TOWN OF BRIDGEWATER

SUBDIVISION BY-LAW

Adopted by Bridgewater Town Council on March 9, 1988,

Approved by the Minister of Municipal Affairs on December 12, 1988

consolidated with

Amendments approved by Council on June 14, 1993 and the Minister of Municipal Affairs on August 3, 1993

and

Format Editing Changes made on August 24, 1993, March 7, 1995, June 1996 and September 16, 1996

Amendments Approved by Council on June 11, 2001

and

Amendments approved by Council on April 22, 2002 and the Minister of Service Nova Scotia Municipal Relations on May 22, 2002

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PART 1: AUTHORITY AND TITLE

1.1 This By-law is enacted by the Council of the Town of Bridgewater pursuant to Section 90 of the Planning Act, S.N.S. 1983, Chapter 9, as amended from time to time.

1.2 This By-law may be cited as the "Subdivision By-law" of the Town of Bridgewater.

PART 2: INTERPRETATION

2.1 The metric system of measurement is used throughout this By-law. Imperial Measurements are approximately only, for convenience only, and where there is a conflict between Metric and Imperial measurements, the Metric measurements shall prevail.

2.2 The Schedules identified as Schedules A, B, C, D, E and F are attached to this By-law and shall form part of this By-law.

PART 3: DEFINITIONS

3.1 In this By-law,

a. **Area of Land** means any lot as described by its boundaries.

b. **Council** means the Council of the Town of Bridgewater.

c. **Nova Scotia Land Surveyor** means a surveyor who holds a certificate of qualification to practice professional land surveying in Nova Scotia and whose name is on the roll of the Association of Nova Scotia Land Surveyors.

d. **Planning Act** means the Planning Act, S.N.S. 1983, Ch. 9 as amended from time to time.

e. **Professional Engineer** means a registered member, in good standing, of the Association of Professional Engineers of Nova Scotia.

f. **Public Sewer System** means any sewer system which is owned and maintained by the Town.

g. **Public Street** means any street which is owned and maintained by the Town.

h. **Public Water System** means any water system which is owned by the Public Service Commission of Bridgewater.

i. **Remainder Lot** means a lot for which subdivision approval is not requested or granted but which results from the approval of lots shown on a plan of subdivision.

j. **Subdivider** means the owner or owners of any area of land proposed to be subdivided and includes anyone acting with his written consent.

k. **Subdivision** means the division of any area of land into two or more parcels and includes a resubdivision or a consolidation of two or more parcels.

l. **Town** means the Town of Bridgewater.

m. **Usable land** means land for park, playground or public purposes which:

(i) the Town entered into negotiation for after January 1, 2002; and

(ii) (a) is larger than 1,115 sq. metres (12,000 sq. ft.) in area; and

(b) has public access; and

(c) does not have a slope of greater than five percent (5%); and

(d) is not located in an area where sufficient parkland exists, as determined by the Parks and Recreation Commission; and

(e) is not comprised of lands subject to flooding or classified as wetlands or lands with substantial amounts of soil classed as organic; and

(f) will not create a nuisance, disturbance or other form of hardship for nearby property owners; or

(iii) provide protection for an environmentally sensitive area or enhances an existing parcel of public open space land, a facility, or an area to be conveyed to the Town at a later date.

PART 4: ADMINISTRATION

4.1 This By-law shall be administered by the Municipal Development Office of the Town appointed

under Section 95 of the Planning Act.

4.2 The Council may from time to time authorize any other person to act in the Municipal Development Officer's stead.

4.3 The Subdivision By-law adopted by Bridgewater Town Council on 14 March, 1977, and approved by the Minister of Municipal Affairs on 28 March, 1977, as subsequently amended from time to time, is automatically repealed on the date that this present Subdivision By-law takes effect.

PART 5: GENERAL PROVISIONS FOR LOTS

5.1 All proposed lots and the remainder lot, if any, shall abut a Public Street.

5.2 Section 5.1 and 5.3 notwithstanding, as provided for in MPS Policy 4.2.2 and 4.2.3, approval may be given to a lot which has access to a Public Street by means of a right-of-way no less than 6 metres (20 feet) wide, which is clearly granted by deed.

5.3 All proposed lots and the remainder lot, if any, shall satisfy the dimensional requirements for area and frontage contained in the Land Use By-law.

5.4.1 Notwithstanding Sections 5.1, 5.2, 5.3, 7.1, and 8.2 the Development Officer may approve a final plan of subdivision increasing the size of an existing area of land provided that:

a) no additional lots are created; and

b) each lot

   i) meets the minimum dimensions for lot frontage specified in the Land Use By-law, or

   ii) has not had its frontage, if any, reduced; and

c) each lot

   i) meets the minimum dimensions for lot area specified in the Land Use By-law, or

   ii) has not had its area reduced.

5.4.2 Where the proposed lot is not surveyed pursuant to Section 16.1(b) and 16.2(j), the final plan of subdivision prepared pursuant to Section 5.4.1 shall:

a) be certified and stamped by a Nova Scotia Land Surveyor that the boundaries of the parcel proposed to be added to the existing area of land have been surveyed, shown as a heavy solid line, except the common boundary between the existing lots is surveyed and certified as being the common boundary shown as a heavy broken line, and

b) notwithstanding clauses 16.1(b) and 16.2(j), other than the new boundaries which have been surveyed pursuant to clause (a), show the remaining boundaries of the resulting lot for which approval is requested described graphically as a light solid line, and

c) have the following notation affixed to the plan adjacent to the certification required by the Nova Scotia Land Surveyors Act and Regulations made thereunder, and such notation is signed by the Surveyor:

"NOTE: The only boundaries shown on this plan which have been surveyed are the boundaries of Parcel ___. The common boundary between existing lots __ and ___ which is shown by a heavy broken line is hereby certified as having been the common boundary.

The remaining boundaries of resulting lot ____ shown on this plan are a graphic representation only and do not represent the accurate shape or position of the lot boundaries which are subject to a field survey".

5.5 Sections 5.1, 5.2, 5.3, 7.1 and 8.2 notwithstanding, approval may be given to the consolidation of lots.

5.6 Notwithstanding the frontage and area requirements of Section 5.3, the Development Officer may approve a final plan of subdivision in accordance with the variance provisions of Section 98 of the Planning Act.

5.7.1 Wherever possible, side lot lines shall be substantially at right angles to a public street, or radial to a curve on a public street; and

5.7.2 Wherever possible, the rear lot lines of a series of adjoining lots shall be continuous, rather than being stepped or jogged.

5.7.3 All lots to be approved on a Tentative or Final plan of subdivision shall have a minimum width and a minimum length of at least 6 metres (20 feet) unless a lesser width and length are permitted by the Land Use By-law.

PART 6: GENERAL PROVISIONS FOR STREETS

6.1.1 All proposed public streets shall be designed to the specifications contained in "Geometric Design Standards for Canadian Streets and Roads" amended to 1980 as prepared by the Roads and Transport Association of Canada.

6.1.2 Section 6.1.1 notwithstanding, the specific standards contained in Schedule B "Street Design Standards" shall apply to all proposed public streets.

6.1.3 The classification of streets in Schedule "B" shall be based on use patterns that may extend beyond the boundaries of the lands being sub-divided and shall be determined by the Town Engineer from the Tentative Plans of subdivision as well as from the existing and proposed street classification shown on Map 4 of the Municipal Planning Strategy and from the criteria referred to in Section 6.1.1. For the purposes of this Section, a "Primary Street", for the purposes of street design and construction, means a Collector or Arterial Street; and a "Secondary Street", for the purposes of street design and construction, means a Local Street.

6.2 The design of all proposed public streets shall be executed over the stamp of a Professional Engineer.

6.3 Proposed public streets shall provide for access to adjacent properties, and where an existing public streets abuts the area proposed for subdivision the proposed public streets in that area shall, if reasonably feasible, be laid out as extensions of such public streets unless they would thus be in violation of this By-law.

6.4 Prior to construction of any proposed public street, the entire width of the right-of-way shall be cleared and grubbed, and the cross-section levelled removing from the site any and all roots, stumps, and other organic matter, with the roadslopes constructed outside of the proposed right-of-way.

6.5.1 Provision shall be made for surface drainage through the use of culverts, ditches, and natural water courses of appropriate capacity calculated using the criteria contained in Schedule "E", Part I.

6.5.2 Where overland drainage is provided through private property, easements with a minimum width of 6m (20') shall be provided along the drainage channel or natural watercourse.

6.6 All proposed public streets shall be constructed to the appropriate specifications contained in the "Standard Specifications, Metric Edition", dated 1980 and revised to January, 1987, prepared by the Province of Nova Scotia, Department of Transportation.

6.7 Names for proposed public streets shall be unique and distinctive so as not to be confused with the names of existing public streets and shall be selected by Council.

PART 7: GENERAL PROVISIONS FOR WATER SUPPLY

7.1 Where the area of land to be subdivided is adjacent to an existing water supply system, the subdivider shall design, lay out and construct a water supply system to service each proposed lot in conformance with the requirements contained in the "Standard Specifications for Municipal Services" in the edition of January, 1987, as available from the Nova Scotia Road Builders Association and on file in the office of the Town Engineer.

7.2 The subdivider shall connect the water supply system required by Section 7.1 with the existing public water supply system.

7.3 Section 7.1 notwithstanding, the specific standards contained in Schedule "C" "Water Supply Design Standards", shall apply to all proposed water supply systems.

7.4 The design of any proposed water supply system shall be executed over the stamp of a Professional Engineer.

PART 8: GENERAL PROVISIONS FOR SANITARY SEWERS

8.1 Where the area of land to be subdivided is adjacent to an existing sanitary sewer system, the subdivider shall design, lay out and construct all sanitary sewers to service each proposed lot in conformance with the requirements contained in the "Standard Specifications for Municipal Services" in the edition of January, 1987, as available from the Nova Scotia Road Builders Association and on file in the office of the Town Engineer.

8.2 The subdivider shall connect the sanitary sewers required by Section 8.1 with the existing Town central sewer system.

8.3 Section 8.1 notwithstanding, the specific standards contained in Schedule "D" "Standards for Sanitary Sewers" shall apply to all proposed central sanitary sewers.

8.4 The design of any proposed central sanitary sewer shall be executed over the stamp of a Professional Engineer.

PART 9: GENERAL PROVISIONS FOR STORM WATER DRAINAGE

9.1 The subdivider shall provide for the collection and disposal of surface drainage and storm water by catch basins, storm sewers, natural or man-made watercourses or any combination of these.

9.2 Section 9.5 notwithstanding, the specific standards contained in Schedule E "Storm Drainage Design Standards" shall apply to all proposed storm water drainage systems.

9.3 The design of any proposed storm water drainage system shall be executed over the stamp of a Professional Engineer.

9.4 Pursuant to Section 15.6, a Joint Certificate of approval from the Departments of Health and the Environment is required for the design of any Storm Sewer System.

9.5 Construction of any storm water drainage system shall follow sound construction practice contained in the "Standard Specifications for Municipal Services" in the edition of January, 1987, as

available from the Nova Scotia Road Builders Association and on file in the office of the Town Clerk.

PART 10: GENERAL PROVISIONS FOR PUBLIC OPEN SPACE

10.1 Prior to endorsement of approval on the final plan of subdivision the applicant shall:

a) Transfer to the Town for park, playground and similar public purposes, an area of usable land equal to five percent (5%) of the area subdivided in the final plan of subdivision excluding streets, roads and the residue of land owned by the subdivider; or cash in lieu of equivalent value.

10.2 Waiver of Public Open Space Requirements

Council hereby waives the requirements of Part 10.1 of this By-law, where:

a) The subdivider or his predecessors in title with respect to the property have contributed land or cash in lieu of land with respect to the same area subdivided in a plan approved within the previous two years.

b) No new vacant lots are created except any remainder lot; or,

c) Lot boundaries are changed but no new vacant lots are created.

10.3 Pursuant to Sections 13.3 and 15.4, all proposals submitted to satisfy the requirements of Section 10.1 shall be forwarded by the Development Officer to the Recreation Director for comments and recommendations.

PART 11 CONSTRUCTION OF STREETS AND SERVICES

11.1 The subdivider shall permit the Town Engineer to inspect the construction of services at any reasonable time, and shall advise in writing the Engineer of the dates, sites and times of the required testing of the system.

11.2 No deviation from the approved plans shall take place during construction unless such deviation is approved by the Town Engineer, and such minor deviation shall conform with the standards contained in this By-law.

11.3 The Development Officer shall not endorse approval upon a Final Plan until:

a) the requirements either of Section 11.4 or of Subsection 11.5.1 or of Subsection 11.6.1 are satisfied; and

b) Town Council has accepted title in fee simple to all street rights-of-way, together with easements sufficient for the maintenance of all services, such title and easements to be conveyed free of encumbrances and at no cost to the Town; and

c) all other applicable requirements of this By-law are satisfied.

11.4 When the Town Engineer has determined that the required streets, central water supply system, storm water system and sanitary sewer systems have been constructed in accordance with the specifications contained within this By-law, and within 30 days of being notified of such determination, the subdivider shall:

a) Provide the Town Engineer with the "as built" reproducible engineering drawings for all streets and services, with the stamp of a Professional Engineer; and

b) Provide the Town Engineer with all necessary operating and procedural manuals for each water or sanitary sewer system; and

c) Provide the Town Engineer with reports of all required tests to indicate that the systems are operating to the required standards; and

d) Provide to the Town a maintenance bond effective for one year, in an amount equal to ten percent (10%) of the actual cost of construction.

11.5.1 Where the subdivider wishes approval of the subdivision plan to be endorsed on the plan prior to construction of any required streets and services, the applicant shall, with the consent of Town Council, enter into an agreement with the Council to carry out and complete the required streets and services

according to the requirements of this By-law within a period of time as set out in the agreement, and shall also post a performance bond or other security acceptable to Council to guarantee such agreement, in the amount of one hundred twenty-five percent (125%) of the total estimated costs of supplying such streets and services.

11.5.2 The estimated cost required by Subsection 11.5.1 shall be prepared by the subdivider.

11.5.3 The Town Engineer may revise the estimate if the estimate, is, in his opinion, inadequate and shall advise Council of the effect of the revision upon the size of the performance bond or other security.

11.6.1 Where

a) The subdivider wishes approval of the subdivision plan to be endorsed on the plan prior to construction of any required streets and services, and

b) Town Council agrees to a request by the subdivider for the Town to construct such streets and services, the subdivider shall, with the consent of Council, enter into an agreement with the Council in which the Council undertakes to carry out and complete the required streets and services according to the requirements of this By-law within a period of time as set out in the agreement, and the subdivider shall also give to the Council a certified cheque, bond or other security in the amount of one hundred and twenty-five percent (125%) of the total estimated cost of supplying such streets and services, such estimates to be prepared in accordance with Subsections 11.5.2 and 11.5.3.

11.6.2 Should the actual costs of supplying streets and services under an agreement signed in accordance with Subsection 11.6.1 exceed the amount of the required certified cheque, the subdivider shall not be required to pay such excess costs, but should the actual costs be less than the amount of the cheque, any balance shall be returned to the subdivider.

11.6.3 Where streets and services are constructed under an agreement signed in accordance with Subsection 11.6.1, the provisions of Section 11.4 shall not apply.

PART 12: PRELIMINARY PLANS (OPTIONAL FIRST STEP)

12.1 The subdivider proposing to subdivide property may submit to the Development Officer three (3) copies of a preliminary plan of the proposed subdivision together with the following information and documentation:

a) name and address of the subdivider and, if the subdivider is not the owner of the area of land proposed to be subdivided, the name of the owner; and

b) names and addresses of all owners or the lot identifiers of all properties abutting the land proposed to be subdivided; and

c) a plan or sketch of the land proposed to be subdivided to scale or scales sufficient for clarity of all particulars on the plan, showing:

i) the dimensions and area of the area of land to be subdivided; and

ii) the nature of the proposed subdivision and the lots therein; and

iii) the approximate location of watercourses or other natural features on the land proposed to be subdivided that might affect the number of lots on the area proposed to be subdivided; and

iv) a key plan at a scale not smaller than 1:50,000 showing the general location of the area of land and indicating the north point.

12.2 The Development Officer shall, if applicable, forward a copy of all material received pursuant to Section 12.1 to:

a) The Department of Health for an evaluation to determine what lot size is generally appropriate to meet the requirements of the Regulations Respecting Subdivision of Land to be Serviced by On-Site Sewage Disposal Systems;

b) the Town Engineer; and

c) any other agency of the Province or the Town as the Development Officer deems necessary.

12.3 The Department of Health, Town Engineer and any other agency of the Province or Town which has been forwarded a copy of the Preliminary Plan shall forward a written report of their findings to the subdivider and the Development Officer.

PART 13: PROCEDURE FOR TENTATIVE PLANS

13.1 The subdivider proposing to subdivide an area of land shall submit to the Development Officer for approval an application in the form specified in Schedule "A" of this By-law, together with eight (8) copies of the tentative plan of the proposed subdivision meeting the requirements of Part 14 of this By-law.

13.2 Notwithstanding Section 13.1, the Development Officer may waive the requirement that tentative application and plan of subdivision be submitted, where:

a) the lot abuts an existing street; and

b) no central water or sewer services are to be installed, provided that, if required, an assessment of the lots by the Department of Health has been completed pursuant to the Regulations Respecting Subdivision of Land to be Serviced by On-Site Sewage Disposal Systems and the Development Officer is advised in writing by the Department of Health of the classification of such lots pursuant to the Regulations.

13.3 Where a transfer to the Town of land, or cash in lieu of land, for Public Open Space is required pursuant to Section 10.1, the application for Tentative Approval shall be accompanied by, or shall show on the Tentative Plan, a proposal which satisfies the requirements of Section 10.1, and the Development Officer shall forward such proposal or plans to the Recreation Director.

13.4 When the Development Officer is satisfied that an application and tentative plan of subdivision are complete he shall, if applicable, forward a copy to the Department of Health, Town Engineer and any other agency of the Province or Town the Development Officer deems necessary.

13.5 The Development Officer shall comply with the notification and approval provisions of Sections 96(2) and (3) of the Planning Act.

13.6 Approval of a tentative plan of subdivision may not be refused or withheld as a result of the assessment or recommendations made by the Department of Health, Town Engineer or any other agency of the Province or the Town unless the tentative plan of subdivision is clearly contrary to a law of the Province or to a regulation or by-law made pursuant to a law of the Province.

13.7 The following information shall be stamped or written on any tentative plan of subdivision which is approved, together with any other information necessary for the tentative plan to proceed to the final plan stage:

a) "This tentative plan of subdivision is approved for lots_____. Such approval lapses if the lots are not shown on a final plan of subdivision approved within two years of the date of the approval of the tentative plan".

b) the date of the approval of the tentative plan.

c) "This tentative plan of subdivision shall not be filed in the Registry of Deeds as no subdivision takes effect until a final plan of subdivision is endorsed by the Development Officer and has been filed by him in the Registry of Deeds".

13.8 1) Within 5 days of approval a tentative plan of subdivision, the Development Officer shall forward a copy of the approved tentative plan to the subdivider and notify in writing, where applicable, the Town Engineer, Department of Health, and any other agency of the Province or Town the Development Officer requested to review the plan, of his decision to approve the tentative plan.

Where the Development Officer refuses to approve a tentative plan of subdivision, he shall notify the subdivider pursuant to Section 96(3)(c) of the Planning Act, advising the subdivider of the appeal provisions of Section 103 of the Planning Act.

PART 14: REQUIREMENTS FOR TENTATIVE PLANS

14.1 Tentative plans of subdivision submitted to the Development Officer shall be:

a) drawn to scale or scales sufficient for clarity of all particulars on the tentative plan of subdivision; and

b) based on a description of the property to be subdivided, preferably but not necessarily as surveyed;

c) folded to approximately 20 x 30 cm (8 x 12 in.) with the face of the folded print being the title block which is located in the lower right hand corner of the tentative plan of subdivision.

14.2 Tentative plans of subdivision shall show the following:

a) name of the subdivision, if any, and the name of the owner of the area of land; and

b) names of all owners or the lot identifiers of all properties abutting the area of land proposed to be subdivided; and

c) a location map, drawn to a scale not smaller than 1:50,000 (such scale to be shown on the map), preferably with the same orientation as the area of land; and

d) the words "TENTATIVE PLAN" located above the title block; and

e) a clear space for stamping measuring at least 15 centimetres (6 in.) wide by 15 centimetres (6 in.) high; and

f) the approximate dimensions of the area of land proposed to be subdivided; and

g) the proposed dimensions and shape of lots and blocks; and

h) the area of each lot including the approximate area of the remainder lot, if any; and

i) each proposed lot individually identified without duplication of lot identifiers, and, where practicable, where a parcel is being added to or subtracted from an existing lot or where a lot shown on a plan of subdivision is being divided, the proposed lot or lots shall be identified by the exiting lot identifier and a letter; and

j) approximate location of existing main buildings on the area of land proposed to be subdivided with the graphical location for all building within 3 metres (10 feet) either side of the boundaries of the proposed lot; and

k) the boundaries of proposed lots shown by solid lines, and the vanishing boundaries of existing lots being re-subdivided, consolidated or both, shown as broken lines; and

l) the scale to which the tentative plan of subdivision is drawn; and

m) the width and location of railroads, and existing and proposed public streets, including intersections and turning circles; and

n) the names of existing and proposed public streets; and

o) a notation stating whether or not the lots for which approval is requested are serviced by central sewer and water systems; and

p) the width, location and nature of any easements or rights-of-way on or affecting the area of land proposed to be subdivided; and

q) north point; and

the date on which the tentative plan of subdivision was drawn and the date of any revisions; and

s) the location of any watercourse, prominent rock formation, area subject to flooding and any other prominent natural features which might affect the layout or provision or public streets and services to the area where the subdivision is to be located; and

t) the location and dimensions of any area of land proposed to be conveyed to the Town in accordance with Section 10.1(a); and

u) any other information which the Development Officer deems necessary to determine whether a tentative plan of subdivision conforms to this By-law.

14.3 In addition to meeting the requirements of Section 14.1 and 14.2, where the proposed lots front on a proposed public street, a tentative plan of subdivision shall:

a) show a boundary survey of the area of land proposed to be subdivided, excluding the remainder lot, certified and stamped by a Nova Scotia Land Surveyor in the manner required by the Nova Scotia Land Surveyors Act and the Regulations made thereunder; and

b) be accompanied by four copies of a plan showing:

i) contours at 2 metre (5 foot) vertical intervals, and drainage patterns; and

ii) the width and location of existing and proposed public streets, including intersections and turning circles; and

iii) the location of existing and proposed central sewer and water systems and proposed connections thereto; and

c) be accompanied by two copies of a plan showing the centre line profiles of the proposed public streets; and

d) be accompanied by any other information which the Development Officer deems necessary to determine whether the plans referred to in subsections (b) and (c) conform to this By-law.

14.4 Where plans or drawings or centre-line profiles are prepared by or under the supervision of a professional engineer, they shall be signed and sealed by the professional engineer in accordance with the Engineering Profession Act.

PART 15: PROCEDURE FOR FINAL PLANS

15.1 The subdivider proposing to subdivide an area of land shall submit an application in the form specified in Schedule "A" of this By-law together with eight (8) copies of the final plan of subdivision meeting the requirements of Part 16 of this By-law, and any required Engineering drawings to the Development Officer for approval

15.2 The Development Officer shall comply with the notification and approval provisions of Section 96(2) and (3) of the Planning Act.

15.3 When the Development Officer is satisfied that an application and final plan of subdivision are complete he shall, if applicable, forward a copy to the Department of Health, Town Engineer and any other agency of the Province or Town the Development Officer deems necessary.

15.4 Where a transfer to the Town of land or cash in lieu of land, for Public Open Space is required pursuant to Section 10.1, the application for final approval shall be accompanied by or shall show on the Final plan a proposal which satisfies the requirements of Section 10.1 and the Development Officer shall forward such proposal or plans to the Recreation Director.

15.5 Where a storm drainage system is required pursuant to Section 9.1, whether above ground or below ground, no approval of the Final Plan may be given until all required Water Rights Permits have been granted by the Department of the Environment.

15.6 Where a central water supply, a central sanitary sewer system or storm sewer system is required pursuant to Sections 7.1, 8.1, and 9.1, no approval may be given until the applicant has obtained a Joint Certificate of Approval for the proposed systems from the Departments of Health and Environment.

15.7.1 When a Final Plan has been approved and prior to endorsement of approval on the final plan of subdivision, the subdivider shall either lay out and construct streets, blocks, lots, land for public purposes and any other services or utilities required in accordance with the provisions of Section 11.4 or enter into an agreement with Council pursuant to Sections 11.5 or 11.6.

15.8 Approval of a final plan of subdivision may not be refused or withheld as a result of the assessment or recommendations made by the Department of Health, Town Engineer or any other agency of the

Province or Town unless the final plan of subdivision is clearly contrary to a law of the Province or to a regulation or by-law made pursuant to a law of the Province.

15.9.1 Upon approval by the Development Officer of the final plan of subdivision, the Development Officer shall notify in writing the subdivider and, where applicable, the Town Engineer, the Department of Health and any other agency of the Province or Town the Development Officer requested to review the plan, of his decision to approve the final plan.

15.9.2 Where a Development Officer refuses to approve a final plan of subdivision, he shall notify the subdivider pursuant to Section 96(3)(c) of the Planning Act, advising the subdivider of the appeal provisions of Section 103 of the Planning Act.

15.10.1 An application to amend or repeal a plan of subdivision shall be in accordance with Section 102 of the Planning Act.

The application to amend shall refer to the plan of subdivision as originally endorsed or drawn and such reference shall include the file number of the earlier subdivision plan filed at the office of the Registrar of Deeds for the Town.

PART 16: REQUIREMENTS FOR FINAL PLANS

16.1 Final plans of subdivision submitted to the Development Officer shall be:

a) drawn to a metric scale or scales sufficient for clarity of all particulars on the final plan of subdivision; and

b) certified and stamped by a Nova Scotia Land Surveyor that the lots for which approval is requested have been surveyed in the manner required by the Nova Scotia Land Surveyors Act and the regulations made thereunder, except for the final plan of subdivision prepared pursuant to Section 5.4.2; and

c) folded to approximately 20 x 30 cm (8 x 12 in.) with the face of the folded print being the title block which is located in the lower right-hand corner of the final plan of

subdivision; and

d) accompanied by two (2) copies of the final version of any Engineering drawings referred to in Sections 14.3(b), (c) and (d).

16.2 Final plans of subdivision shall show the following:

a) name of the subdivision, if any, and the name of the owner of the area of land; and

b) a location map, drawn to a scale not smaller than 1:50,000 (such scale to be shown on the map), preferably with the same orientation as the area of land; and

c) the length of the boundaries of all existing and proposed lots, streets, and rights-of-way and easements, including the length of arc, points of curvature and radius in the case of curved lines; and

d) names of all owners or the lot identifiers of all properties abutting the proposed subdivision; and

e) a clear space for stamping measuring at least 15 centimetres (6 in.) wide by 15 centimetres (6 in.) high; and

f) the dimensions of the area of land proposed to be subdivided; and

g) approximate location of existing main buildings on the area of land proposed to be subdivided with the graphical location for all buildings within 3 metres (10 feet) either side of the boundaries of the proposed lot; and

h) the shape, dimensions and area of lots, blocks, and the remainder lot, if any; and

each proposed lot individually identified without duplication of lot identifiers, and where practicable, where a parcel if being added to or subtracted from an existing lot or where a lot shown on a plan of subdivision is being divided, the proposed lot or lots shall be identified by the existing lot identifier and a letter; and

j) the bearings of the boundaries of proposed lots; and

k) the width and location of railroads, and existing and proposed public streets, including intersections and turning circles; and

l) the boundaries of proposed lots shown by solid lines, and the vanishing boundaries of existing lots being re-subdivided, consolidated or both, shown as broken lines; and

m) a notation stating whether or not the lots for which approval is requested are serviced by central sewer and water systems; and

n) the width, location and nature of any easements or rights-of-way on or affecting the area of land proposed to be subdivided; and

o) the date on which the final plan of subdivision was certified with all revisions to be identified, dated and initialled; and

p) north point; and

q) the scale to which the final plan of subdivision is drawn; and

r) the names of existing and proposed public streets; and

s) at least one survey marker of the subdivision referred by bearing and distance to a Nova Scotia Control Monument; and

t) any other information which the Development Officer deems necessary to determine whether a final plan of subdivision conforms to this by-law.

PART 17: ENDORSEMENT AND FILING OF FINAL PLANS

17.1 When the requirements of the Planning Act, this by-law and the Regulations Respecting Subdivision of Land to be Serviced by On-Site Sewage Disposal Systems pursuant to the Health Act have

been met and the final plan of subdivision has been approved by the Development Officer, approval shall be endorsed on the final plan of subdivision by the Development Officer.

17.2 The Development Officer shall forward a copy of the endorsed final plan of subdivision to the subdivider.

17.3 The Development Officer shall give notice of the endorsement of approval on the final plan of subdivision to:

a) the Council; and

the surveyor; and

c) any other department or agency of the Province or the Town who has been requested to review the final plan of subdivision.

17.4 The following information shall be written or stamped on any final plan of subdivision which is endorsed:

a) "This final plan of subdivision is approved for lots _____";

b) the classification of each lot within one of the classes A, B, C or D, including the definition of such class, specified in Schedule "A" to the Regulations Respecting Subdivision of Land to be Serviced by On-Site Sewage Disposal Systems or "Lots _____ are serviced with a central sewer".

17.5 Pursuant to Section 100(2) of the Planning Act, the Development Officer shall forward by certified mail or hand deliver one endorsed copy of the final plan of subdivision to the office of the Registrar of Deeds for the registration district in which the land is located and pay the fees required under Part 18 of this By-law to file the final plan.

17.6 Pursuant to Section 100(2B) and (2C) of the Planning Act, the Development Officer shall register a notice, in the form specified in Schedule "F", which indicates approval of the final plan of subdivision in the Registry of Deeds,. and forward the fees required in Section 18.1 of these regulations.

PART 18: FEES FOR FILING

18.1 The subdivider shall pay the fees contained in the Costs and Fees Act, R.S.N.S., 1967, C.63, for filing the endorsed final plan of subdivision "registering a notice of approval of the plan, and certification of a copy of such plan.

18.2 The fee referred to in Section 18.1 shall be paid at the time of application for approval of the final plan of subdivision by cheque or money order made payable to the Registry of Deeds.

18.3 Where the final plan of subdivision does not receive endorsement of approval by the Development Officer, the subdivider shall be entitled to the return of the cheque or money order referred to in Section 18.2.

SCHEDULE "A"

APPLICATION FORM

TOWN OF BRIDGEWATER

REQUEST FOR SUBDIVISION APPROVAL

Name, Address and Phone Number of Property Owner
Name, Address and Phone Number of Applicant, if not the owner
Location of Property
Surveyor's Plan Number
I Hereby request approval for the subdivision of this property with the knowledge and consent of the owner of the property. Signature Date
Please return this form to: The Development Officer Town of Bridgewater P.O. Box 9 Bridgewater, N.S. B4V 2W7 Telephone: 543-4651 Fax : 543-6876 The office is located at 60 Pleasant St., Bridgewater

SCHEDULE "B"
STREET DESIGN STANDARDS*
PART 1 - TABLE OF STREET DESIGN STANDARDS

	Street Classification		
	Local Street	Collector Street	Arterial Street
Design Speed	50 kph (30 mph)	50 kph (30 mph)	70 kph (45 mph)
Minimum Right-of-Way	15 m (50')	20 m (66')	20 m (66')
Minimum Pavement Width			
Face to Face Curb	9 m (30')	10.5 m (34')	10.5 M (34')
Minimum Crown	150 mm (6")	150 mm (6")	150 mm (6")
Minimum Width of Gravel Surface	10 m (33')	12 m (39')	12 m (39')
Maximum Back Slope	2:1	2:1	2:1
Maximum Grade	8%	8%	6%
Minimum Grade	0.5%	0.5%	0.5%
Radius for Centerline Curvature	Less than 15 m (50') or Greater than 70 m (230')	Greater than 70 m (230')	Greater than 190 m (625')
Minimum Sight Distance	60 m (200')	60 m (200')	110 m (360')
Minimum Cul-de-sac radius Right-of-way	16.5 m (54')	N/A	N/A
Minimum Cul-de-Sac radius from Centre to Face of Curb	14 m (46')	N/A	N/A
Maximum Dead-end Street Length from beginning to the Designated Turning Area	107 m (350')	N/A	N/A
Maximum Distance Between Intersections	365 m (1,200')	365 m (1,200')	N/A
Minimum Distance Between Intersections (At Centerline)	60 m (200')	65 m (215')	180 m (590')
Maximum Centerline Offset	1 m (3')	1 m (3')	1 m (3')
Minimum Culvert Diameter	375 mm (15")	375 mm (15")	375 mm (15")
Intersection Angles (at Centrelines)	75 degrees to 105 degrees	75 degrees to 105 degrees	75 degrees to 105 degrees

*NOTE: 1) Metric values are the standard and English values are given only for approximate reference purposes.

2) These standards may be varied by the Town Engineer in exceptional circumstances and in accordance

with accepted Engineering practice.

PART 2 - STREET PAVING

a) All streets shall contain standard curb and gutter and be paved with a minimum of 88 millimetres (3 1/2 inches) of hot mix asphalt. Area behind the curb to the street line shall be filled with material not exceeding 100 millimetres in any dimension and graded at 2 percent to within 100 mm of the top of the curb.

b) The minimum pavement width (face of curb to face of curb) shall be:

-	arterial	-	10.5 metres
-	collector	-	10.5 metres
-	local	-	9 metres
-	minimum radius of a cul-de-sac, from centre bulb to face of curb	-	14 metres

c) Under stable conditions, the base course gravel shall consist of Class "C" and Class "B" material in compacted minimum layers of 150 mm and 100 mm respectively, compacted to 98% standards Proctor Density.

d) The required depth of base course gravels is directly dependent upon the conditions of the subgrade. Therefore, the specific design shall be determined by a geotechnical engineering firm prior to placement and paving.

e) The asphalt shall be placed in two lifts, two-thirds of thickness type B , and the top third, type C.

f) Topsoil (100 mm) and seed shall be placed from the back of the curb to the street line at 2 percent to the top of the curb; where driveway openings exist in the curb and gutter, topsoil shall not be placed in the driveway allowance but the area constructed to finish grade with Class A Gravel.

g) Refer to Town of Bridgewater Standard Drawings SD-1, SD-2, SD-3, and SD-4.

PART 3 - CURB AND GUTTER

a) Concrete curb and gutter shall conform to Type C, Nova Scotia Department of Transportation standard and be constructed of 30 MPa concrete, 6 1/2 percent air entrainment. Gravel base shall be Class B gravel, evenly graded, compacted to 98 percent Proctor Density. Residential drive-way openings shall be 4.25 metres wide for single driveways and 6 metres wide for double driveways with a 300 millimetre taper on each end.

b) Commercial driveway opening width shall conform to the same specifications. The maximum width of a commercial driveway opening shall not exceed 9 metres.

c) Pedestrian ramps shall be installed at the intersections, constructed with a 1200 millimetre low profile curb and 300 millimetre taper on either end.

d) Refer to Town of Bridgewater Standard Drawings SD-9, SD 9A, SD-10, SD-11 and SD-12.

PART 4 - SIDEWALK

a) Sidewalks shall be incorporated into the construction of new collector and arterial roadways as follows: Arterial roadways, both sides; collector roadways, one side.

b) The minimum width of all sidewalks shall be 1.5 metres, unless otherwise approved by the Engineer.

c) The sidewalk shall be separated from the back of the street curb by a minimum of 1.2 metres median and have a minimum of 900 millimetres median between back of sidewalk and edge of right-of-way.

d) Pedestrian ramps shall be installed at all intersections, having a minimum of 1200 millimetre low-back curb, and a 300 millimetre taper on both ends.

e) Gravel base shall be 150 millimetre Class A or B gravel.

f) Sidewalks, in commercial zones, shall be constructed of 30 MPa concrete, 6 1/2 percent air entrained.

i) The year of construction shall be stamped in concrete sidewalks at all intersections using block lettering of 75 millimetres in height.

ii) Concrete sidewalk slab shall be minimum 100 millimetre thick and shall be 150 millimetre thick at driveway locations.

g) Sidewalks, in residential areas, shall be constructed of a minimum of 50 mm (2 in.) thick (compacted) hot-mix asphaltic concrete Type C and shall be constructed of a minimum of 75 mm (3 in.) thick (compacted) hot-mix asphaltic concrete Type C at driveway locations.

h) Refer to Town of Bridgewater Standard Drawings SD-5, SD-6, SD-7 and SD-8.

SCHEDULE C
WATER SUPPLY DESIGN STANDARDS

Part I **Domestic Water Demands**

- average daily demand 400 LPD (90 IGPD)
- maximum daily demand 600 LPD (130 IGPD)
- maximum hourly demand expressed as daily rate 1,100 LPD (250 IGPD)

Part II **Fire Demand**

To be calculated in accordance with the latest published requirements of the Canadian Underwriters Association, Minimum pressure at the hydrant to be 140 KPA 20 psi) at the required flow.

Part III **Design Demand**

The demand used for main size selection shall be fire demand plus maximum daily demand. Minimum main size to be 200 mm (8 inches).

Part IV

The Hazen - Williams formula or its appropriate nomograph shall be used for design.

Part V

Hydrants shall be provided at a maximum interval of 150 metres (500 feet). Hydrant laterals to be a minimum diameter of 150 mm (6 inches). A gate valve shall be provided in every hydrant lateral.

Part VI

The following control valves shall be provided on every main:

i) Three (3) valves per cross-section

ii) Two (2) valves per Tee Intersection

iii) One valve per 425 metres (1,400 feet) where there are no intersections. All valves shall be accessible through valve boxes.

Part VII

All water mains shall be constructed of cement line ductile iron pipe, class 50, or Polyvinyl Chloride (PVC) pressure pipe, DR of 18, supplied, installed, tested, and disinfected in accordance with the specifications of the American Water Works Association and the Public Service Commission in Bridgewater.

Part VIII

All water service connections between the main stop and curb stop shall be a minimum of 20 mm (3/4 inch) diameter, type K copper, or 25 mm (one inch) diameter 1,120 KPA (160 psi) polyethylene pipe. Service pipe must be rated for in excess of 150% of the normal working pressure. All curb stops shall have valve boxes with telescopic stems. Stems shall be set at the approximate level of the finished grade, as near as possible to the boundary line of the street.

Part IX

Water connections from the water system to the property lines shall be the responsibility of the subdivider.

Part X

The subdivider shall pay for tests required by the Public Service Commission of Bridgewater to determine whether the system is properly installed. Test pressures referred to in the A.W.W.A. standard shall be 150% of the normal working pressure.

Part XI

These standards may be varied by the Town Engineer in exceptional circumstances and in accordance with accepted Engineering practice.

SCHEDULE D

SANITARY SEWER DESIGN STANDARDS

Part 1 **Design Factors**

a) Sanitary sewers shall be designed for peak flow plus infiltration. Peak flows shall be estimated using either the Babbitt or Harmon formulas which are based on average daily water consumption, and the minimum infiltration allowance shall be 0.011 Litres/Sec/Hectare (0.001 cfs per acre).

b) The capacity of sanitary sewers shall be calculated using the Manning formula or its appropriate nomograph.

c) Sanitary sewers using gravity flow shall not be designed as pressure systems.

d) Sanitary sewers flow velocities shall not be less than 0.6 m/sec (2ft/sec) nor greater than 4.6 m/sec (15 feet per second).

e) No sanitary sewer main shall be less than 200 mm (8 inches) in diameter.

f) Manholes shall be constructed at every change of grade or direction, at all pipe intersections, and at intervals not exceeding 100 m (330 feet). No manholes shall be less than 1.0 m (39 inches) in diameter.

g) All connections shall be a minimum of 150 mm (6 in.) in diameter except that a minimum of 100 mm (4 in.) in diameter is acceptable for a single family dwelling.

h) The sanitary sewer system shall be designed and constructed to accommodate potential flow from adjacent upstream development.

Part II **Pipe Testing**

a) The applicant shall pay for tests to demonstrate that the system is properly installed.

b) All sewer pipes shall be tested in the presence of the Town Engineer or a person appointed by him.

c) The sanitary sewer shall be tested from manhole to manhole by placing a plug in the lower end of the pipe and filling the upper manhole to a depth of not less than 1,500 mm (4 ft.) above the top of the pipe. The test period shall be for at least one half hour and maximum permissible leakage shall be 1.4 litres per mm of pipe per kilometre of pipe length per hour (300 Imperial Gallons per inch of pipe diameter, per mile of pipe, for a 24 hour period).

d) An air test, approved by the Town Engineer, may be permitted in lieu of a water test for sanitary sewer.

e) A television inspection and report shall be completed for the sanitary sewer mains and shall be performed prior to street paving or primary acceptance. A visual inspection shall be carried out on all manholes, catchbasins, etc., by the Engineer or his delegate.

f) A mandrel test shall be performed on all PVC pipe prior to street paving and/or primary acceptance. Testing shall be in accordance with manufacturers' specifications.

Part III **Sanitary Sewer Pipe Material**

a) Sanitary Sewer pipe shall be constructed of: concrete meeting ASTM specifications C-14 for extra strength pipe; polyvinylchloride having a wall thickness capable of withstanding normal highway loading and soil pressures; or other materials approved by the Town Engineer.

b) All sanitary sewers shall have gasketed joints to prevent ex-filtration as well as in-filtration.

Part IV **Variance**

These standards may be varied by the Town Engineer in exceptional circumstances and in accordance with accepted Engineering practice.

SCHEDULE E

STORM DRAINAGE DESIGN STANDARDS

Part I **Storm Water Flow Calculation**

(a) The following rainfall intensity values, based on a twenty five (25) year return cycle shall be used to calculate storm water runoff:

TABLE I

RAINFALL INTENSITY - BRIDGEWATER

Time (minutes)	Intensity mm/hr (in./hr)
10	99 mm (3.9 in.)
100	25 mm (1.0 in.)
1000	8 mm (0.30 in.)

Intermediate values may be obtained by plotting a logarithmic graph of intensity in millimetres per hour (inches per hour) against time in minutes.

(b) The Rational Method shall be used for computing storm water runoff quantities for the local system in residential systems.

(c) Average runoff coefficients for all classes of land use shall be computed on the basis of the ratios of areas of the various types of surfaces in accordance with Table 2.

TABLE 2

RUN-OFF COEFFICIENTS FOR CALCULATING STORM WATER FLOW

Surface Type	Recommended Run-off Coefficient
Asphalt, Concrete, Roof areas and Impervious Areas	0.95
Sodded Open Areas with Sandy soil: - 0.2% ground slope (flat) - 2.7% ground slope (rolling) - over 7% ground slope (steep)	 0.15 0.20 0.25
Sodded Open Areas with Clay Soil: - 0.2% ground slope (flat) - 2.7% ground slope (rolling) - over 7% ground slope (steep)	 0.20 0.25 0.30

Part II Storm Sewer Design Practices

(a) **Design Storm Selection:**

Storm sewers on residential streets shall be designed to accommodate a rainfall with a return period of twenty-five years.

(b) **Surface Drainage**

Where practical, considering both topography and economics, roadway grades and lot drainage shall be designed with continuous fall to a storm drainage outlet.

(c) The capacity of storm sewers shall be calculated using Manning's formula or its appropriate nomograph.

(d) Manholes are to be provided at every change of grade or change of direction and at all pipe intersections. Maximum distance between manholes shall be 120 m (400 ft.). Minimum diameter of manholes shall be 1,000 mm (39 inches).

(e) **Foundation Footing Drains**: At the option of the Town Engineer, foundation Footing Drains are to be discharged on to the surface, or into the storm system. Footing drainage should be by one of the following means:

i) by sump pumps discharging to the ground surfaces, or

by connection to the storm sewer system with flow either by gravity or sump pump.

(f) **Storm Water Retention Ponds:**

Where applicable, consideration shall be given to the creation of storage reservoirs in association with parks for the purpose of reducing peak storm flows.

Part III Storm Sewer Design Standards

(a) Design flow velocities in storm sewers shall not be less than 0.75 m/sec (2.5 fps) nor greater than 6 mps (20 fps). Flow at pipe outlets shall be controlled to prevent erosion in receiving channels.

(b) **Minimum Pipe Size:**

The minimum allowable pipe size for storm sewers is 250 mm (10 inches) in diameter.

(c) **Depth of Cover:**

The minimum depth of cover to top of a storm sewer shall be 1,200 mm (4 ft.).

Part IV Catch Basins

Catch basin laterals shall be installed and capped by the applicant at low points in the road and at low grade points at intersections. Laterals shall also be provided for additional catch basins along the streets as set out in the following table. Catch basins will be constructed by the Town using "bicycle proof" catch basin covers.

Road Grade (%)	Maximum Spacing
0.5 - 3.0	110m (350 ft.)
3.0 - 4.5	100m (330 ft.)
Greater than 4.5	75m (250 ft.)

The maximum distances are based on the capacity of a 600 mm (24 inch) square grid on pavement widths up to 10 metres (33 ft.).

Part V Storm Sewer Material

(a) Storm sewer pipe under roadways shall either be concrete meeting ASTM Specifications C14 or C76 or be polyvinylchloride (PVC) with a minimum DR of 28

(b) All storm sewers shall be installed with watertight joints.

Part VI Variance

These standards may be varied by the Town Engineer in exceptional circumstances and in accordance with accepted Engineering practice.

Part VII Testing

a) All testing shall be conducted in the presence of the Town Engineer or his designate.

b) A television inspection and report shall be required for the storm sewer mains and shall be performed prior to street paving or primary acceptance. A visual inspection shall be carried out on all manholes, catchbasins, etc., by the Engineer or his delegate.

c) A mandrel test shall be performed on all PVC pipe prior to street paving and/or primary acceptance. Testing shall be in accordance with manufacturers' specifications."

SCHEDULE F

NOTICE OF APPROVAL OF A PLAN OF SUBDIVISION IN ACCORDANCE WITH SECTION 100(2B) AND (2C) OF THE PLANNING ACT

Name of the Owner(s) _____

_____

Name of Subdivision _____

Location _____

Date of Approval _____ For Lot(s) _____

Surveyor _____ Date of Plan _____

Dated this ____ day of _____ 19 _____

_____

Development Officer

Plan of Subdivision Filed in the Registry of Deeds as Plan #_____

Dated this ___ day of _____ , 19__

This plan of subdivision also contains information regarding the lots approved on this plan with respect to one or more of the following:

1. The lots' eligibility for on-site sewage disposal systems.
2. The availability of public sewer and water systems
3. Information indicating whether or not the lots abut a public street or highway.

SCHEDULE "G"

WALKWAY SPECIFICATIONS

a) The minimum width of walkway right-of-way shall be 4.5 metres. Where municipal sewer and water systems are to be constructed within the walkway right-of-way, the minimum width shall be 6 metres.

b) As much as possible, the constructed portion of the walkway shall be centrally located within the right-of-way.

c) Where possible, all manholes and water appurtenances shall be to the sides of the 1800 millimetres asphalt walkway.

d) The walkway shall be constructed as follows:

1. 150 millimetres Class B gravel, 2.4 metres wide and compacted to 95 percent Proctor Density.
2. 50 millimetres thickness hot-mix asphaltic concrete Type C, 1.8 metres wide.

e) The maximum grade for a walkway shall not exceed (15 percent). Where site topography dictates grades of more than 15 percent, concrete steps of uniform rise and run, and handrails shall be installed, unless otherwise approved by the Town of Bridgewater.

f) Both sides of any asphalt walkway shall be topsoiled and seeded from the edge of the walkway to the edge of the right-of-way, if feasible.

g) All reset structures within the walkway easement shall be adjusted to 6 millimetres finish grade.

h) All walkways shall be constructed at the time of the installation of services and streets. Natural vegetation of the area shall be preserved during walkway construction, where possible. Mature trees and shrubbery shall remain, and clearing and grubbing restricted to the construction area.

i) Walkways shall be oriented so as to make use of existing street lighting, where possible.

j) All walkways in residential and commercial areas shall be fenced on both sides for the entire length of the walkway right-of-way, if deemed necessary by the Bridgewater Parks and Recreation Commission. Fencing shall be galvanized chain link fencing of a minimum height of 1.2 metres.

k) Refer to Town of Bridgewater Standard Drawing SD-14.

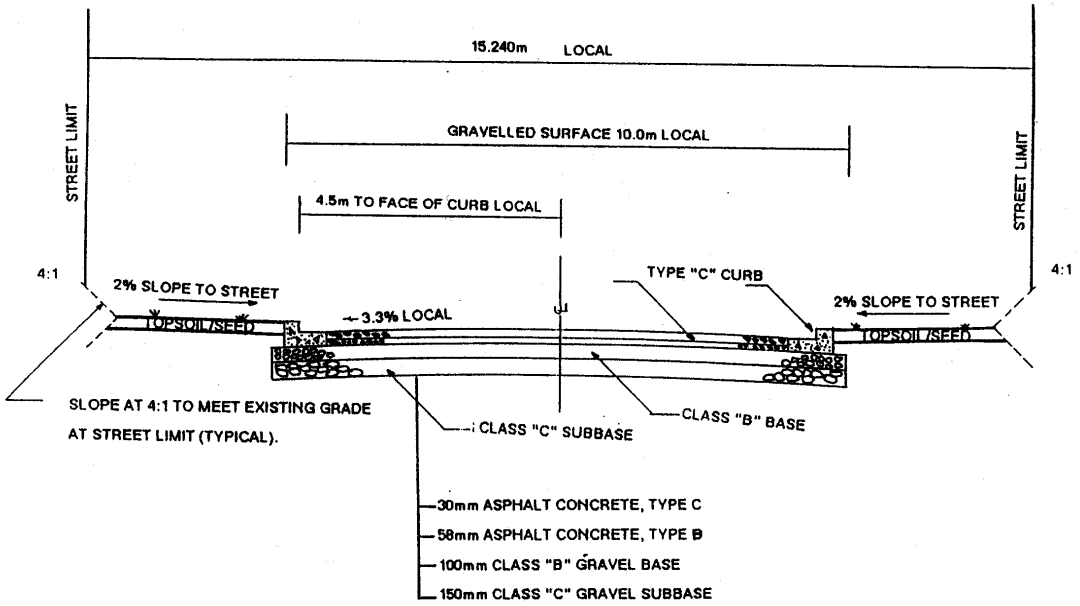
SCHEDULE "H"

LIST OF STANDARD DRAWINGS

SD-1	Collector/Arterial Street, Typical Sections
SD-2	Local Residential Street, Typical Sections
SD-3	Intersection, Street Grade Detail
SD-4	Cul-de-sac, Details
SD-5	Asphalt Sidewalk, Typical Details
SD-6	Concrete Sidewalk, Typical Details
SD-7	Sidewalk, Driveway Ramp Details
SD-8	Sidewalk, Pedestrian Ramp Detail
SD-9	Concrete Curb, Typical Detail
SD-9A	Roll Face Curb and Gutter
SD-10	Concrete Gutter, Typical Detail
SD-11	Asphalt Depression at Catchbasin, Detail
SD-12	Typical Catchbasin, Detail
SD-13	Typical Manhole, Frame & Cover, Detail
SD-14	Typical Walkway, Cross-Section

TYPICAL ROADWAY SECTION

R.O.W. WIDTH



NOTE:

1. SUBGRADE TO BE PREPARED IN ACCORDANCE WITH CONSTRUCTION SPECFICATIONS OUTLINED IN NOVA SCOTIA DEPARTMENT G TRANSPORTATION SPECFICATIONS FOR SUB-DIVISION ROADS IN URBAN AND RURAL AREAS. (LATEST EDITION)

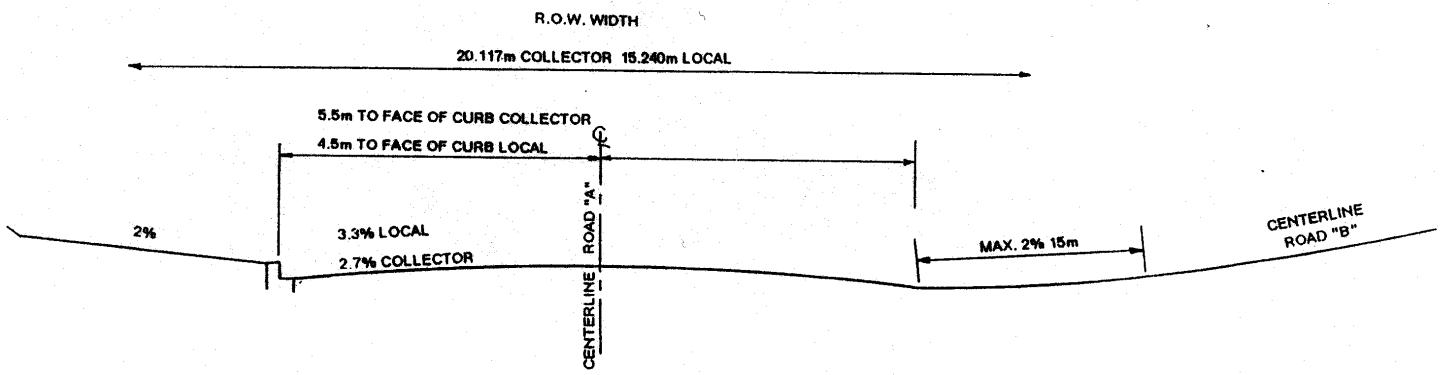
2. GRAVELS TO BE COMPACTED TO 98% STANDARD PROCTOR.

REVISIONS			
NUMBER	DATE	DESCRIPTION	CHECKED

TOWN OF BRIDGEWATER
ENGINEERING DEPARTMENT
STANDARD DRAWINGS
LOCAL RESIDENTIAL STREET
TYPICAL SECTION

SCALE: NOT TO SCALE	
DRAWN BY: RICHARD FITZGERALD	CHECKED BY: STUART GLEN
DATE: 2nd APRIL, 1993	DRAWING No.: SD – 2

TYPICAL INTERSECTION



GRADES AT INTERSECTIONS SHALL NOT EXCEED 2%
FOR AT LEAST 15m MEASURED FROM THE SHOULDER OF
THE INTERSECTING ROAD.

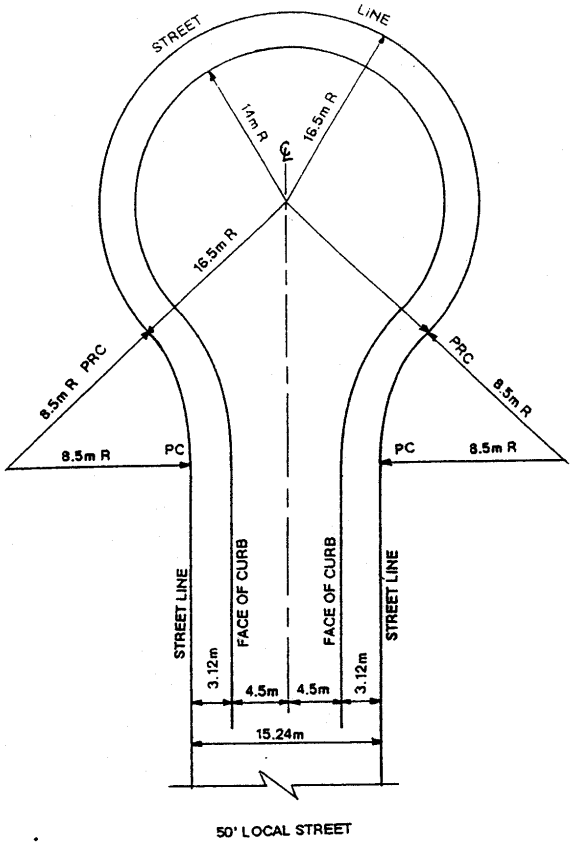
REVISIONS			
NUMBER	DATE	DESCRIPTION	CHECKED

TOWN OF BRIDGEWATER
ENGINEERING DEPARTMENT

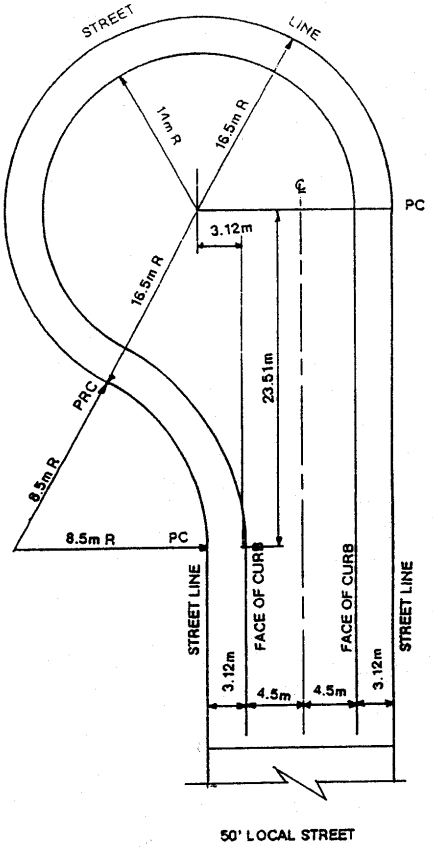
STANDARD DRAWINGS

INTERSECTION
STREET GRADE DETAIL

SCALE: NOT TO SCALE	
DRAWN BY: RICHARD FITZGERALD	CHECKED BY: STUART GLEN
DATE: 2nd APRIL, 1993	DRAWING No.: SD – 3



TYPE I – CIRCULAR

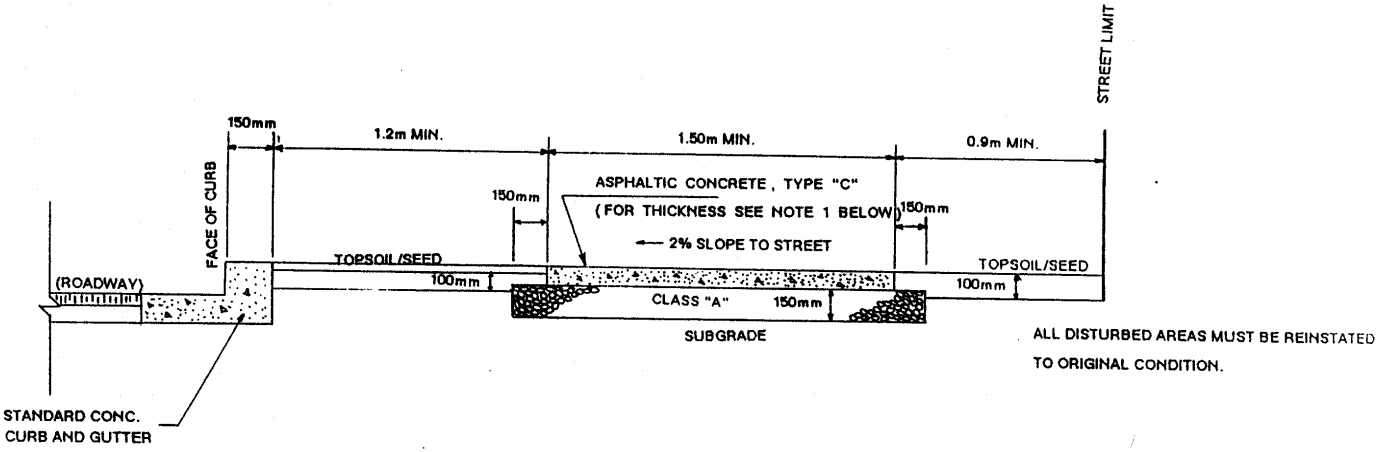


TYPE II – CIRCULAR–OFFSET

REVISIONS			
NUMBER	DATE	DESCRIPTION	CHECKED

TOWN OF BRIDGEWATER
ENGINEERING DEPARTMENT
STANDARD DRAWINGS
CUL – DE – SAC
DETAILS

SCALE: NOT TO SCALE	
DRAWN BY: RICHARD FITZGERALD	CHECKED BY: STUART GLEN
DATE: 2nd APRIL, 1993	DRAWING No.: SD – 4



ALL DISTURBED AREAS MUST BE REINSTATED TO ORIGINAL CONDITION.

NOTE:

1. NORMAL THICKNESS OF SIDEWALK TO BE 50mm, 75mm THICK IN AREAS OF DRIVEWAY.
2. THE GRAVEL BASE SHALL EXTEND 150mm MIN. ON EACH SIDE OF SIDEWALK STRUCTURE.
3. IN AREAS WHERE SIDEWALK CROSSES DRIVEWAY, BASE COURSE SHOULD EXTEND 300mm MIN. EITHER SIDE OF FINISH SURFACE.

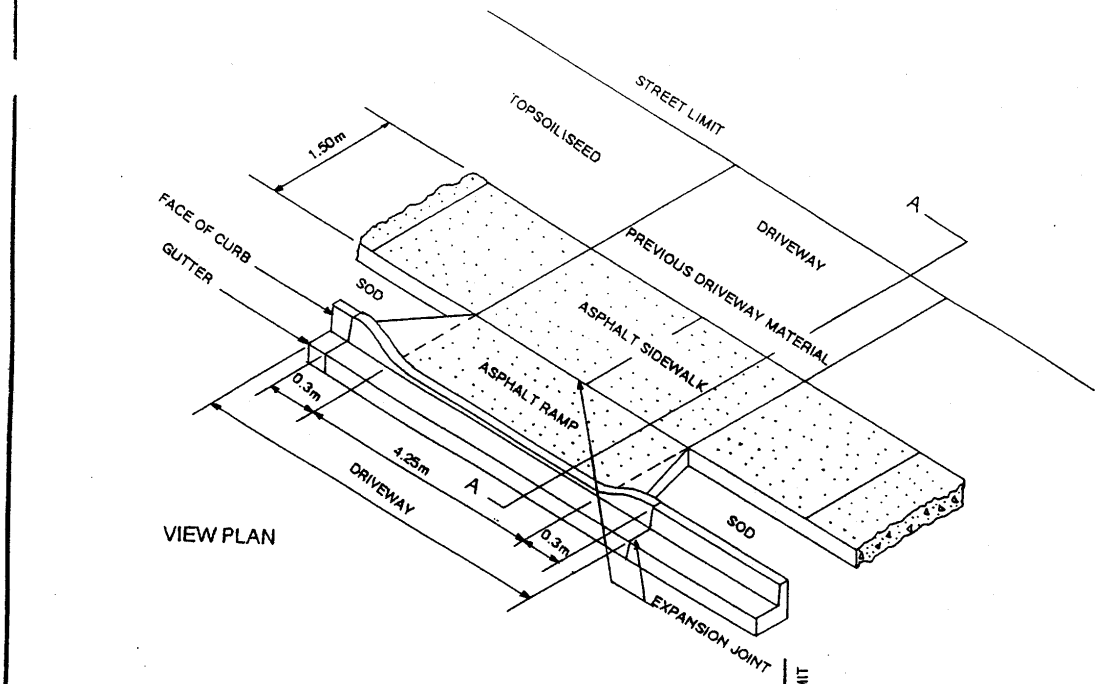
REVISIONS			
NUMBER	DATE	DESCRIPTION	CHECKED

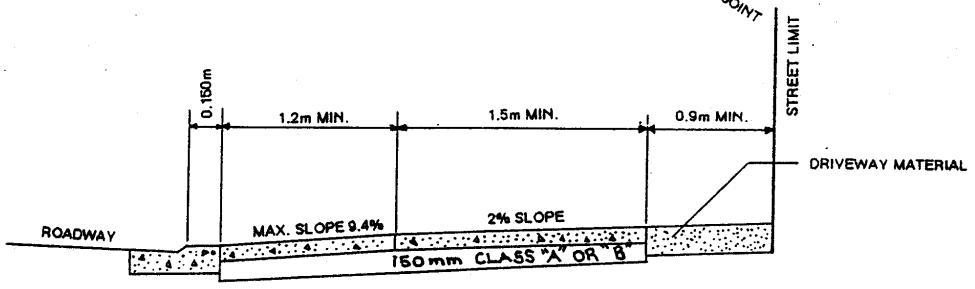
TOWN OF BRIDGEWATER
ENGINEERING DEPARTMENT
STANDARD DRAWINGS
ASPHALT SIDEWALK
TYPICAL DETAILS

SCALE: NOT TO SCALE	
DRAWN BY: RICHARD FITZGERALD	CHECKED BY: STUART GLEN
DATE: 2nd APRIL, 1993	DRAWING No.: SD – 5

OWN ENGINEER

ALL DISTURBED AREAS MUST BE REINSTATED TO ORIGINAL CONDITION





SECTION A

NOTE:

1. CATCHBASIN CAPPING RINGS TO MEET 110 SERIES LOADING REQUIREMENT.
2. BACKFILL MATERIAL AROUND CATCHBASIN TO BE SELECTBACKFILL MATERIAL COMPACTED TO 95% STANDARD PROCTOR.
3. IN AREAS WHERE SIDEWALK CROSSES DRIVEWAY, BASE COURSE SHOULD EXTEND 300mm.

REVISIONS			
NUMBER	DATE	DESCRIPTION	CHECKED

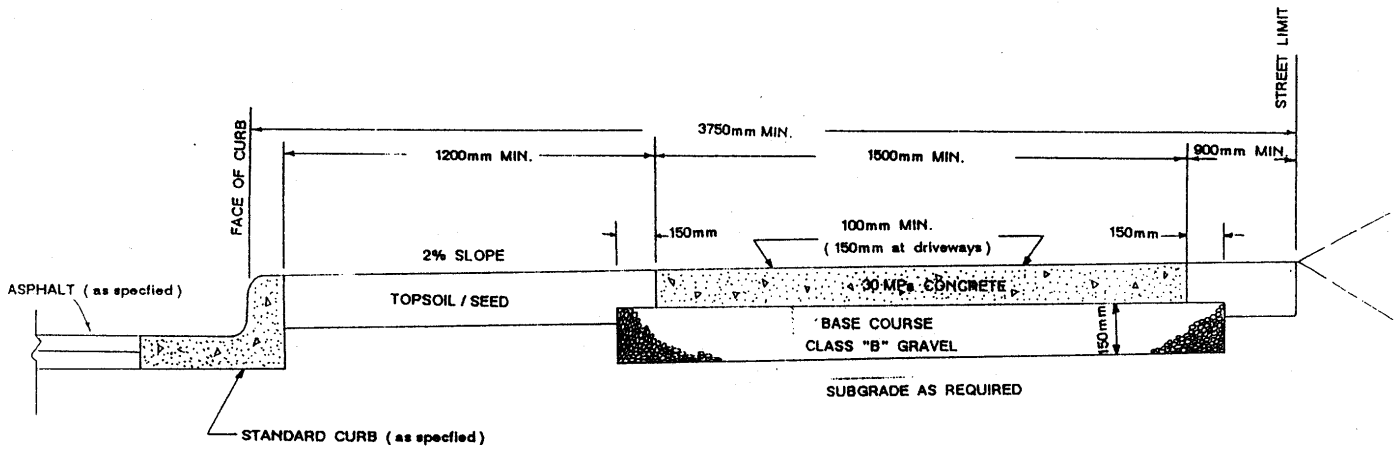
TOWN OF BRIDGEWATER
ENGINEERING DEPARTMENT

STANDARD DRAWINGS

SIDEWALK
DRIVEWAY RAMP DETAIL

SCALE: NOT TO SCALE	
DRAWN BY: RICHARD FITZGERALD	CHECKED BY: STUART GLEN
DATE: 2nd APRIL, 1993	DRAWING No.: SD – 7

TOWN ENGINEER



NOTES

1. NORMAL THICKNESS OF CONCRETE SIDEWALK TO BE 100mm.
2. THICKNESS OF CONCRETE SIDEWALK THROUGH DRIVEWAY AREA TO BE 150mm.
3. WIRE MESH (150mm x 150mm G.A.W.W.A.) TO BE USED IN ALL COMMERCIAL TYPE DRIVEWAYS.
4. THE BASE COURSE SHALL EXTEND 150mm MIN. ON EACH EDGE OF THE SIDEWALK STRUCTURE.
5. BASE COURSE GRAVEL TO BE COMPACTED TO 98% STANDARD PROCTOR

REVISIONS			
NUMBER	DATE	DESCRIPTION	CHECKED

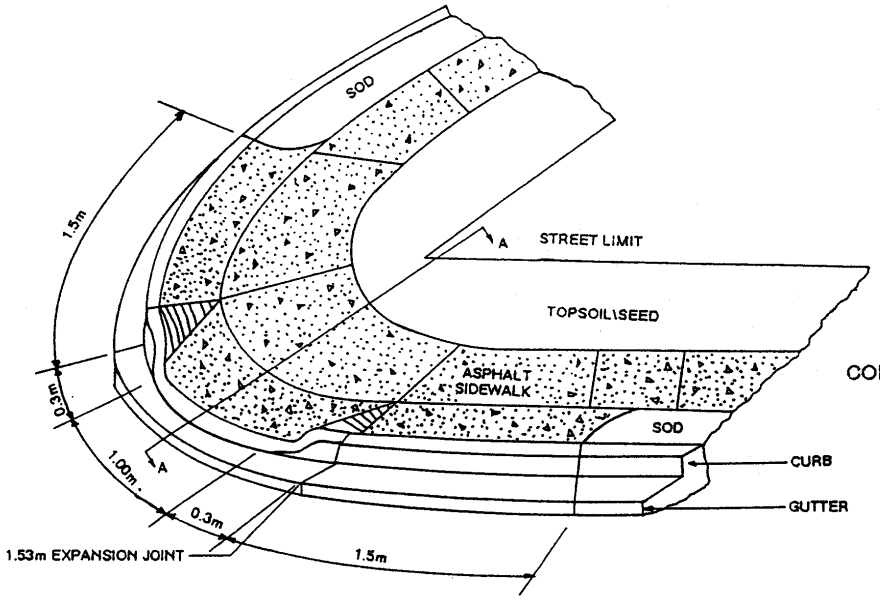
TOWN OF BRIDGEWATER
ENGINEERING DEPARTMENT

STANDARD DRAWINGS

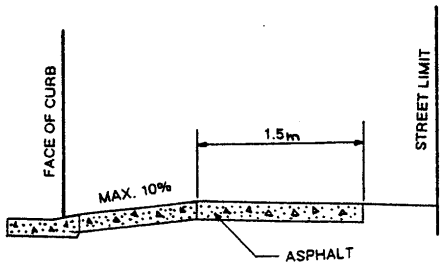
CONCRETE SIDEWALK
TYPICAL DETAILS

SCALE: NOT TO SCALE	
DRAWN BY: RICHARD FITZGERALD	CHECKED BY: STUART GLEN
DATE: 2nd APRIL, 1993	DRAWING No.: SD – 6

TOWN ENGINEER



CORNER BLOCK VIEW



SECTION A-A

REVISIONS			
NUMBER	DATE	DESCRIPTION	CHECKED

TOWN OF BRIDGEWATER
ENGINEERING DEPARTMENT

STANDARD DRAWINGS

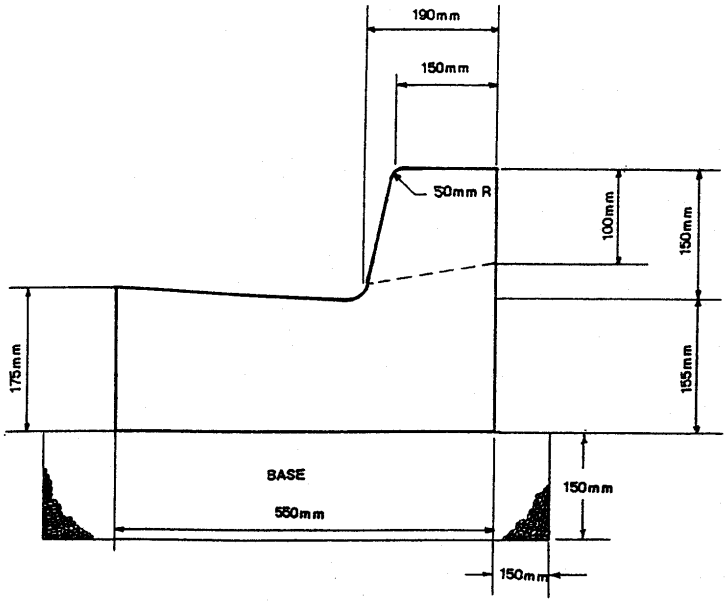
SIDEWALK
PEDESTRIAN RAMP DETAIL

SCALE: NOT TO SCALE	
DRAWN BY: RICHARD FITZGERALD	CHECKED BY: STUART GLEN
DATE: 2nd APRIL, 1993	DRAWING No.: SD – 8

TOWN ENGINEER

NOTES:

1. CURBS AND CURBS & GUTTER SHALL BE BUILT ON AN APPROVED GRANULAR BASE HAVING A MINIMUM DEPTH OF 150mm.
2. EXPOSED EDGES SHALL BE FINISHED WITH A ROUNDED TOOL TO PRODUCE A 25mm RADIUS.
3. CONCRETE USED SHALL BE 30 MPa WITH 6% AIR ENTRAINMENT.



TYPE "C"

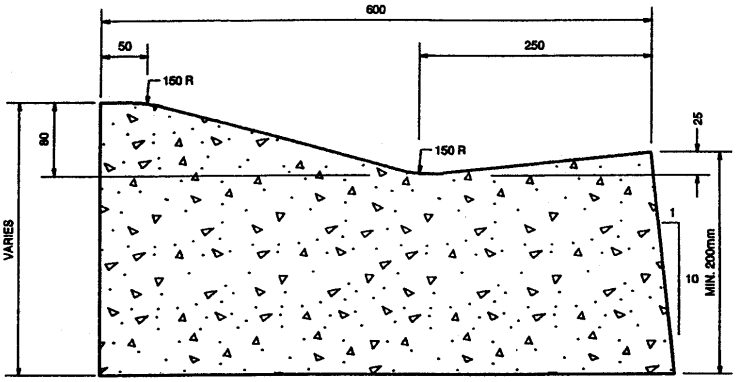
REVISIONS			
NUMBER	DATE	DESCRIPTION	CHECKED

TOWN OF BRIDGEWATER
ENGINEERING DEPARTMENT

STANDARD DRAWINGS

TYPICAL CONCRETE CURB
DETAIL

SCALE: NOT TO SCALE		
DRAWN BY: RICHARD FITZGERALD	CHECKED BY: STUART GLEN	
DATE: 2nd APRIL, 1993	DRAWING No.: SD – 9	TOWN ENGINEER

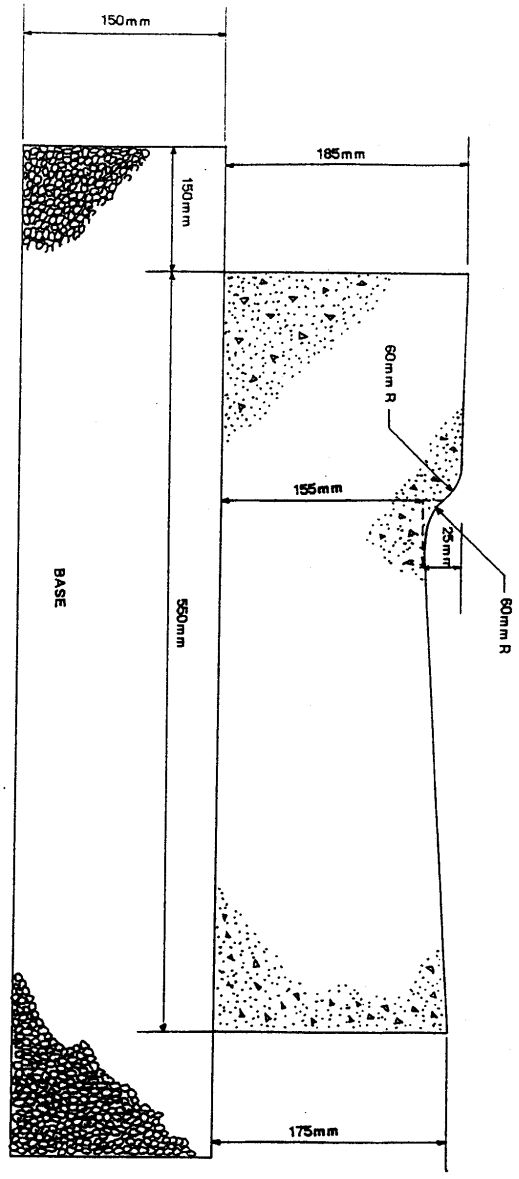


ALL DIMENSIONS
IN MILLIMETRES UNLESS
OTHERWISE NOTED

THE CITY OF Edmonton
STANDARD DRAWING

ROLL FACE CURB AND GUTTER

Date Approved:	Drawn By:	Approved	Revision #	Drawing #
Nov 1998	DTS,BDA			
Scale:	Checked By:		-	SD9A
N.T.S.				



REVISIONS			
NUMBER	DATE	DESCRIPTION	CHECKED

TOWN OF BRIDGEWATER

ENGINEERING DEPARTMENT

STANDARD DRAWINGS

TYPICAL CONCRETE GUTTER

DETAIL

SCALE: NOT TO SCALE

DRAWN BY: RICHARD FITZGERALD

CHECKED BY: STUART GLEN

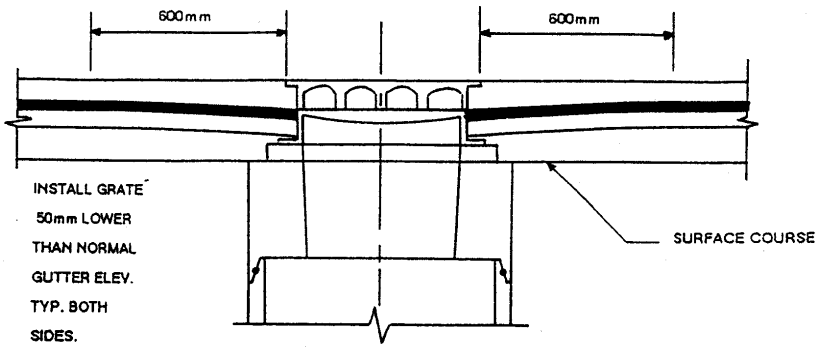
DATE: 2nd APRIL, 1993

DRAWING No.: SD – 10

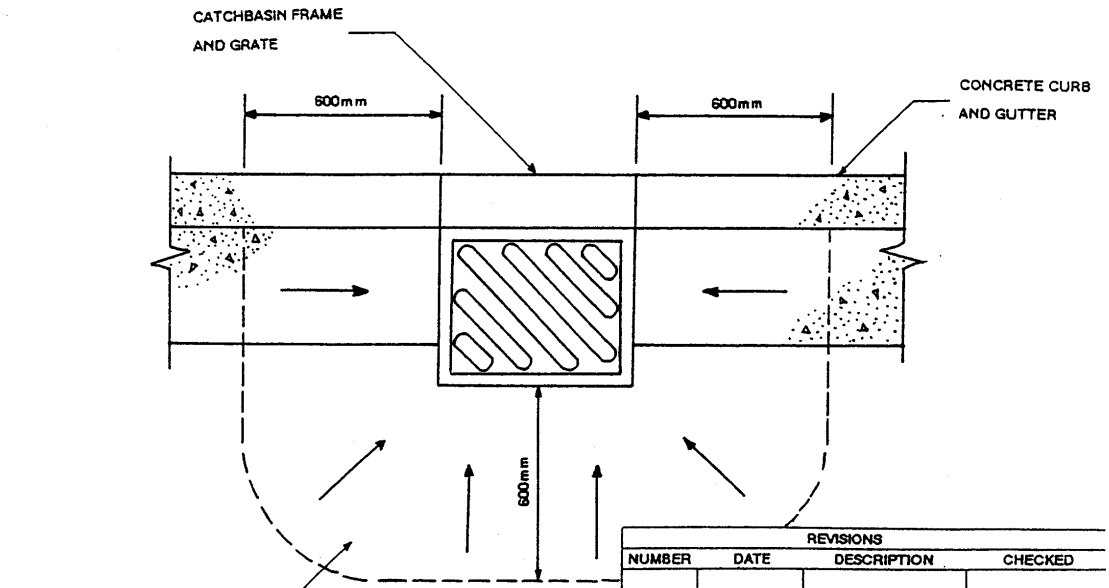
T(

ENGINEER

CURB INLET CATCH BASIN



SECTION



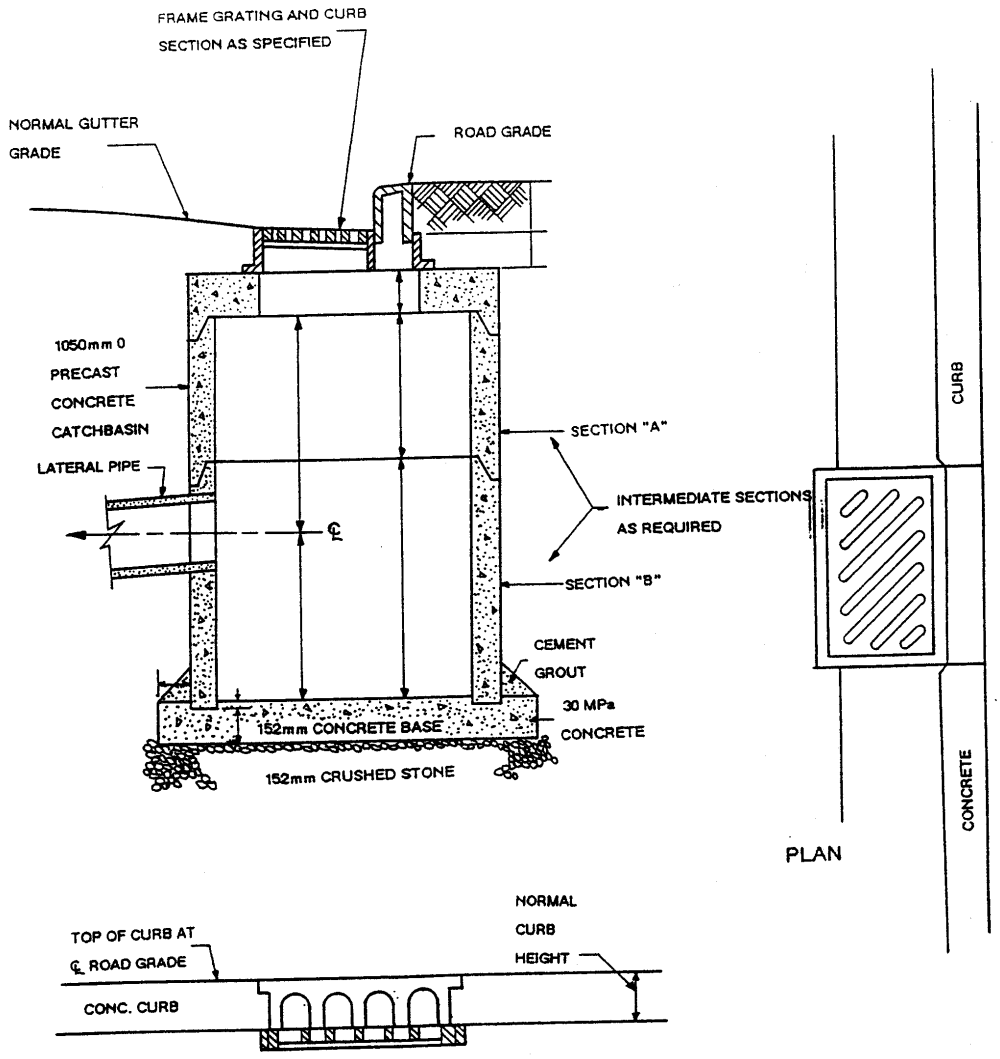
PLAN

REVISIONS			
NUMBER	DATE	DESCRIPTION	CHECKED

TOWN OF BRIDGEWATER
ENGINEERING DEPARTMENT
STANDARD DRAWINGS
ASPHALT DEPRESSION AT CATCHBASIN
DETAIL

SCALE: NOT TO SCALE	
DRAWN BY: RICHARD FITZGERALD	CHECKED BY: STUART GLEN
DATE: 2nd APRIL, 1993	DRAWING No.: SD – 11

TOWN ENGINEER



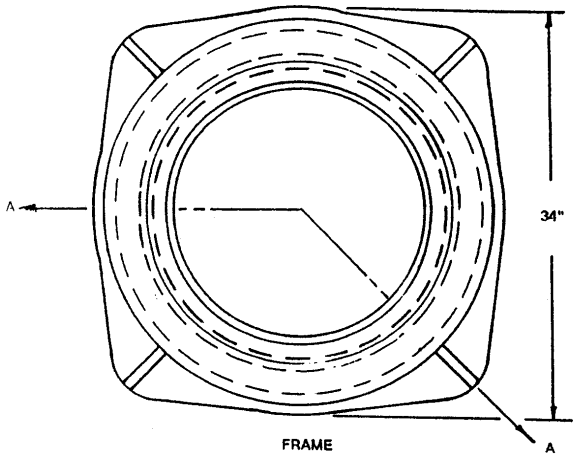
ELEVATION–CURB AT CATCHBASIN

REVISIONS			
NUMBER	DATE	DESCRIPTION	CHECKED

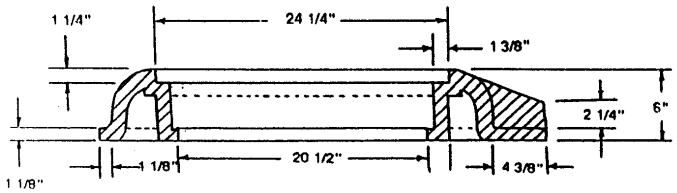
TOWN OF BRIDGEWATER
ENGINEERING DEPARTMENT
STANDARD DRAWINGS
TYPICAL CATCHBASIN
DETAIL

SCALE: NOT TO SCALE	
DRAWN BY: RICHARD FITZGERALD	CHECKED BY: STUART GLEN
DATE: 2nd APRIL, 1993	DRAWING No.: SD – 12

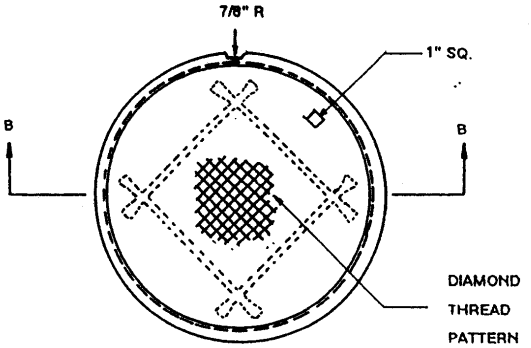
TOWN ENGINEE



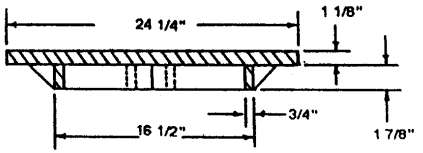
FRAME



SECTION A-A



COVER



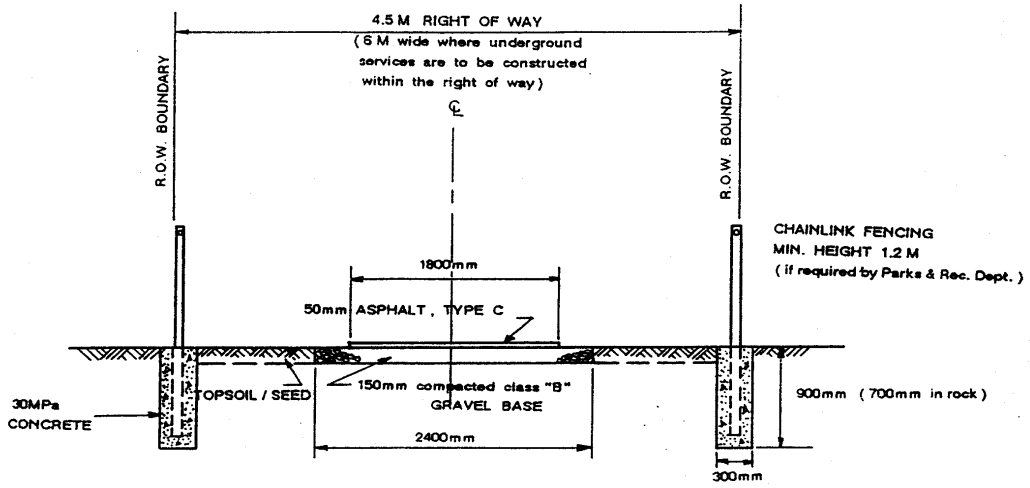
SECTION B-B

NOTE: MATERIAL - GRAY CAST IRON, A.S.T.M. A48 - 74, CLASS 30
FRAME WEIGHT - 325 lbs.
COVER WEIGHT - 135 lbs.
LOAD CAPACITY - 16 000 lbs.

TYPICAL MANHOLE

TOWN OF BRIDGEWATER ENGINEERING DEPARTMENT	
STANDARD DRAWINGS	
TYPICAL MANHOLE FRAME & COVER DETAIL	
SCALE: NOT TO SCALE	
DRAWN BY: RICHARD FITZGERALD	CHECKED BY: STUART GLEN
DATE: 2nd APRIL, 1993	DRAWING No.: SD – 13

WN ENGINEER



REVISIONS			
NUMBER	DATE	DESCRIPTION	CHECKED

TOWN OF BRIDGEWATER
ENGINEERING DEPARTMENT

STANDARD DRAWINGS

TYPICAL WALKWAY
CROSS - SECTION

SCALE: NOT TO SCALE	
DRAWN BY: RICHARD FITZGERALD	CHECKED BY: STUART GLEN
DATE: 2nd APRIL , 1993	DRAWING No.: SD – 14

TOWN ENGINEER