M. Barker
L. Lariviere

Minutes of meeting - do not put see notes or similar on Bldg inspection approvals, only name and date.



Interoffice Correspondence

February 1, 1993

TO: INSPECTORS
FROM: B. A. FRANSEN
SUBJECT: INSPECTION PROCEDURES

I note that the Inspectors include in their comments the statement "No time to inspect".

Whenever an inspection is not done because of time limitations, the Inspector is to arrange for an alternate time to do the inspection.

These repeat inspections will take precedence over other inspections.

COMMENT

It is apparent that the inspection schedules are being disrupted by the inspections not being done by virtue of time limitations.

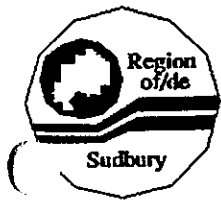
In the event these are mandatory inspections, every effort must go towards having them done before a project is completed.

Should you have any questions whatsoever, please discuss with Roger O'Malley or myself at your convenience.

B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS.
BAF*kcs

cc: R. O'Malley

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Interoffice Correspondence

February 19, 1993

TO: INSPECTORS

FROM: B. A. FRANSEN

SUBJECT: CONDITIONS FOR OCCUPATION OF BUILDINGS

A meeting was convened in the Social Services Boardroom to review the documents and the procedures that will affect the occupation of buildings in the Regional Municipality of Sudbury.

In the event that you missed the meeting would you please ensure that you obtain copies of the documents and acquire the information that will acquaint you with the current procedures. This is an important new step in our procedures and you will want to be able to convey the information to the constructors throughout the region.

B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS.
BAF*kcs

Kerry would you please obtain the services of a printer so that we can have some books prepared which provide us with the appropriate documents in triplicate.



Interoffice Correspondence

November 23rd, 1995

**TO: BUILDING INSPECTORS
PLANS EXAMINERS**

FROM: GUIDO A. MAZZA, P. ENG.

**SUBJECT: INNOVATIVE MATERIALS
SYSTEMS OR BUILDING DESIGN
SECTION 29 OF THE ONTARIO BUILDING CODE**

Recently, there have been a number of innovative material products and systems being used in residential projects within the Region, which, in some cases, do not have a Building Material Evaluation Commission (BMEC) number or a Minister's ruling approving their use. Please find attached to this memo a copy of an excerpt from the Building Action Newsletter that should be self-explanatory.

In the event that you should be out in the field and you are confronted with what you consider to be an innovative material product and/or system, you should follow the following procedure:

- 1) If the product and/or system does not appear in the drawings submitted and approved for the Building Permit, an Order to Comply should be issued under Section 8(13) "Prohibition". The product, material and extent of use should be described under the "nature of contravention" section of our Order to Comply form. As well, the contractor should note the following on the Order to Comply form: "Do not cover or enclose, pending inspection".
- 2) The contractor should be notified that a "BMEC" product number with the associated evaluation report should be provided to our office so that you may properly evaluate the installation. A Canadian Construction Materials Centre (CCMC) evaluation report with an associated Ministry's ruling can also be substituted for a BMEC product number.

...../2

- 3) The inspector should read the evaluation report, ensure that it is still valid with the appropriate evaluation agency and inspect the site. Any uncertainties or questions arising from your investigation should be brought to the Chief Building Official's attention for consideration and resolution.

This memorandum shall serve as the basis for a "Building Controls Standard Practice Sheet" on the subject, and any suggestions from the Field Inspectors or Plans Examiners would be appreciated. Thanks.



GUIDO A. MAZZA, P. ENG.
CHIEF BUILDING OFFICIAL
REGIONAL MUNICIPALITY OF SUDBURY
GAM*kcs

Attach.

Unfortunately, some municipal staff rely on a long-standing acquaintance with some builders, without considering the possibility the builders could have let their registration expire, may have had their registration revoked, produced a false registration number or been unaware of ONHWP and the law.

If building permit applicants declare themselves as owners, the construction of the home should be monitored by the municipality. Any signs of builder activity should be reported to ONHWP.

Recent statistics from ONHWP show that approximately 30 to 40 per cent of building permit applications are from "owners", and up to 15 per cent of these "owners" are unregistered builders.

If an unregistered builder is apprehended, the declaration of ownership form will be used as evidence in court to support the charges. Two builders who refused to accept their warranty obligations are currently being prosecuted by ONHWP's Enforcement Group.

While an investigator's primary role is to enforce the Ontario New Home Warranties Plan Act, ONHWP prefers to see a builder comply with ONHWP's objectives. Efforts to educate these illegal builders are paying dividends, as shown by the 84 investigated builders who registered in 1994 and enrolled 697 homes and condominium units.

ONHWP is promoting the use of the Permit Declaration Form by the building officials and the 818 municipalities across Ontario. It is a natural part-

nership between building officials and ONHWP to implement the Permit Declaration Form since under the Building Code Act a building permit for a new home built for sale cannot be issued unless the builder or vendor is registered with ONHWP. Also, the Ontario New Home Warranties Plan Act requires that each home or condominium unit built for sale must be enrolled with ONHWP.

If you are a building official and wish to implement the Permit Declaration Form in your municipality or you have any information about an unregistered builder, contact your nearest ONHWP Office or call 1-800-668-0124.

Carole Bennett is the vice president of Client and Technical Services for the Ontario New Home Warranty Program.

COMMISSIONS AND MINISTERS' RULINGS

RULINGS OF THE MINISTER OF MUNICIPAL AFFAIRS & HOUSING

Section 29 of Ontario's Building Code Act 1992 (BCA) authorizes the Minister of Municipal Affairs and Housing to make Rulings approving the use of innovative materials, systems or building designs evaluated by a materials evaluation body designated in the Ontario Building Code (OBC).

The Canadian Construction Materials Centre (CCMC) has been designated in the OBC as a materials evaluation body for the purposes of these Rulings. A CCMC Evaluation Report is an opinion on the suitability of a product for its intended use. In most cases that opinion relates to the ability of a product to meet the intent of the requirements of the National Building Code, the OBC and/or other provincial des.

A Ruling of the Minister of Municipal Affairs and Housing is based on a CCMC Evaluation Report. It entitles a

person to use the approved material, system or building design in all of Ontario unless stated otherwise (see BCA s.29(5)). The use of the approved material, system or building design in the manner approved in the Ruling is deemed not to be a contravention of the OBC (see BCA s.29(6)).

Rulings of the Minister contain terms and conditions which should be carefully reviewed by persons who will make use of the Rulings. Particular attention should be paid to the following terms and conditions which are contained in all Rulings:

- the use of the approved material, system or building design must comply with the BCA and, except as specifically provided in the Ruling, with the OBC and
- the use of the approved material, system or building design must be in accordance with CCMC Evaluation Report upon which the Ruling is based, unless otherwise specified in the Ruling.

Each Ruling of the Minister is given a file number (eg. 94-01-01- (12563-R)). The digits in brackets represent the corresponding CCMC Evaluation number for the subject material, system or building design. It would be helpful to provide a copy of the CCMC Evaluation with the Ruling when applying for a building permit.

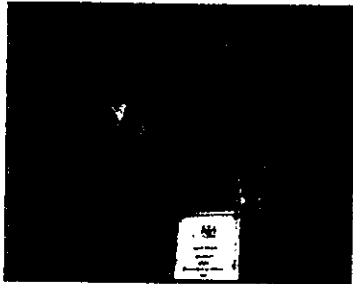
Brief descriptions of Minister of Municipal Affairs and Housing Rulings are provided to the Ontario Building Officials Association, the Ontario Association of Architects and the Professional Engineers of Ontario, for publication. Further information about Rulings of the Minister is available by contacting the Housing Development and Buildings Branch of the Ministry of Municipal Affairs and Housing at (416) 585-6666.

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COMMISSION NEWS



*Ali Arlani,
Manager
and
Michael
Wong*



*Ali Arlani,
Manager
and Sarah
Maman*

board or agency, Sarah Maman, Chair, and David Lam and Michael Wong have stepped down as members of the Building Code Commission (BCC). During Sarah's term, new policies and procedures for the operation of the BCC were established, resulting in an average processing time of 31 days from receipt of application to decision. This resulted in significant cost savings to both private and public sector participants in the building industry.



*Susan
Friedrich,
Commision
Member,
Roy
Philippe,
Chair*

Roy Philippe replaces Sarah as chair of BCC. Mr. Philippe is a graduate of the University of Ottawa in Chemical Engineering and a member of the Professional Engineers of Ontario. He was employed with the Office of the Fire Marshal, Ministry of the Solicitor General, and held the position of Deputy Fire Marshal. Roy retired from the OFM in December, 1993.

In addition, Michael Lio has been appointed Vice-Chair. Michael has an Engineering degree in Building Science and is a professor at Ryerson Polytechnic University. He also consults as a building code specialist with regard to housing and is a facilitator for the Ministry of Municipal Affairs and Housing's Building Code technical training programs.

As provincial policies do not allow an individual to serve for more than six years as a member of a commission,

BUILDING CODE ACT, 1992 RULINGS OF THE MINISTER OF MUNICIPAL AFFAIRS & HOUSING

The following Rulings have been made to-date:

Ruling Number	Issue Date	Material, System or Building Design	Manufacturer\Agent
94-01-01-(12563-R)	94-09-28	ISOFOAM® SS-1300	IPI Canada Kingsley & Keith (Canada) Inc.
94-02-02-(12420-R)	94-09-28	Enviro-Shield	Thermo-Cell Insulation (1983) Ltd.
94-03-03-(09877-R)	94-09-28	TIC 75/K-13/NIC PLUS Spray-on Insulation	Can-Cell Industries
94-04-04-(12344-R)	94-09-28	WallBAR	Can-Cell Industries
94-05-05-(12505-R)	94-09-28	Airmetic 223	DEMILEC Inc.
94-06-06-(12423-R)	94-09-28	ACFoam-I™/Stucco-Shield®	Atlas Roofing Corporation
94-07-07-(12422-R)	94-09-28	ACFoam Supreme™/ Energy-Shield®	Atlas Roofing Corporation
94-08-08-(12464-R)	94-09-28	ACFoam-I™	Atlas Energy Products
94-09-09-(12380-R)	94-09-28	Heatlok 0240	ICI Polyurethanes
94-10-10-(12413-R)	94-09-28	ArmourGard Ice and Water Protector (IKO)	IKO Industries Limited
94-11-11-(11678-R)	94-09-28	Weatherdek GT-300	ADS Weatherdek Canada Limited
94-12-12-(10241-R)	94-09-28	Decrabond	Carter Holt Harvey Roofing International
94-13-13-(12325-R)	94-09-28	Onduline	Onduline Incorporated
94-14-14-(12543-R)	94-09-28	Alcoa Home Crest Shingles/ Country Cedar Shakes	Alcoa Building Products
94-15-15-(10930-R)	94-09-28	Surco seal	Ensurco Duradek (Canada) Ltd.
94-16-16-(12384-R)	94-11-21	Adjust-A-Track Window Conversion Kit	Adjust-A-Track Ltd.
94-17-17-(12331-R)	94-11-21	Fibertherm 325 Fixed	Omniglass Ltd.
94-18-18-(12332-R)	94-11-21	Fibertherm 325 Awning	Omniglass Ltd.
94-19-19-(12333-R)	94-11-21	Fibertherm 325 Casement	Omniglass Ltd.
95-01-20-(12536-R)	95-01-29	The Royal Housing System	Royal Building Systems (Cdn.) Limited
95-02-21-(12555-R)	95-01-23	BRIG - EEZ™	BRIG-EEZ Incorporated
95-03-22-(12416-R)	95-03-02	STO Exterior Insulation and Finish System	STO Industries Canada Inc.



Interoffice Correspondence

January 27, 1993

**TO: INSPECTORS
PERMIT CONTROL CLERKS
PLANS EXAMINERS**

FROM: B. A. FRANSEN

**SUBJECT: INTERPRETATION OF CITY OF SUDBURY ZONING BY-LAW 62-192
PARKING REQUIREMENTS/SENIOR CITIZENS' DWELLING UNITS**

You will find attached three pages copied from the City of Sudbury zoning by-law which describe the parking requirements for senior citizens' dwelling units. Mr. Glenn Lewis brought this matter to my attention and, because of its significance, I view it as something that we all should become aware of.

You will note that the parking requirements for dwellings are described under Section 2.1.6.(a), which reads as follows:

"Dwellings (68-89)

Minimum one parking space for each dwelling unit. Multiple Family dwellings containing more than six (6) dwelling units in all Districts except in "C-3" and "C-M", one additional space for every 2 units. Allowance for driveway shall be not less than 2.70 m (8.9') clear of all projections, excepting eaves."

Special consideration must be given to those proposals that are described as senior citizens' dwelling units where the parking requirements is described as "one parking space for every four dwelling units".

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If an application is submitted and the applicant proposes to construct a senior citizens' dwelling, the dwelling units must satisfy the conditions spelled out in Section 1.49(a) of the zoning by-law, which reads as follows:

"Senior citizens dwelling units means dwelling units erected by the municipality or a non-profit organization where there is no return on equity and where the financing is under Section 16 of The National Housing Act and where all tenants, other than the caretaking staff, are sixty (60) years of age or older." (70-29)

You will note that there are some very specific requirements for a senior citizens' dwelling which must be met before the reduced parking provisions can be applied to the proposal. These are listed in order as:

- (a) dwelling units erected by the municipality or in non-profit organization
- (b) no return on equity
- (c) financing is under Section 16 of the National Housing Act
- (d) where all tenants other than the caretaking staff are 60 years of age or older.

As you can see, the specific requirements to be classified as a senior citizens' dwelling are quite onerous, and these must be met before giving approval to erect a senior citizens' dwelling and applying the reduced parking restrictions.



B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS.
BAF*kcs

Attach.

cc: B.R. Gutjahr
W.E. Lautenbach
P.J. Morrow
R.M. Swiddle
J.A. Darmanin
M. Kivistik

DEFINITIONS (CONT'D)

- is a continuation of the front lot lines of the lot to its rear.
- 1.42 LOT - THROUGH: A lot having frontage on two parallel or approximately parallel streets.
- 1.43 LOT - WEDGE: A lot having the lot frontage shorter than the rear lot line, or vice-versa.
- 1.44 LOT - WIDTH: The average horizontal distance between the side lot line measured at right angles to the lot depth.
- 1.45 LOT LINE - FRONT: The lot line abutting the street. In the case of a corner lot, the shorter line that abuts a street shall be deemed the front lot line and the longer lot line that so abuts shall be termed the flank of the lot.
- 1.46 LOT FRONTAGE: The measurement of the front lot line.
- 1.47 LOT LINE - REAR: The lot line furthest from and opposite to the front lot line.
- 1.48 LOT LINE - SIDE: A lot line other than a front or rear lot line.
- 1.48(a) MOBILE HOME: Any dwelling that is designed to be made mobile, and constructed or manufactured to provide a permanent residence for one or more persons, but does not include a travel trailer or tent trailer or trailer otherwise designed. (80-148)
- 1.49 PARKING AREA - PUBLIC: An open area, other than a street, for the parking of more than four (4) vehicles.
- ~~1.49(a) "Senior citizens dwelling units means dwelling units erected by the municipality or a non-profit organization where there is no return on equity and where the financing is under Section 16 of The National Housing Act and where all tenants, other than the caretaking staff, are sixty (60) years of age or older." (70-29)~~
- 1.49(b) PINBALL OR ELECTRONIC GAME MACHINE ARCADE: Any premises or part thereof containing more than three pinball or mechanical or electronic game machines. (82-63)

and maintain at the time of such erection, enlargement, or use on the same lot with the building or structure, off street parking for its occupants with adequate provision for ingress and egress of automobiles to or from a street or land as follows:" (70-29)

a) Dwellings (68-89)

Minimum one parking space for each dwelling unit. Multiple Family dwellings containing more than six (6) dwelling units in all Districts except in "C-3" and "C-M", one additional space for every 2 units. Allowance for driveway shall be not less than 2.70 m \varnothing clear of all projections, excepting eaves.

b) Rooming and Boarding Houses

One parking space for each dwelling unit; plus one additional parking space for every two rooms for hire.

c) Hotels and Apartment Hotels

One parking space for each dwelling unit; plus one additional parking space for each of the first twenty (20) individual guest rooms or suites; plus one additional parking space for every four (4) guest rooms or suites, in excess of twenty (20) but not exceeding forty (40); plus one additional parking space for every six (6) guest rooms or suites in excess of forty (40) provided in such building.

d) Tourist Courts, Auto Courts, Motor Lodges, Cabins & Motels

One parking space for each individual guest room or suites.

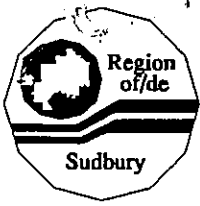
2.1.7 (cont'd)

- x) Automotive (new) Equipment Shop in "C4"
One parking space for each 18.00 m² of gross floor area, plus one additional parking space for every four (4) employees.
- y) Senior Citizen's Dwelling Units, one parking space for every four dwelling units. (72-168)
- z) An additional provision of one parking space for every 27.00 m² of floor area is required wherever a "Wholesale Cash and Carry-Out" business is introduced to the above mentioned uses. (68-89)

2.1.8 Parking Space Area and Location (80-47)

All parking spaces required by this by-law for a building or land use shall measure not less than 2.70 m by 6.00 m and must be provided with proper driveways.. No required parking spaces shall be located in the required front yard in any Residential Districts. All required parking spaces must be located on the same lot as the use or building or may be located on a separate lot provided that:

- a) It is zoned either C1, C2, C3, C4, M1, M2 or M3, and is within 90.00 m of the lot for which parking is required;
- b) The two lots are owned by the same owner; and
- c) A covenant is registered in the Registry or Land Titles Office to the effect that the land can be used only to provide for the parking for the other lot.



Interoffice Correspondence

December 9, 1992

**MEMO TO: PLANS EXAMINERS
INSPECTORS
PERMIT CONTROL CLERKS**

FROM: B. A. FRANSEN

RE: ZONING INTERPRETATION - 300 SERIES ZONING BY-LAWS

You will find attached a list of material compiled by Donna Noel de Tilly, that demonstrates the application of the zoning by-law to rear yard requirements.

It is extremely important to note that the definition of **CORNER SIDE YARD** means a yard extending from the front yard to the rear lot line of a corner lot and from the flankage lot line of such lot to the nearest part of any main building or structure on such lot.

REAR YARD means a yard extending across the full width of a lot between the rear lot line of such lot and the nearest part of any main building or structure on such lot, **BUT EXCLUDING ANY PART OF A CORNER SIDE YARD AS DEFINED HEREIN.**

CONSEQUENCE:

The zoning requirements spelled out herein, attempts to explain the need to give extra care to the determination of **REAR YARDS** and the subsequent affect on **REAR YARD COVERAGE** when constructing accessory buildings in the **REAR YARD.**

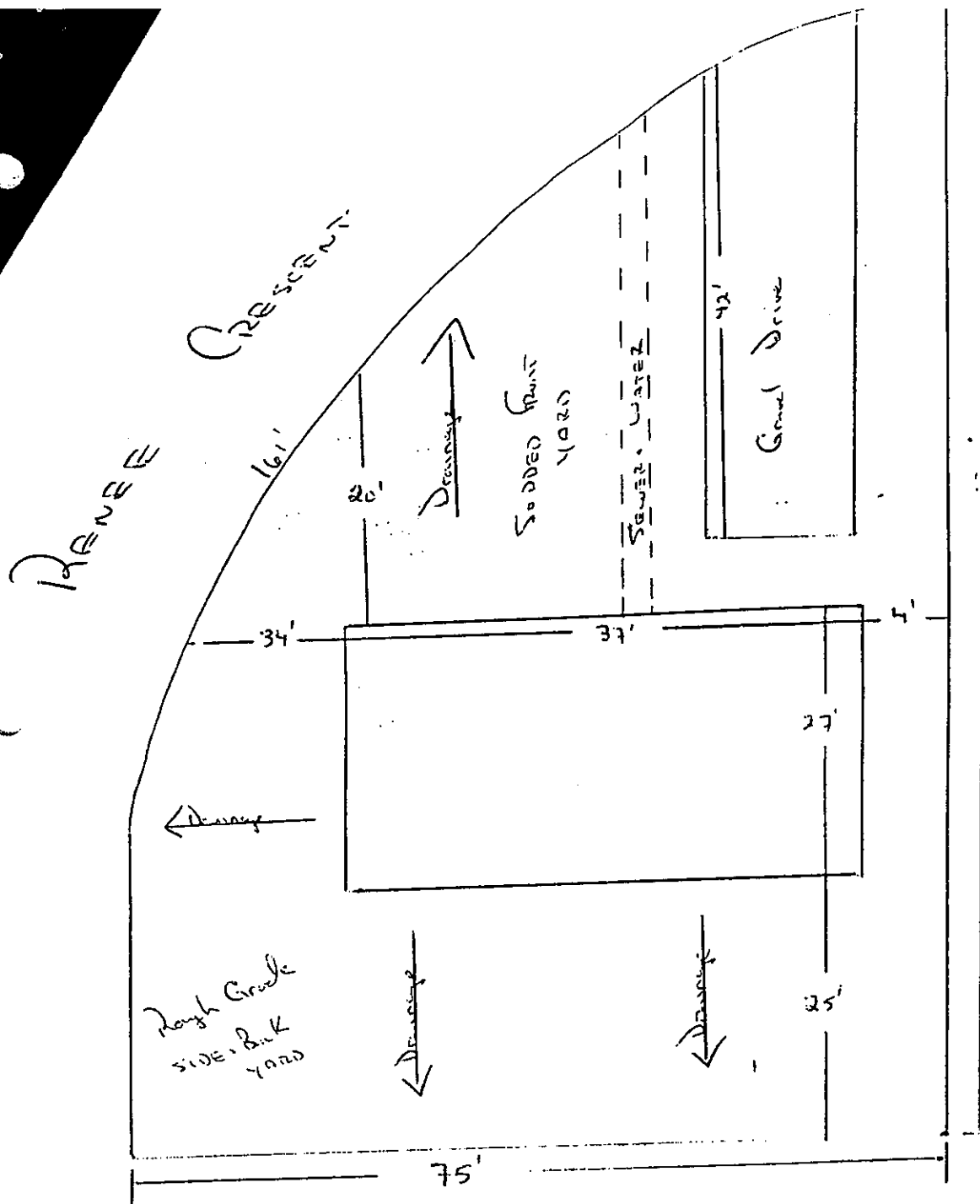
Please peruse the material carefully and should you have any questions whatsoever, please discuss with Donna, Bryan, Roger or myself.

**B.A. FRANSEN, P.ENG.,
DIRECTOR OF BUILDING CONTROLS
BAF*lm**

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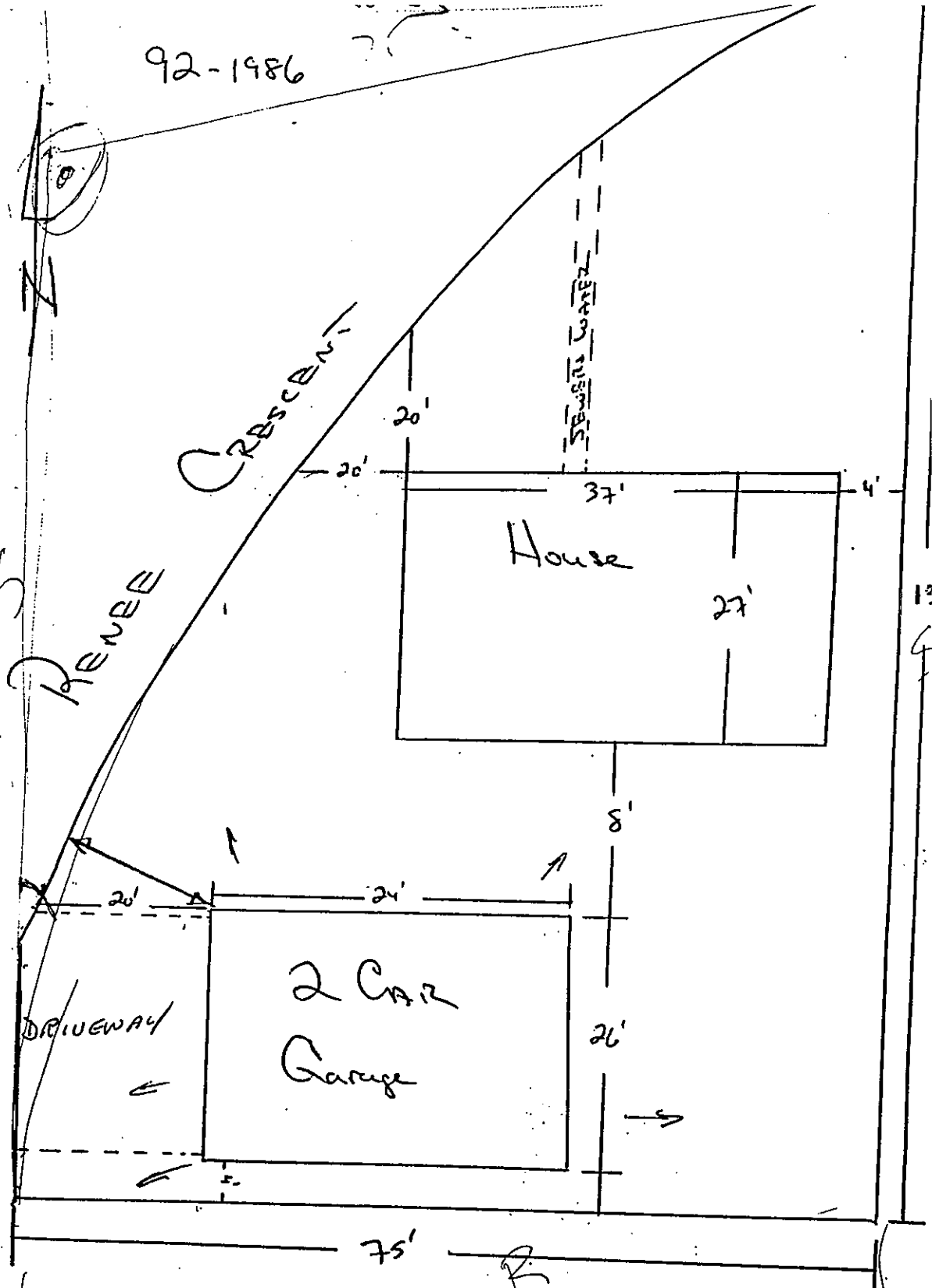
- (109) (a) "LOT" means an area of land under one ownership, other than a road, which is used as the site of, and pertains to, one or more main buildings, structures or uses, together with any buildings, structures or uses accessory thereto, regardless of whether or not such area of land constitutes a registered lot.
- (b) "CORNER LOT" means a lot located directly adjacent either to an intersection of two or more roads or to a bend in a road, where the said intersection or bend has an interior angle, measured along the street lines of such lot, of not more than 135 degrees, but does not include any lot having three or more distinct interior lot lines where such lot is so shaped that, if it were deemed to be an interior lot, the lot frontage of such lot would be less than the lot depth thereof.
- (c) "REVERSE CORNER LOT" means a corner lot the rear lot line of which abuts a key lot.
- (d) "INTERIOR LOT" means any lot which abuts a road but which is not a corner lot.
- (e) "KEY LOT" means an interior lot having an interior side lot line which coincides with the rear lot line of a corner lot.
- (f) "THROUGH LOT" means an interior lot abutting two or more roads.
- (g) "LANDLOCKED LOT" means a lot which does not abut a road, other than a waterfront lot.
- (h) "WATERFRONT LOT" means a lot having a shoreline but no street line.
- (i) "THROUGH WATERFRONT LOT" means a waterfront lot having two or more separate shorelines.
- (110) "LOT AREA" means the total horizontal area within the lot lines of a lot, excluding any part of a navigable waterbody.
- (111) "LOT COVERAGE" means that part of a lot, or that percentage of the lot area of a lot, covered by the perpendicular projections onto a horizontal plane of all buildings on the lot.

- (112) "LOT DEPTH" means the shortest horizontal distance between the mid-point of the front lot line of a lot and the mid-point of the rear lot line of the said lot.
- (113) "LOT FRONTAGE" means the horizontal distance between the side lot lines of a lot, such distance being measured:
- (i) along a line perpendicular to the side lot lines, in the case either of a lot having parallel side lot lines or of a corner lot having a bent corner but where the side lot lines are parallel except for such bend; or
 - (ii) along a line which is parallel to, and 6 m distant from, the front lot line, in any other case.
- (114) (a) "LOT LINE" means any boundary of a lot or the vertical projection thereof.
- (b) "FRONT LOT LINE" means:
- (i) in the case of an interior lot other than a through lot, the street line of such lot;
 - (ii) in the case of a corner lot where:
 - 1. the street lines are not of equal length, the shorter street line
 - 2. where the street lines are of equal length, either street line shall be deemed a front lot line provided that the resulting lot frontage of the said lot does not exceed the resulting lot depth thereof;where the street lines meet in a curve or in a series of straight lines which together form a bend, the street line shall be deemed to include the projection of a straight street line, or in the case of a curve, the projection of the tangent of the curve to their point of intersection;
 - (iii) in the case of a through lot, any one street line of such lot, other than a street line abutting a reserve established by a public agency to restrict or control access to an abutting road from such lot.



LOT 120 RENE
 Plan 53m-1095
 Zoning - R1

92-1986



Lot 120 Renee Crescent

Plan 53m-1095

Zoning R1

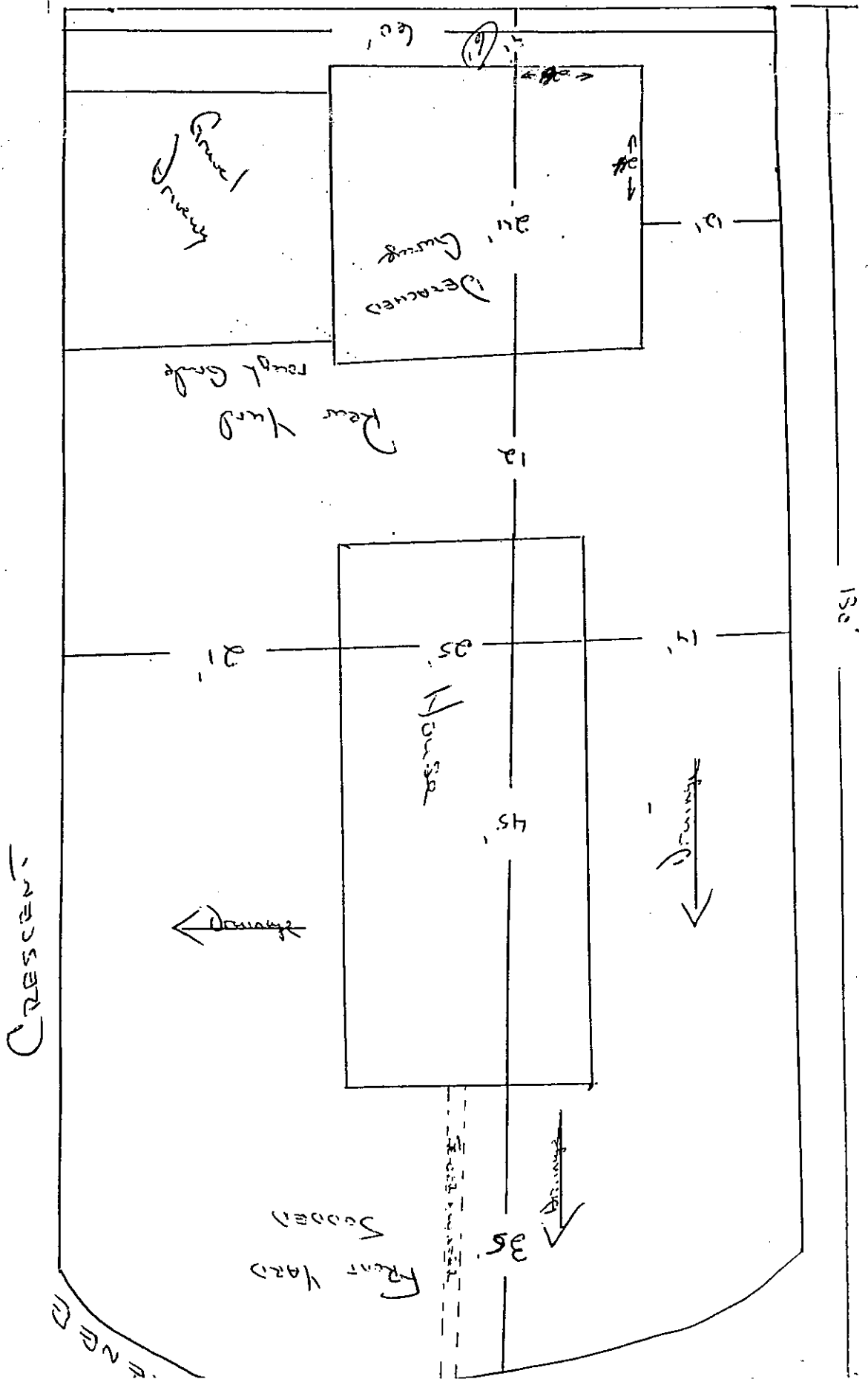
KFM

- Revised Plot Plan - NOT

1201

- (d) "REAR YARD" means a yard extending across the full width of a lot between the rear lot line of such lot and the nearest part of any main building or structure on such lot, but excluding any part of a corner side yard as defined herein.
- (e) REAR YARD DEPTH" means the shortest horizontal dimension of a rear yard between the rear lot line of a lot and the nearest part of any main building or structure on such lot.
- (f) "INTERIOR SIDE YARD" means a yard extending from the front yard to the rear yard of a lot and from an interior side lot line of such lot to the nearest part of any main building or structure on such lot.
- (g) "INTERIOR SIDE YARD WIDTH" means the shortest horizontal dimension of an interior side yard between an interior side lot line of a lot and the nearest part of any main building or structure on such lot.
- (h) "CORNER SIDE YARD" means a yard extending from the front yard to the rear lot line of a corner lot and from the flankage lot line of such lot to the nearest part of any main building or structure on such lot.
- (i) "CORNER SIDE YARD WIDTH" means the shortest horizontal dimension of a corner side yard between the flankage lot line of a corner lot and the nearest part of any main building or structure on such lot.
- (j) "SIDE YARD" means an interior side yard or corner side yard.
- (k) "EXTERIOR YARD" means a yard abutting a street line, and includes a front yard and a corner side yard as defined herein.
- (l) "INTERIOR YARD" means a yard which is not an exterior yard.
- (m) "REQUIRED YARD" means that part of a yard which:
 - (i) is located adjacent to a lot line;
 - (ii) has the minimum front yard depth, rear yard depth or side yard width required hereby.

Lot 103 Jones Cres
Revised Plat Plan



PLAN
53R-7104

LANE

LINE BETWEEN THE N 1/4 AND THE S 3/4
OF LOT 5, CON. 2 GARSON

PART 8
PLAN 53R-7104

NATIONAL

JUDY
COURT

CANADIAN

AVENUE

RAVINA

RENÉE

CRESCENT

VICTORIA

PRIMROSE

JOHN

STREL

CEL 1584 S.E.S.

GOVERNING LINE

REQ'D

SEE

57

52 PLAN

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Interoffice Correspondence

February 2, 1993

TO: ~~INSPECTORS~~
PERMIT CONTROL CLERKS
PLANS EXAMINERS
BY-LAW ENFORCEMENT OFFICERS
SITE PLAN CONTROL OFFICER
PROJECT RESEARCH CLERK
COMMITTEE OF ADJUSTMENT

FROM: B. A. FRANSEN

SUBJECT: OCCUPANCY PERMITS

This memo will describe the current procedures connected with conditions for occupancy.

All buildings are regulated by Part 7 of the Building Code Act, which reads as follows:

"7. CONDITIONS FOR OCCUPANCY

Except as authorized by the regulations, no person shall occupy or use or permit to be occupied or used any building or part thereof newly erected or installed,

- (a) until notice of the date of completion of the building or part thereof is given to the chief official;
- (b) until,
 - (i) an inspection is made pursuant to such notice, or

....cont'd



- (ii) ten days have elapsed after the service of the notice or after the date of completion, whichever occurs last; and
- (c) until an order made by an inspector under section 8 is complied with. R.S.O. 1980, C. 51, S. 7"

The regulations, on the other hand, provide for the occupancy of unfinished buildings and takes into consideration two different size ranges of structures.

SMALL BUILDINGS

Firstly, I will describe the regulations and our procedures as they affect the occupancy of the smaller size range of buildings.

The regulations, under 2.4.3.2.(1), read as follows:

"A person may occupy or permit to be occupied a building intended for RESIDENTIAL occupancy that has not been fully completed at the date of occupation provided that

- (a) the building
 - (i) it not more than 3 storeys in building height,
 - (ii) has not more than 1 dwelling unit above another dwelling unit,
 - (iii) has not more than 2 dwelling units sharing a common means of egress, and
 - (iv) has no accommodation for tourists,

....cont'd

(b) the following building components and systems are complete and operation:

(i) required exits, handrails and guards, fire alarm and detection systems, and fire separations, and

(ii) water supply, sewage disposal, lighting and heating systems, and

(c) [not applicable].

2.4.3.3. Where a person has occupied or permitted the occupancy of a building under this Subsection, such person shall notify the chief official forthwith upon completion of the building."

PROCEDURES

1. Persons wanting to occupy those buildings described in Section 2.4.3.2.(1) must
 - (a) provide the chief official with a notice that the building or part thereof has been completed. This notice will confirm that the building's construction has progressed to the stage where occupancy is permitted.
 - (b) An inspection will be conducted upon receipt of the notice of completion.
 - (c) If the Inspector identifies any outstanding or new deficiencies, the appropriate Order will be issued.
 - (d) If it is determined that occupancy has occurred prior to a building having reached the stage when it can be occupied, then the appropriate Orders will be issued, and charges laid, if necessary.
 - (e) If there are no outstanding Orders at the time the Inspector conducts the inspection resulting from his having received a notice of completion, the building can be occupied.

....cont'd

LARGE BUILDINGS

2. All of the procedures that are currently in effect with respect to those buildings subject to the regulations described in Section 2.4.3.1.(2) will remain as is, i.e., larger buildings.

B. A. Fransen .

**B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS.
BAF*kcs**



Interoffice Correspondence

March 12, 1993

**TO: INSPECTORS
 PLANS EXAMINERS
 PERMIT CONTROL CLERKS
 BY-LAW ENFORCEMENT OFFICER**

FROM: B. A. FRANSEN

SUBJECT: 83 SERIES ZONING BY-LAWS

The attached information was assembled by Mr. Mike Shlemkevich and is intended to alert Building Controls Division employees to the restrictions placed on driveways resulting from site triangles.

You will note that this stems from the 83 Series Zoning By-Laws and should be reviewed carefully so that there is a clear understanding of its implications.

Would you kindly review the content of the document, and should you have any questions whatsoever please review the issue with Roger O'Malley or Mike Shlemkevich or this writer for clarification.

B. A. Fransen

**B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS.
BAF*kcs**

BERNIE :

RE:

DRIVEWAY ACCESS TO PARKING SPACE

— 83 SERIES —

AN INTERESTING AND RARE SCENARIO RESULTING FROM A RECENT APPLICATION FOR A SEMI-D WITH TWO SEPARATE DRIVEWAYS,

THE GENERAL PROVISIONS DESCRIBE PROHIBITION OF DWY. ACCESS THROUGH THE SITE TRIANGLE,

FOR YOUR INFO ONLY; PERHAPS GOOD ADVISORY TO FORWARD / DISCUSS WITH THOSE INVOLVED WITH ACCEPTING APPLICS.

Mike

(5) YARDS WHERE PARKING AREAS PERMITTED

Outdoor parking areas shall be permitted in any part of any yard, other than within a sight triangle, except that no required parking spaces shall be located:

- (i) in any required exterior yard in a Residential or Open Space Zone; or
- (ii) closer to any road or Residential Zone than 4.5 m in an Industrial Zone and 3 m in a Commercial or Institutional Zone. ^{14.7'}
_{9.8'}

(6) ENCLOSED PARKING AREAS

(a) MAIN USE ON LOT

Where a parking structure constitutes a main use on a lot, such structure shall conform to the zone requirements for the zone where it is located.

(b) ACCESSORY USE ON LOT

Where a parking structure constitutes an accessory use on a lot, such structure shall conform to the provisions for accessory uses set out in Section 1 of this Part.

(c) UNDERGROUND PARKING AREAS

Nothing in this By-law shall apply to prevent the location of an underground parking area in any part of any yard on a lot.

(7) ACCESS TO PARKING AREAS AND PARKING SPACES

(a) DRIVEWAYS AND PARKING AISLES

Access to required parking areas and required parking spaces shall be provided from a public road by means of 1 or more driveways which:

- (i) have a minimum width of ^{5.85'} 2.7 m;

- (ii) are not located within a sight triangle; and
- (iii) comply with any applicable regulations of the Region, an area municipality or the Ontario Ministry of Transportation and Communications pertaining to entrances onto public roads.

(b) DOUBLE PARKING

Each required parking space shall be accessible at all times for parking a vehicle without the necessity of moving any other vehicle, except that nothing in this By-law shall apply to prevent the parking of a vehicle in any part of a driveway accessory to a single dwelling.

(8) SURFACING OF PARKING AREAS AND DRIVEWAYS

Except in Open Space Zones, all parking areas and driveways providing access thereto shall be established and maintained with a stable surface, treated so as to prevent the raising of dust or loose particles and comprised in whole or in part of 1 or more of the following surfacing materials:

- (i) crushed stone, crushed brick or tile, gravel, cinders, or, except within a flood plain, slag or dry pack; or
- (ii) asphalt, concrete, Portland cement, paving stones or any other hard-surfaced material.

(9) SHELTERS FOR PARKING ATTENDANTS

Nothing in this By-law shall apply to prevent the erection of a shelter, for use solely by parking attendants or security personnel, in any part of a parking area except within a sight triangle, provided that such shelter does not exceed 4.5 m in height and 5 m² in gross floor area.

53.5 ft²

14.7'

SECTION 13

SIGHT TRIANGLES

(1) APPLICATION

Notwithstanding any other provision hereof to the contrary, the sight triangle requirements set out in this Subsection shall apply to any lot located at an intersection at grade either of 2 or more roads or of a road and a railway right-of-way, except that no sight triangle shall be required where this By-law does not require an exterior yard adjacent to any such road.

*FENCES RESTRICTED
TO 3' AT CORNER LOTS
85-1-16 (2)
W.M. PHOL*

PROHIBITION OF OBSTRUCTIONS

Within any part of a sight triangle as defined herein:

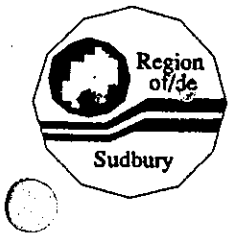
- (i) no building, structure, sign, wall or fence shall be erected, located or placed, in whole or in part;
- (ii) no vehicle shall be parked or stored;
- (iii) no land shall be graded; and
- (iv) no landscaping materials shall be located or allowed to grow,

in such a manner as to impede or obstruct in any way the field of view across such sight triangle for persons driving vehicles on an abutting road, but in no case greater than 0.9 m 2.95' in height above the average elevation of the said sight triangle, determined by averaging the elevations of the 3 corner points thereof.

(3) EXTENT OF SIGHT TRIANGLES

For the purpose of calculating the extent of a sight triangle as defined herein, the following distances shall apply:

- (i) ^{49.3'} 15 m, where a lot contains an automobile service station or a gas bar; and
- (ii) ^{29.5'} 9 m adjacent to an arterial road and ^{24.7'} 7.5 m in any other case, for any other lot.



Interoffice Correspondence

H:RMANBC...\\WPDATA\

February 20, 1998

MEMO TO: Building Inspection Staff
Building Permit Services Clerks

FROM: Guido Mazza, P.Eng.
Chief Building Official

SUBJECT: Procedure Documentation
Refreshment Vehicles/Chip Stands

Attached is a copy of modified procedures concerning the installation of refreshment vehicles/chip stands.

These procedures should serve to alleviate any confusion you may have had in the past as to when a building permit is required for this type of structure.

Should you have any concerns regarding these procedures, feel free to consult with me.

Guido Mazza, P.Eng.
Chief Building Official

Attach.

c.c. M. Tedeschi (FYI)



REGIONAL MUNICIPALITY OF SUDBURY BUILDING SERVICES SECTION PROCEDURE DOCUMENTATION

EFFECTIVE DATE: April 1, 1987	NO. OF PAGES: 2
REVISION DATE: February 19, 1998	DEPARTMENT: Planning and Development
PURSUANT TO POLICY: Directive from Director of Building Controls	SECTION: Building Services
	GROUP: Inspectors/Permit Control Group
	POSITION: Inspectors/Permit Control Clerks

APPROVAL OF REFRESHMENT VEHICLES/CHIP STANDS

HISTORY:

When refreshment vehicle operators come in to apply for approval for their units it is important that they be provided with the most current and up-to-date information affecting their facility.

These procedures were put in place by the Director of Building Controls in an inter-office memo to staff dated April 1, 1987. On December 30, 1991 these procedures were confirmed in another inter-office memo from the Director of Building Controls to Building Inspectors, the By-law Section and the Site Plan Control Section.

The following items are to be considered before authorizing the establishment of a refreshment vehicle:

- 1. A proposal should be supported by sufficient information to enable an inspector the opportunity to assess whether or not the refreshment vehicle complies with the zoning regulations. A drawing, showing the location of the refreshment vehicle and the surrounding buildings on the lot should be accurately described on a plot plan.
- 2. The use must satisfy the applicable zoning regulations.
- 3. The refreshment vehicles must not occupy parking spaces required by the buildings already on site.
- 4. Sufficient parking spaces must be provided to satisfy the zoning regulations determined by the size of the refreshment vehicle.
- 5. It must be established if a Site Plan Agreement currently affects the property and the refreshment vehicle is provided for in the agreement.

... 2/.

CROSS REFERENCES: - Inter-office memo dated December 30, 1991, including an inter-office memo dated April 1, 1987 from the Director of Building Controls to Building Inspectors, By-law Section and Site Plan Control Section.

DEPARTMENT HEAD W.E. Lautenbach	SECTION HEAD G.A. Mazza, Eng. 	PREPARED BY: I.S. Clarke, CPS, AMCT
---	---	---

APPROVAL OF REFRESHMENT VEHICLES/CHIP STANDS - continued

HISTORY - continued

- 2 -

6. The signs erected to advertise the refreshment vehicle activities and/or its menu, must satisfy the applicable zoning regulations.
7. The vehicle must be set back from the property lines to satisfy the current zoning regulations. February 19, 1998
8. All seating facilities connected with the refreshment vehicle must be shown on the drawing submitted.
9. The operator is to advise whether or not the refreshment vehicle is to be located at a single site or moved from place to place.

A Building Permit is only required if:

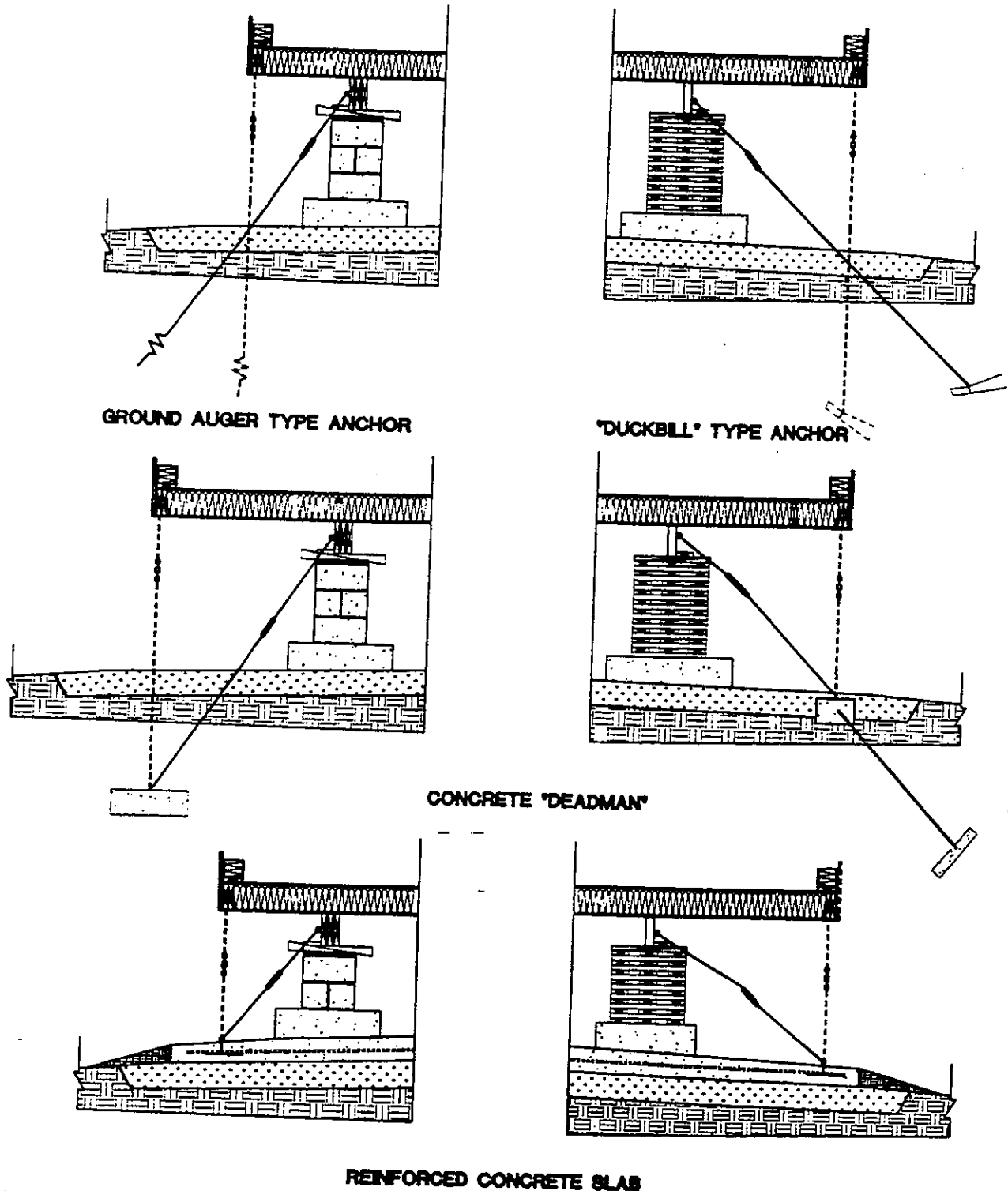
- ▶ structure or refreshment vehicle is directly connected to "hard services" such as sewer/water & hydro.

Note that refreshment vehicles/chip stands obtaining power via an extension cord plug-in are not considered connected to a "hard service". If hydro is supplied through a "mast" connected to the vehicle or structure, it is to be considered "hard" connected. The vehicle or structure, if connected to "hard service", must be underpinned with cribbing and anchored to resist overturning. Details for such work can be provided from those in CSA Standard 240.10.1-94. Site Preparation, Foundation and Anchorage of Mobile Homes, Figure C-4 Typical Anchorage Systems and Figure B8 - Wood Crib Pier Foundation, copies attached.

- ▶ structure or refreshment vehicle is not on wheels and requires cribbing and anchoring

Any questions with respect to this procedure should be directed to the Chief Building Official.

FEES:



Notes:

- (1) Diagonal tiedowns are effective in limiting lateral sliding on the foundation piers.
- (2) Vertical tiedowns, directly connected to the wall studs, provide the most effective resistance to uplift and overturning forces and should be considered for use at high wind load sites, particularly on the prevailing windward sides of the installation.

Figure C4
Typical Anchorage Systems
(See Clause 5.)

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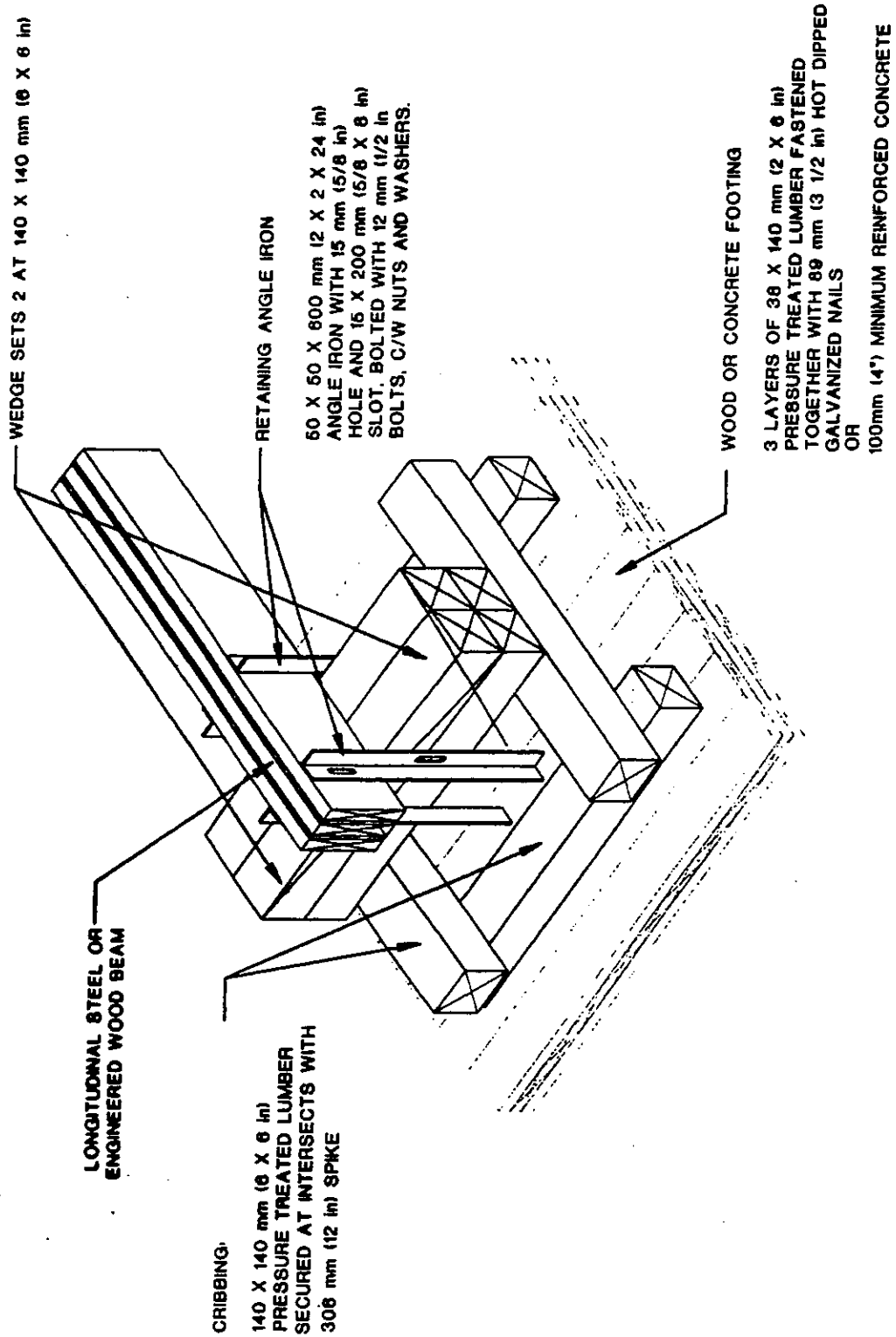
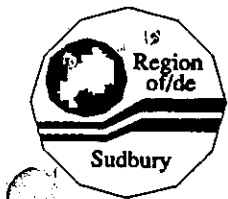


Figure B8
Wood Crib Pler Foundation



Interoffice Correspondence

March 9th, 1998

**TO: BUILDING INSPECTORS
PERMIT SERVICES CLERKS**

FROM: GUIDO A. MAZZA, P. ENG.

**SUBJECT: OFFICE PROCEDURES
OFF-PEAK PERIODS
POST DATES**

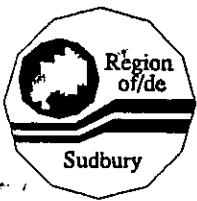
Please find attached a new draft procedure for processing of post-dated files. You will be advised of the date of implementation in the near future.

Thank you for your attention to this.

**GUIDO A. MAZZA, P. ENG.
CHIEF BUILDING OFFICIAL
*kcs**

Attach.

cc: G.Y. Martin



Interoffice Correspondence

March 6th, 1998

TO: BUILDING SERVICES STAFF

FROM: GUIDO A. MAZZA, P. ENG.

**SUBJECT: OFFICE PROCEDURES
OFF-PEAK PERIODS
POST DATES**

Based on meetings held with inspection staff, a procedural change is proposed. The normal priority for Inspectors' calls will be as follows:

- 1) called-in requested inspections or follow-up inspections with respect to Orders to Comply;
- 2) revocation notice inspections generated by Permit Control Clerks on behalf of Chief Building Official;
- 3) site sheets, i.e., inspections scheduled pursuant to public complaints and special assignments for C.B.O., C.A.O., Councillors, etc.;
- 4) postdates.

The first three assigned inspection types will continue as per present procedures. The postdates will be dealt with using a "team" approach. Each team will consist of a Plans Examiner, Permit Control Clerk, and Field Inspectors. The teams will be as follows:

Team "A"
***(Valley East, Nickel Centre,
Capreol, Onaping Falls)***

Lyne McInnes
Rheal Pitre
Richard Beaudry
Tony Pileggi

..../2

Team "B"*

Corrie Jo Caporale
Glenn Lewis
Mike Riopel
Rick Vincent

****This team will undertake all commercial calls, including postdate commercial calls, until further notice.***

Team "C"

***(City of Sudbury, Walden,
Rayside-Balfour)***

Julie Forget
Michael Shlemkevich
Richard Bisailon
Alfio Mazzuchin
Wendy Skyba

The Permit Control Clerks will assist in typewritten correspondence, ownership verification through OASYS and Water Billing, and phone calls during the day, if necessary. The Plans Examiners will serve as team captains to provide overall co-ordination, and be responsible for filling in of Inspectors' call sheets to reflect actual postdate calls undertaken that day from the assigned pool of postdates for Inspectors.

Upon commencement of this program, every Inspector will receive a pool of 20 postdates. Each day, every Inspector will receive his/her share of called-in inspections, site sheets and special assignments. The responsibility for postdated assignments will rest with the Inspector and the team Plans Examiner. The filled-in schedule showing postdate inspections are to be handed in as per usual practice at the end of the day to office staff. As postdated files are completed, conditionally closed or re-postdated files shall be withdrawn from the filing system by the team Plans Examiner for assignment to the Field Inspectors in the Plans Examiner's team.

The postdated file location will be monitored for each team and Inspector through a log chart binder maintained at the front desk. A sample of this log chart is attached for your information. The log book shall be maintained by the front desk staff in conjunction with the Plans Examiner team leaders.

Plans Examiners shall serve as a resource for Building Inspectors in lieu of meetings with the Chief Building Official. Plans Examiners will meet with the C.B.O. when required to discuss unusual situations which fall outside prescribed policy. The lead Plans Examiner for policy decisions will be Rheal Pitre, should the Chief Building Official be unavailable.

Workload distribution among Permit Control Clerks will be monitored by Gisele Martin, that is, if a Permit Services Clerk is absent due to illness or vacation and the absence results in a backlog of postdated files, the Plans Examiners shall approach Gisele Martin for assistance or redistribution of workload.

The above modifications to policy are made with the objective of providing Building Inspectors with more flexibility in establishing their daily work schedules with property owners in order that the inspections are more effective. The ultimate goal is to finalize as many of our dormant files as possible, if not conditionally close those that warrant this action.

The finalizing of these files reduces our liability exposure by showing "Duty of Care" in our attempt to carry out our statutory mandate under the Ontario Building Code Act and, as such, is an important part of our work. As well, the owners are being served by clearing title on their property to ensure that any future legal transactions involving their property are not met with the hurdle of an outstanding project file. Delays in property sales and/or re-financing arrangements represent significant cost and stress to property owners. Therefore, clearing postdated files is mutually beneficial, and the property owner should be made aware of this when they are contacted by staff. This is good to point out to owners in order to gain co-operation.

With your co-operation, I believe these policy modifications will be successful, even though staff will doubtless encounter some challenges in the start-up stage of this new program. Thank you in advance for your suggestions and anticipated co-operation.



GUIDO A. MAZZA, P. ENG.
CHIEF BUILDING OFFICIAL
REGIONAL MUNICIPALITY OF SUDBURY
GAM*kcs

cc: W.E. Lautenbach

MINUTES OF INSPECTORS' MEETING

Thursday, December 15, 1994
Boardroom C-15, 3:00 p.m.

Attending: G. Mazza, M. Shlemkevich, G. Lewis, J. Dupuis, K. Anderson,
R. Beaudry, W. Skyba, R. Pitre, K. Kaltainen, T. Pileggi,
A. Mazzuchin, M. Riopel
Absent: R. Henri, R. Vincent

The Inspectors indicated that there are many outstanding and active permit files for detached accessory buildings. In most instances, the application of the exterior cladding is required to complete the project file, however, this work is usually delayed and postponed by the property owner. Ideally, if these files were to be completed, more time may be allotted towards the much larger projects. *The following policy is now in full force and effect as a result of the discussion*

POLICY STATEMENT - ACCESSORY BUILDINGS

Active accessory building files are to be "conditionally closed" where only the exterior cladding remains to "fully complete" the file. The owner/applicant is to be given an **INSPECTION NOTICE** which describes the outstanding item with an advisory that a final inspection may be performed with notification by the owner of all work being fully completed.

Also, with respect to accessory buildings, the Inspectors explained that the structural framing components are often covered with sheathing prior to the owner requesting a framing inspection. The question was whether to issue an Order to Comply requiring the owner to expose the framing for the purpose of an inspection. *The following policy is now in full force and effect as a result of the discussion:*

POLICY STATEMENT - ACCESSORY BUILDINGS

An accessory building file can be fully completed, with the framing not being inspected and covered, providing there are no obvious defects. The owner must, however, provide a written declaration that the project is constructed in accordance with the plans and specifications that form part of the permit and the project is constructed in compliance with the Ontario Building Code.

Mike Shlemkevich will prepare a form letter which can be completed at the site by the owner, which may serve as this declaration.

....cont'd

With the exception of the Town of Rayside-Balfour, Building Controls is responsible for the inspection of swimming pool enclosures. Rayside-Balfour has chosen to enforce its own pool enclosure by-law. Building Controls is also responsible to ensure pool location conformity with the zoning regulations. *The following policy is now in full force and effect as a result of the discussion:*

POLICY STATEMENT - SWIMMING POOLS

Building Inspectors are to review the pool location and enclosure to ensure conformity with the regulations. In the event a violation is noted, the Inspector will immediately direct the file to Regional By-Law for enforcement. If a pool violation in Rayside-Balfour is noted, the Inspector is to advise Joe Steen, Rayside-Balfour By-Law Enforcement Officer. The file may then be closed.

PROCEDURES

In an effort to complete some of the active postdated files the Inspectors will be required to retrieve postdated files in the area where their assigned "called in" calls are scheduled on any given day. The Inspectors will allot time in the morning to telephone the property owner to make an appointment for an inspection. Each Inspector is to set up a postdated call box on their desk with postdated files; an accurate and up-to-date list of any files retained by the Inspector is to be provided and submitted to the front desk clerks for their records.

Meeting Adjourned at 4:25 p.m.

Minutes prepared by Mike Shlemkevich



cc: G.Y. Martin



The
Regional
Municipality
of
Sudbury

La
Municipalité
Régionale
de
Sudbury

Bag 3700
Station 'A'
Sudbury, Ontario
P3A 5W5

Sac 3700
Succursale 'A'
Sudbury, Ontario
P3A 5W5

(705) 673-2171

(705) 673-2171

_____, 1995

Owner's Name _____

Property Description _____

RE: BUILDING PERMIT # _____

Description of Work _____

I, _____, Owner of the above-referenced property certify and acknowledge that the work described and documented for the above work in the building permit file, has been completed as per the drawings and documents submitted by myself, and/or the assigned agent.

January 30/95

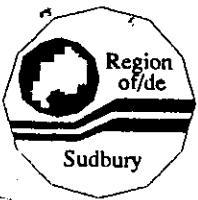
Guido:

Owner's Signature

Please Print Name

- Gisele has this form
- If you require more changes - just let me know.

Lynne



Interoffice Correspondence

July 27th, 1998

**TO: BUILDING INSPECTORS
G.Y. MARTIN
PLANS EXAMINERS**

FROM: GUIDO A. MAZZA, P. ENG.

**SUBJECT: ARCHITECTS' SEALS ON BUILDING
PERMIT DOCUMENTATION**

Please find enclosed a self-explanatory excerpt from the O.A.A. (Ontario Association of Architects) Bulletin. This will serve to verify what we have been requiring from the architects, which is: if it is a design drawing or sketch, the architect's seal is required, but for letters of general conformance and reports, only their letterhead and signature is required.

**GUIDO A. MAZZA, P. ENG.
CHIEF BUILDING OFFICIAL
REGIONAL MUNICIPALITY OF SUDBURY
GAM*kcs**

Encl.



Facsimile transmission
Transmission par télécopieur

Date / Date **JUNE 17 '98** **RECEIVED**

To / Destinaire **BUILDING SERVICES**

Attention / Attention **SHIRO MAZUR** OFFICE OF BUILDING OFFICIAL

Re / Objet _____ Job No. / Numéro du projet _____

No. of pages (Cover +) / Nombre de pages (Page couverture) **1 page**
Comments / Commentaires

SHIRO,
WE HAVE AT TIMES DISCUSSED THE ISSUE
OF AFFIXING SEALS TO LETTERS. THIS
BRIEF ARTICLE IN A DOCUMENT FROM
OUR ASSOCIATION ANTICIPATES THE USE OF
OUR SEAL. I SEND IT TO YOU FOR YOUR
INFORMATION.

- Material faxed is to be / Matériau télécopié doit être:
- Filed / Ranger
 - Returned to sender / Retourner à l'expéditeur
 - Original by mail / Original par la poste
 - Other / Autre _____

Signature / Signature

226 Larch Street
Sudbury, ON
P3B 1M2

256, rue Larch
Sudbury (ON)
P3B 1M2

TEL 705-675-3383
FAX 705-675-3588

If you do not receive the total number of pages or if they are not legible, please call us.
Si vous n'avez pas reçu le nombre de pages indiquées ou si elles ne sont pas lisibles, s'il vous plaît, appelez-nous.

Fa O:\JOBFILES\N_PROG\LOUISV\FAXFORM.DOC

SMR

Intern Architect program cont'd. / Practice

Free ARE Practice Software Available

The National Council of Architectural Registration Boards (NCARB) had added the practice software for the Architect Registration Examination (ARE) to its web site. Exam candidates can now download the software directly into their computers by signing on to the site at <http://www.ncarb.org> and following the links to the examination information.

The software includes tutorials to teach candidates how to use the various testing tools found in the three graphic divisions of the ARE. (There are no practice programs for the six multiple-choice divisions.) Following the tutorials are 15 representative vignettes, one for each of the 15 vignettes that make up the graphic divisions.

Previously, candidates had to request the ARE software after they were made eligible by their state registration boards or provincial architectural associations. Now the software is being sent to all candidates on diskette, but with the addition of an online version, interns can begin to familiarize themselves with the ARE software even before they become eligible candidates.

In order to become an eligible candidate, interns need to apply for registration with one of the U.S. registration boards or Canadian provincial associations. Only these entities can determine eligibility to take the ARE. For more information about the ARE, please visit NCARB's web site. ■

Reminder: Transition Period

The 12-month transition period during which interns may elect to continue to complete the requirements for licence under the previous system (prior to January 1, 1998) expires December 30, 1998! ■

Professional Seal and Signature

Members on occasion are requested by building officials to affix their seal/signature to documents other than permit application drawings.

Practice Bulletin A.1 reminds members of the proper use of the architect's seal. The April 1998 issue of the Ontario Building Official's Association Journal informs their members of the differences between Architect, Engineer and OACETT seals. The following are excerpts from that article:

- The professional seal and signature of the architect on construction or permit documents indicates that the design was prepared under the personal supervision and direction of an architect. Designs which are not ready for construction or permit application should not be sealed and signed.
- The professional seal is not intended to be used for any other purpose. The name of the architectural practice and signature of the architect or authorized representative is sufficient on reports, correspondence, certificates, agreements, contracts and other documents to demonstrate that the architect is accepting professional responsibility."

"If building officials have any questions regarding the need for a professional seal, they are encouraged to contact the Ontario Association of Architects or Professional Engineers Ontario, as appropriate."

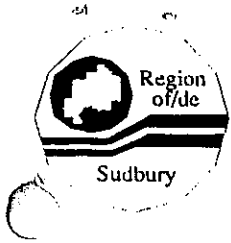
If you are asked by building officials to apply your seal inappropriately, refer them to their April 1998 Journal (page 9) and provide them with a copy of Practice Bulletin A.1. ■

RECEIVED

JUN 17 1998

OFFICE OF
CHIEF BUILDING OFFICIAL

321



Interoffice Correspondence

August 12th, 1998

**TO: BUILDING INSPECTORS
PLANS EXAMINERS**

FROM: GUIDO A. MAZZA, P. ENG.

**SUBJECT: MINISTERS' RULING FOR STO EXTERIOR WALL INSULATION
AND FINISH SYSTEM**

Please find enclosed for your review the Ministers' ruling regarding the subject building materials.

for *Kerry*
**GUIDO A. MAZZA, P. ENG.
CHIEF BUILDING OFFICIAL
REGIONAL MUNICIPALITY OF SUDBURY
*kcs**

Encl.



U-2400 Dundas Street West #273
Mississauga, Ontario L5K 2R8

Tel: (905) 278-278 ext. 4513

June 1, 1998

RECEIVED

JUN 3 1 1998

BUILDING CONTROLS

Mr. Guido Mazza, Chief Building Official
City of Sudbury
Building and Inspections Department
Sudbury, Ontario.

Dear Mr. Mazza,

Re: Ministers' Ruling for Sto Exterior Wall Insulation and Finish System.

Please find attached a copy of the recently revised and updated (May 15/98) Minister's Ruling for Sto Exterior Wall Insulation and Finish Systems.

It is our understanding that valid CCMC Evaluation Reports and listings, as well as, Ministers' Rulings are required for EIFS to be used on buildings designed and constructed under section 7 of the Ontario Building Code in certain jurisdictions in this province.

Sto Finish Systems Canada has now met both of these requirements, and we ask that you circulate this information within your department to ensure the building officials, plan checkers and building inspectors are aware of this information.

Thank you for your time and attention in this matter.

Yours truly
Sto Finish Systems Canada

Paul Wesley
Area Manager.

CC: Peter Culyer, Ed Muise, Don Jones.

A member of the Sto Corp.

RECEIVED

JUN 8 1 1998

OFFICE OF
CHIEF BUILDING OFFICIAL

Ministry of
Municipal Affairs
and Housing

Ministère des
Affaires municipales
et du Logement



BUILDING CODE ACT, 1992

RULING OF THE MINISTER OF HOUSING

**No. 98-03-22-(12416-R)
Revised May 15, 1998**

Pursuant to Section 29(1)(a) of the Building Code Act, 1992, the Director of the Housing Development and Buildings Branch as delegate of the Minister of Housing hereby approves the use of **STO Exterior Insulation and Finish System**, subject to the following terms and conditions:

1. **MANUFACTURER/AGENT**

STO Finishing Systems Canada
6-2400 Dundas Street West
#223
Mississauga, Ontario
L5K 2R8
2. **MANUFACTURING FACILITIES**

STO Industries Canada
Box 219, Quality Lane
Rutland, Vermont
U.S.A. 05701

6504 West Northern Avenue
Glendale, Arizona
U.S.A. 85301

6175 Riverside Drive S.W.
Atlanta, Georgia
U.S.A. 30336
3. **SPECIFIC CONDITIONS**
 - (a) The use of **STO Exterior Insulation and Finish System** is approved in respect of the combustible cladding requirements contained in Section 9.27 and Article 9.10.8.1; Sentence 3.1.5.5.(1) when using "STO System I" and "Sto System II"; Clause 3.2.3.7(7)(b) when using "STO System II-NC"; and Sentence 3.1.5.1.(1) when using "Sto System III" and "STO System Plus 1-RS" of the Revised Regulations of Ontario 1997, Regulation 403/97 as amended or remade from time to time, (the "Ontario Building Code").
 - (b) The use of **STO Exterior Insulation and Finish System** must comply with the Building Code Act, 1992, and

2/...

except as specifically provided otherwise in this Ruling, with the Ontario Building Code.

- (c) The use of **STO Exterior Insulation and Finish System** must be in accordance with Canadian Construction Materials Centre ("CCMC") Evaluation Report No. CCMC 12416-R, revised issue date November 28, 1996.
- (d) A copy of this Ruling shall be attached to the application for a building permit, and
- (e) This Ruling is valid only for **STO Exterior Insulation and Finish System** manufactured at the facilities outlined in Section 2 ("Manufacturing Facilities") of this Ruling.

4. GENERAL CONDITIONS

The Minister or his/her delegate may amend or revoke this Ruling if:

- (a) the Evaluation Report is amended by the CCMC;
- (b) the Evaluation Report expires in accordance with the CCMC's General Conditions for Evaluation Reports;
- (c) the Evaluation Report is rendered void in accordance with the CCMC's General Conditions for Evaluation Reports by reason of alterations to products or relocation of manufacturing facilities described in the Evaluation Report without prior agreement by the CCMC;
- (d) the Evaluation Report is withdrawn by the CCMC in accordance with the CCMC's General Conditions for Evaluation Reports where, in the opinion of the CCMC:
 - (i) the level of performance, in-situ, of the product described in the Evaluation Report is unsatisfactory;
 - (ii) the proponent of such product fails to fulfil its obligations as set out in the CCMC's General Conditions for Evaluation Reports; or
 - (iii) such product may pose any danger to the health or safety of the user of such product;

3/...

- (e) the Minister or his/her delegate determines that the use of the material, system or building design authorised by this Ruling:
 - (i) will not comply with the Building Code Act, 1992 or any relevant law as they may be amended or reenacted from time to time; or
 - (ii) provides an unsatisfactory level of performance, in situ; or
- (f) any Ontario Building Code provision relevant to this Ruling is amended or remade.

DATED AT TORONTO THIS 15th DAY OF MAY, 1998.



ANN BOROOGAH, DIRECTOR
HOUSING DEVELOPMENT AND BUILDINGS BRANCH



Interoffice Correspondence

RECEIVED
JUL 3 1991
BUILDING CONTROLS
DEPARTMENT

RECEIVED
JUN 27 1991

REGIONAL ENGINEERING DEPT

June 24, 1991

FROM
TO: KEN SCOTT
TO
FROM: B. A. FRANSEN
SUBJECT: LOFTY PINES SUBDIVISION
CAPREOL, ONTARIO

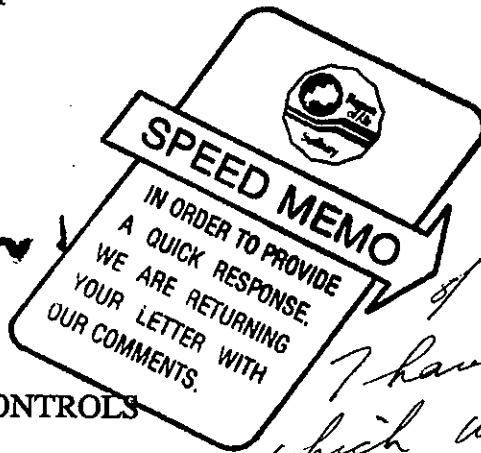
1991-07-08
Copy
Inspector's (4)
Examiners (3)
J. P. Morrow
4390

The enclosed report establishes the requirement for weeping tiles in the Lofty Pines Subdivision, Capreol. I am requesting your comments only to ensure that the report does not conflict with any of the studies/examinations of the area received by you through the normal subdivision approval process.

I thank you for a prompt response.

BAF

B. A. FRANSEN, P. ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/dn
cc: P. J. Morrow



9/10/28
The soil is typical of the Capreol area.
I have received no report which would be contrary to this opinion.
[Signature]

April 27, 1990

Mr. B. Fransen
Building Controls
The Regional Municipality of Sudbury
Bag 3700, Station 'B'
Sudbury, Ontario
P3A 5W5

53141211

Re: Weeping Tiles
Lofty Pines Subdivision, Capreol

Dear Mr. Fransen:

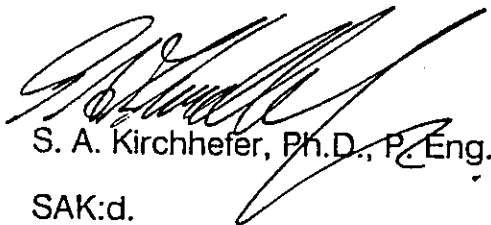
On behalf of the Town of Capreol we inspected the hydrogeological setting of the site which accommodates the Lofty Pines subdivision. We found that the soil consists primarily of sand and gravel, which usually has a high hydraulic conductivity. Further, we found that the groundwater level is in excess of 4 m below the existing grade.

Based on these findings we conclude that there is no need for installing weeping tiles for the residential homes of the area of the Lofty Pines Subdivision.

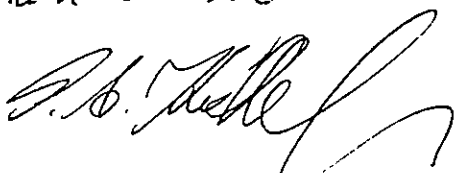
We trust that you concur with our opinion.

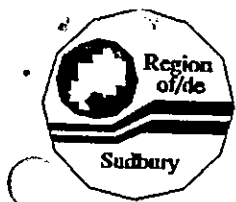
Yours very truly,

S. A. KIRCHHEFER LIMITED


S. A. Kirchhefer, Ph.D., P. Eng.
SAK:d.

C.E. MARIO.
ROBER.
projects!

Note: Lofty Pines Subdivision
includes Hamme Street and Cedar Court and
Oak Crescent. 



Interoffice Correspondence

July 15, 1993.

TO: Building Inspectors
Project Control Clerks
Plans Examiners

FROM: B. A. FRANSEN

SUBJECT: Footings in Pagnutti Subdivision

I am attaching a memorandum prepared by Ken Scott that was sent to Ron Swiddle on January 29, 1992 as it relates to the foundations that will be constructed to support buildings in the Pagnutti subdivision. A similar memorandum was sent to you on August 25, 1992 and it is intended that this will serve as a reminder.

BACKGROUND:

The Pagnutti subdivision has been founded on relatively unstable soil as evidenced in a report prepared by Trow Consulting Engineering Limited dated June 27, 1991.

You will note in my correspondence dated February 5, 1992 the proviso, which reads as follows:

The builder will be required to have a qualified soils engineer test to the adequacy of the soil to support the appropriate footings.

POSITIVE ACTION:

- 1) The project control clerks will ensure that the permits are issued with a copy of the Trow report included in the project file.
- 2) Footings supporting buildings in the Pagnutti subdivision must be accompanied with a report from a qualified engineer confirming the adequacy of the footings and the soils upon which they are to rest.

There is to be no deviation from these requirements and the builders are to be alerted at the permit stage of the reports required for footing approvals.

Please review the attached information carefully as it includes a diagram of the street in question and notations that have been made previously on the same subject.

Should you have any questions whatsoever please do not hesitate to discuss with me.

A handwritten signature in black ink, appearing to read "B. A. Fransen". The signature is written in a cursive, somewhat stylized font.

B. A. FRANSEN, P. ENG.,
DIRECTOR OF BUILDING CONTROLS.
BAF*mam

Attach.

cc: M. Shlemkevich
J. Wilkin
B. Gutjahr
M. Tedeschi
P. Morrow



Interoffice Correspondence

February 5, 1992

**TO: INSPECTORS
PLANS EXAMINERS**

FROM: B. A. FRANSEN

**SUBJECT: PLAN EXAMINATION PROCEDURES
CO-ORDINATION OF PERMIT ISSUANCE PROCEDURES
WITH ARCHITECTS/SUDBURY CONSTRUCTION ASSOCIATION**

I am attaching for your information the correspondence that describes the procedures that were introduced in 1978 after having met with members of the Sudbury Construction Association and the local architects.

These procedures resulted in a preliminary examination of drawings, subject to receipt of \$250.00, which served as partial payment of the building permit application fee. As noted in the letter of Akos Frick, the procedures were well received in 1978 and should be employed at this time as well.

If there is any question about the procedures, please discuss them with me at your earliest possible convenience.

B. A. Fransen

B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attach.

cc: R. O'Malley - PLEASE DISCUSS WITH INSPECTORS & PLANS EXAMINERS
D. Noel De Tilly - PLEASE DISCUSS WITH B.A. FRANSEN

329





AKOS FRICK
ARCHITECT

March 3, 1978.

RECEIVED
MAR 7 1978

Mr. B. A. Fransen, P. Eng.,
Director, Building Controls,
Regional Municipality of Sudbury,
Box 370, Station "B",
SUDBURY, Ontario.

BUILDING CONTROLS

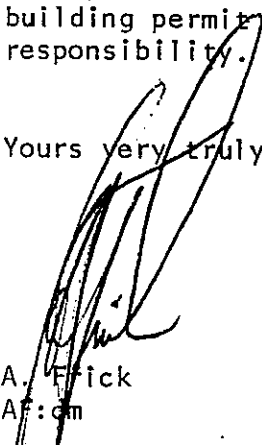
RE: PLAN EXAMINATION PROCEDURES

Dear Bernie:

As you know I am a member of the Fees & Services Committee of the Ontario Association of Architects and as such I have the opportunity to meet with some of my colleagues who are not residents of this area. As the name implies, we deal with Fees & Services as it relates to the Association, however, after the meetings we have the opportunity to discuss items of mutual interest to all Architects. In one of these informal discussions the matter of plans approval was raised and I had mentioned to my fellow Architects that in Sudbury we are working on trying to establish a plans approval procedure with the Building Controls Department to expedite the issuance of building permits and to put it into the format which an Architect can efficiently handle and not to burden the Architect with the additional responsibility of assuming the contractor's role in signing applications for building permits.

This was rather well received by some of the Architects with whom I had this conversation since apparently in the Metro Toronto area, building permit issuance takes 2 to 3 months, and also these same architects were of the opinion that signing for a building permit by the Architect is certainly assuming the contractor's responsibility.

Yours very truly,


A. Frick
AF:cm



Interoffice Correspondence

May 1, 1992

TO: INSPECTORS

FROM: B. A. FRANSEN

SUBJECT: PLUMBING REGULATIONS
REGULATION TO AMEND ONTARIO REGULATION 815-84
MADE UNDER THE ONTARIO WATER RESOURCES ACT

Several very important amendments have been included in the Ontario Water Resources Act which affect our enforcement procedures. For example, sentence 1.2.1.(6) of the regulation, as remade by section 1 of the Ontario Regulation 675/85, is revoked and the following substituted:

"(6) In a row housing complex, no plumbing serving a dwelling unit shall be installed under another unit of the building unless the piping is located in a tunnel, pipe corridor, common basement or parking garage, so that the piping is accessible for servicing and maintenance throughout its length without encroachment on any private living space, but this Sentence does not prevent plumbing serving a unit located above another unit from being installed in or under the lower unit."

COMMENT

It is evident that where plumbing is proposed to be installed in a row housing complex, that the piping must be accessible for servicing and maintenance throughout its length.

- (a) Thus, the piping is to be located in a tunnel, pipe corridor, common basement, parking garage.



- (b) The plumbing can be installed so that it serves units that are one above another.
- (c) The plumbing is not to be installed below the dwelling units in a manner that could result in an encroachment in any private living space for maintenance and servicing.

We have discussed this matter with Mr. John Wood, Plumbing Advisor, Ministry of Housing, (416-585-6661), and he has confirmed the intent of the regulation and its purpose.

I trust that you will review this very carefully and ensure that the contractors are made aware and follow the requirements as stated.



B. A. FRANSEN, P.ENG.,
DIRECTOR, BUILDING CONTROLS
BAF/kcs

Attach.

cc: B. Gutjahr
P. J. Morrow
R. O'Malley
R. Swiddle
K. Yerxa



EDWARD ENGINEERING
CONSULTING ENGINEER

1492 REGENT ST. S.
SUDBURY, ONTARIO P3E 3Z6

TEL: (705) 523-4559
FAX: (705) 523-4562

March 6, 1992

RECEIVED

Mr. Bernie Fransen P.ENG.
Director, Building Controls
Regional Municipality of Sudbury
Bag 3700, Station 'A'
Sudbury, Ontario

MAR 11 1992

BUILDING CONTROLS
DEPARTMENT

Dear Mr. Fransen:

Further to our meeting and discussion regarding the preparation of Engineer's Reports within the Sudbury Region, the following guidelines will be adhered to by our firm.

Engineer's Reports will only be conducted on sites that have been issued a building permit.

In the the few circumstances that a client requests a report where a building permit has been applied for and has not been issued, our firm will contact your office for direction in this matter. At the descretion and only by approval from your office will we undertake an inspection. In order to avoid any misunderstanding, should your office deem it such that our firm not proceed with this inspection, your office will as a matter of record issue a fax to our firm indicating that we are not to proceed, a reason is not expected nor questioned.

Thanking you for your assistance in this matter.

Yours truly,

Edward Chiesa

Edward Chiesa P.ENG.

1992, 03, 11.
c.c. Roger
Claude
Ray Pine
Inspectors.
Bryan
Donna

EC/mc

331
File: Procedures
Inspections

THE CORPORATION OF THE
Town of VALLEY EAST



LA MUNICIPALITÉ DE LA
Ville de VALLEY EAST

P.O. BOX - C.P. 430, VAL CARON, ONTARIO P0M 3A0

TELEPHONE: (705) 897-4938

FAX: (705) 897-2667

June 11, 1992

Mrs. D. Noel De Tilly
Supervisor Administration
and Building Permits
Regional Municipality of Sudbury
Bag 3700, Station "A"
Sudbury, Ontario
P3A 5W5

Dear Madam:

Re: Roads and Drainage and
Development Charge Certificate

There has been considerable confusion between your department and myself regarding the requirement for the Development Charges form and certificate to accompany all Valley East Roads and Drainage forms for all building permit applications processed in your office.

In an effort to clear up any possible misunderstanding, please allow me to assert that we do not require and that we will no longer process and return the Development Charge form and/or certificate for any application that does not entail the creation of a dwelling unit (ie. shed, deck, porch, etc...). We will require the form and certificate for the building of new dwelling units (ie. S.F.D. or Multi), and for additions that are creating new dwelling unit (ie. apartment).

If you require any further information, please do not hesitate to contact the undersigned.

Yours truly,

Richard Legault,
Instrumentman/Inspector

RECEIVED

JUN 16 1992

BUILDING CONTROLS
DEPARTMENT

RL:sc

c.c. - R. A. Hurst

June 16/92 - circulated to all staff

332

BLOCK FOCUS

THE INFORMATION SERIES FROM



THE ONTARIO CONCRETE BLOCK ASSOCIATION

Loadbearing Masonry Efficiencies

INTRODUCTION

Lowrise industrial or Commercial buildings have traditionally used concrete block in recognition of the inherent economics flowing from initial low costs, durability, simplicities in design and application, minimal if any maintenance as well as providing excellent fire and sound protection.

Addition of facings and colour have provided aesthetics and innumerable design combinations to please the most discerning eye while still maintaining adherence to strict budgetary considerations.

THE CHALLENGE

Cost consciousness is a necessary aspect of any project but over emphasis may not necessarily always produce the most economical solution; increases in one aspect may well lead to reductions that more than offset the extra expense e.g.; several design options are possible in the design of masonry which have a decided effect on the final budget.



PHOTOGRAPH 'A': Partially Reinforced Masonry Building

DISCUSSION

A brief review of a typical, one storey industrial structure will illustrate the possibilities —

The simplest, and thus least costly design for masonry buildings, is in accordance with the Empirical Rules for Plain Masonry (Clause 6, CAN3-S304, Masonry Design for Buildings), a simplified analysis of loads and forces acting on the structure.

The simplicity and reduced expertise expected are balance by rather severe limitations on its use: maximum heights, maximum wind expected, maximum openings, non-seismic zones, minimum unit and wall sizes and spacings of lateral supports. Thus, this approach is not allowed in

some regions where either wind conditions or seismic zoning forbid. To illustrate the options, we assume that all conditions are favourable.

EMPIRICAL DESIGN

A typical industrial structure in the 5 to 6m height range would require a 290mm unit in order to use the roof and floor as lateral supports (The slenderness ratio between supports cannot exceed 20). A taller building would require either a thicker wall or that the lateral supports be provided either by abutting walls or by a structural frame. In the latter case, the block wall only serves as an infill and the structural capability is ignored.

Plain Masonry

Empirical Design does not require a high degree of technical knowledge and thus results in rather conservative design solutions. Clause 5 of CAN3-S304, Design Based on Engineering Analysis, provides a more accurate basis for design but does not require design expertise. In the example cited, the smaller unit, 240mm, could be used for plain masonry since the slenderness ratio (h/t) has a potential of 30 rather than 20 [Clause 5.5.1.6; 10(3-e), 11].

Partially Reinforced Masonry

Consideration of the reinforced option to provide increased tensile strength can reduce the size further to a 190mm unit; engineering analysis would result in somewhat higher design costs (although familiarity of the design procedure through usage would reduce the time and thus the costs required) and some added costs to the materials (grout & steel rods). However, the building budget is normally lower due to:

- Reductions in basic material costs (units and mortar)
- Reduction in on-site labour costs from improved productivity
- Recognition of the contribution of existing reinforcement in plain masonry (joint reinforcing, lintels)
- Availability of the masonry option in all regions, without concern for the Empirical limitations, in lieu of other, perhaps more expensive solutions and wind uplift requirements for light roof systems (see following).

ROOF DESIGN

Building Codes require that roof systems be capable of resisting all expected gravity loads (self weight, snow, etcetera) as well as provide resistance to possible wind uplift (internal and external suction combined). Traditional

concrete roof systems provide sufficient mass whereby short ties to the top one or two course bond beams are adequate to maintain structural integrity. Lightweight systems do not provide the same mass and thus depend on wall anchorage to resist the total force of uplift. Depth and spacings of anchor ties depend on wind design conditions and building type and thus will vary by locality and project. Generally, however, uplift loads require much longer tie embedment than used with concrete roofs; in many cases, the spacing at say 2.4m O.C. will require depths within 5 or 6 courses from the bottom (narrower spacing will require shorter lengths). It would seem logical that the tie be extended for the full height of the wall and thus serve a dual purpose: required roof tie-down with minimal cost increase will answer the needs of partially reinforced masonry; the small added costs will be more than offset by the reduction in unit size from 240mm (plain masonry) to 190mm (partially reinforced).

CONCLUSIONS

Partially reinforced loadbearing masonry can lead to substantial reductions in the total building budget by:

- Lower material costs
- Increased on-site productivity
- Increased usable internal area
- Providing enclosure and structure in one step
- Elimination of difficult details around structural columns
- Multi-purpose usage of steel reinforcing
- Built-in roof tie-down system
- Increase freedom of design
- Availability of masonry as an option to other more expensive systems

A Design Guide by Drysdale Engineering and Associates dealing with Engineering Analysis options, is available from the Association.

Members of the Ontario Concrete Block Association

- Atlas Block Company Ltd., Victoria Harbour
- Bancroft Concrete, Bancroft
- Boehmers, Kitchener
- Brown's Concrete Products Ltd., Sudbury
- Century Concrete Products, Scarborough
- Dionne Concrete Products Ltd., Earlton
- Doughty Concrete Products Limited, Peterborough
- Marker Building Materials, A Standard Industries Company, division of Lafarge Canada Inc., Kingston
- Newtonbrook Block & Supply Company Limited, Gormley
- Niagara Block Incorporated, Niagara Falls
- Ontario Block & Tile Limited, Sunderland and Brampton
- Peel Block Company (1987) Ltd., Brampton
- Pemason Ottawa, Inc., Stittsville
- Primeau Miron, a Division of Esroc Canada Inc., Milton
- Richvale York Masonry Group, A Division of Lafarge Canada Inc., Richmond Hill
- Shouldice Cement Products Ltd., Shallow Lake
- Simcoe Block (1979) Limited, Barrie
- TCG Materials Limited, Concrete Block Division, Burlington