

**THE CORPORATION OF THE
CITY OF WHITE ROCK
BYLAW 396**



A Bylaw to regulate connections to sewers and drains
and to impose sewer connection and rental charges.

CONSOLIDATED FOR CONVENIENCE ONLY

DISCLAIMER: THIS BYLAW IS A CONSOLIDATION OF THE BYLAWS AMENDING CITY OF WHITE ROCK ZONING BYLAW NO. 1591. EFFORTS ARE MADE TO ENSURE THAT THIS CONSOLIDATION IS CURRENT AND ACCURATE HOWEVER ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED. ORIGINAL BYLAWS SHOULD BE CONSULTED FOR ALL INTERPRETATIONS AND APPLICATIONS OF THE BYLAW REGARDING THIS SUBJECT.

Consolidated as of January 2024

TABLE OF CONSOLIDATION			
Bylaw No.	Date of Adoption	Amendment No.	Purpose of Amendment
505	December 28, 1972	1	Amends Schedule B
579	1975	2	Amends Sections 1, 3, 17, 18 and Schedule B
645	1976	3	Amends Schedule B
787	February 9, 1981	4	Amends Schedule B
922	April 11, 1984	5	Amends Sections 1, 5, 15, 17, and 18-23
1193	November 27, 1989	6	Section 5 replaced
1307	1992	7	Amends Schedule B
1356	1993	8	Amends Schedule B
1389	1994	9	Amends Schedule B
1424	March 27, 1995	10	Section 5 replaced
1439	May 8, 1995	11	Amends Schedule B
1490	May 13, 1996	12	Amends Schedule B
1520	May 12, 1997	13	Amends Schedule B
1559	May 11, 1998	14	Amends Schedule B
1588	May 3, 1999	15	Amends Schedule B
1742	May 10, 2004	16	Amends Schedule B
1786	April 24, 2006	17	Amends Schedule B
1811	May 7, 2007	18	Amends Schedule B
1840	May 5, 2008	19	Amends Schedule B
1868	May 4, 2009	20	Amends Schedule B
1885	May 3, 2010	21	Amends Schedule B
1939	May 9, 2011	22	Amends Schedule B
1972	May 14, 2012	23	Amends Schedule B
2011	February 4, 2013	24	Amends Section 5 and Schedule B
2047	January 13, 2014	25	Section 5 and Schedule B
2085	May 11, 2015	26	Section 5 and Schedule B
2139	May 9, 2016	27	Schedule B
2245	April 23, 2018	28	Schedule B
2295	May 13, 2019	29	Schedule B

Consolidated Bylaw - Sewer Connection and Rental Charges Bylaw, 1970, No. 396

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2327	March 9, 2020	30	Schedule B
2406	December 13, 2023	31	Section 5
2464	May 1, 2023	32	Schedule B
2488	January 15, 2024	33	Schedule B

WHEREAS it is expedient that all land or real property within the City, which is capable of being drained into a sewer or drain, should be so connected as soon as possible.

AND WHEREAS it is necessary to impose a sewer connection charge to defray the cost of laying connecting pipes from sewers to land on which buildings or structures are situate, and also to charge a sewer rental where a sewer connection has been installed to the property.

AND WHEREAS the Council is empowered in that regard by sections 531 and 532 of the "*Municipal Act*".

NOW THEREFORE the Council ENACTS as follows:

1. In this Bylaw, unless the context otherwise requires:
"City" means the City of White Rock.

"Collector" means the Collector duly appointed by the Council under section 366A of the "*Municipal Act*".

"Council" means the City Council of the Corporation of the City of White Rock.

"Flush" shall include "urinal".

"Owner" shall include an agent duly authorized in writing by the owner to act on his behalf.

"Owners Drain Connection" means a pipe including manholes and other appurtenances therewith laid on private property for the purpose of collecting the discharge from all roof drains, property drains and rainwater runoff thereon and conveying the same to and discharging the same into a drain connection of the City's storm drainage system at the property line. (Amended by Bylaw No. 579)

"Owners Sewer Connection" means a pipe including manholes, inspection chambers and other appurtenances therewith laid on private property and connecting the sanitary services installed in a house or building with a sewer connection of the City's sewerage system at the property line.
(Amended by Bylaw No. 579)

"Sanitary services" shall include bath tubs, laundry tubs, kitchen sinks, hand sinks, toilets, water closets, shower baths and foot baths.

"Sewer" includes any sanitary sewer installed for the collection, conveyance and disposal of sewage or storm sewer installed where the impounding, conveying and discharging of surface and other waters upon, or under, any public street, lane, right-of-way, or easement, which sewer is owned or maintained by the City whether laid by it or any other person. (Amended by Bylaw No. 922)

"Sewer connection" means the sewer connecting pipe from the property line along any street, lane, right-of-way, or easement, to the sewer, which connection is

owned or maintained by the Council whether laid by it or any other person whomsoever.

“Superintendent” means the Superintendent of Public Works duly appointed by the Council.

2. For the purposes of this Bylaw, the Collector shall have charge of the rating of all buildings and premises served by the sewerage system, and the Superintendent shall have charge and control of all properties and works in connection with the aforesaid system, and of all engineering and mechanical work in connection therewith.
- 3.(a) The owner of every parcel of real property on which a building or structure is situate shall connect his building or structure to the appropriate sewer in the manner prescribed in this bylaw. (Amended by bylaw No. 579)
- 3(b) Every person who makes application for a building permit to authorize the erection, construction or the placing of any building or structure upon any parcel of land, shall concurrently with such application make application for the installation of a sewer connection in pursuance of Section 5 of this bylaw. (Amended by bylaw 579)
- 3(c) Notwithstanding the provisions of Section 5 and 6 hereof, where any new building or structure, having the same service requirements as the sewer connection provided thereto, is erected or placed on any parcel of land to which a sewer connection has been provided and the connection charge set out in Section 5 hereof has been paid in full and where the owners service connection has been stopped up in pursuance of the provision of Section 17(e) of this bylaw, and if such owners service connection and service connections are of adequate capacity and grade to adequately serve such new building or structure by gravity flow, the said owners service connection may be unstopped or reconnected to the service connection upon applications by the owner and upon payment of charge of Twenty-Five (\$25.00) dollars. (Amended by bylaw 579)
- 3.(a) In the event of any owner failing to connect his building or structure to the appropriate sewer within thirty days of being called upon in writing by the Superintendent to do so, the Superintendent may have the work done at the expense of any such owner and the City may recover the expense thereof with interest at the rate of six per centum per annum, with costs in like manner as municipal taxes. Notwithstanding the foregoing, any owner failing to connect his building or structure to the appropriate sewer within the aforesaid period of thirty days shall be liable to the penalties provided by this bylaw.
- 4.(b) The notice required to be given in this section shall be sufficiently given if sent by double registered mail to the owner at the address shown as the owners on the last revised Assessment Roll of the City.
5. All applications for the installation of a sewer connection shall be made by the owner to the City in the form contained in Schedule “A” to and forming a part of this Bylaw. The owner shall tender with his or her application a connection fee for each connection, as set out by the City’s current Fees and Charges Bylaw.

Following such payment, the applicant shall receive a sewer connection from the appropriate sewer to the street line or boundary of the applicant's property; except that where the distance from the nearest sewer, from which service can be given, to the boundary line of the applicant's property exceeds 50 feet, the sum payable for such connection shall be the actual cost of the work plus 10% thereof; and the difference between the actual cost of the work plus 10% thereof and the connection fee paid with the application shall be paid forthwith by the owner and before connection is made at the property line. (*Amended by Bylaw 2406*)

~~"All applications for the installation of a sewer connection shall be made by the owner to the City in the form contained in Schedule "A" to and forming a part of this bylaw. The owner shall tender with his or her application a connection, cap-off and inspection fee of \$4,000.00 for each connection. Following such payment, the applicant shall receive a sewer connection from the appropriate sewer to the street line or boundary of the applicant's property; except that where the distance from the nearest sewer, from which service can be given, to the boundary line of the applicant's property exceeds 50 feet, the sum payable for such connection shall be the actual cost of the work plus 10% thereof; and the difference between the actual cost of the work plus 10% thereof and the \$4,000.00 fee paid with the application shall be paid forthwith by the owner and before connection is made at the property line."²(Amended by Bylaw 2085)~~

~~"All applications for the installation of a sewer connection shall be made by the owner to the City in the form contained in Schedule "A" to and forming a part of this Bylaw. The owner shall tender with his or her application a connection fee of \$3,000.00 and an inspection fee of \$150.00 for each connection. Following such payment, the applicant shall receive a sewer connection from the appropriate sewer to the street line or boundary of the applicant's property; except that where the distance from the nearest sewer, from which service can be given, to the boundary line of the applicant's property exceeds 50 feet, the sum payable for such connection shall be the actual cost of the work plus 10% thereof; and the difference between the actual cost of the work plus 10% thereof and the \$3,000.00 connection fee paid with the application shall be paid forthwith by the owner and before connection is made at the property line."¹~~

6. The connection fee specified in section 5 aforesaid shall entitle the owner to one ordinary sewer connection, of such size as shall be approved by the Superintendent, for the service of any single house or premises. If more than one connection is required the cost of such additional connections shall be paid by the owner on the basis of the actual cost of the work plus ten per cent (10%).
7. All applications for the installation of a drain connection, other than an ordinary house sewer connection, to a storm-drain shall be made to the Collector by the owner, who shall at the time of application deposit with the Collector a sum estimated to be the cost of providing such services as determined by the Superintendent, and as soon as convenient after the receipt of such sum, the Superintendent shall provide and lay such drain connection. If the cost of providing and laying such drain connection be less than the amount so deposited, the Collector shall repay to the owner the difference between such amount and the amount so deposited, and, if such cost shall exceed the amount so deposited, the owner shall pay such excess forthwith and before the connection is made.

¹ Amendment Bylaw, 2013, No. 2047

8. No work of any kind connected with the sewerage or drainage systems, either for laying new or repairing of old services shall be done upon or under any streets or lanes in the City by any other than the employees or agents of the Council.
- 9.(a) No person shall make any connection or communication whatsoever to any public or private sewer main or storm drain in the City without first obtaining the consent of the Superintendent.
9. (b) No connection shall be made to any public or private sewer unless the existing plumbing intended to be connected is vented in accordance with the City's Plumbing bylaw.
10. All sewers from houses or other buildings and from private property shall be constructed by and at the expense of the owner or applicant in accordance with the Council's specification as set out in Schedule "C" to this bylaw. For an ordinary dwelling house having one bath, one toilet, and kitchen services, or any of them, the internal diameter of the sewer shall be not less than four (4) inches. Where any house or other building or private property contains a greater number of sanitary services than aforesaid, the sewer shall be of such greater internal diameter as may be specified by the Superintendent.
11. The owner shall notify the Superintendent when any sewer connection or other work carried out under the provisions of this bylaw is ready for inspection and no sewer connection or such other work shall be covered until it has been inspected and approved by the Superintendent. If any such sewer connection or other work has been covered without first having been inspected and approved by the Superintendent, the owner shall when requested by the Superintendent, have such sewer connection or other work uncovered forthwith so that it may be inspected. If such connection or other work is found to be defective or not ready for inspection at the time of the aforesaid notification to the Superintendent, a further notice for inspection must be made to the Superintendent by the owner together with payment of a fee of Five Dollars (\$5.00) to cover the costs of extra inspection.
12. (a) All properties which are connected to the sewer shall be classified in accordance with Schedule "B" to this bylaw.
12. (b) The annual rental set out in Schedule "B" is hereby imposed and levied for such connections supplied by the Council and such annual rental shall be payable at the office of the Collector on the second day of January in each year and shall form a charge on the real property to or upon which the sewer connection is supplied and may be recovered in the same manner as overdue taxes. Any building or property which contains more than one of the classifications enumerated in Schedule "B" shall be charged for each such classification contained within the building or property.
13. In the case of any property which is connected to the sewer after January 1st in any year, the rental to be charged for that year in accordance with Schedule "B" to this bylaw shall be a proportionate amount of the full annual rental based on the number

of full months remaining in that year.

14. No charge or addition shall be made by any person in the number or description of sanitary services on any premises until notice thereof has been given in writing to, and permission for such change or addition has been obtained from the Superintendent; and, if such change or addition shall occasion a higher rate or rent to be payable, the same shall be paid forthwith, and, if such change shall occasion a lesser rate or rent to be payable, a refund shall be made for a proportionate part of the rate or rent, if previously paid.
15. (a) When any sewer connection has become stopped, application to have it unstopped shall be made by the owner to the Superintendent and the owner shall forthwith deposit with the Collector the sum of Fifteen Dollars (\$15.00) which shall be deemed to be not a contract price but merely a provisional charge. The charge for unstopping shall be the actual cost of the work, plus ten percent (10%) thereof and if such charge is less than the sum deposited the Collector shall refund the balance, but if such charge is more than the sum deposited the owner shall pay the additional amount forthwith.
15. (b) In cases where on examination it is estimated that the charge for unstopping and repairing will be in excess of Fifteen Dollars (\$15.00) the Superintendent may, before proceeding with the work, demand a deposit of such additional amount as he considers necessary to cover the estimated charge.
15. (c) The Superintendent may direct the return of the deposit to the owner and charge the cost of the work to the Corporation if it is found that the stoppage is due solely to roots originating from trees on City property, or in cases of municipally installed house sewer extensions, or for any other cause for which, in the opinion of the Superintendent, the Corporation may be responsible.
15. When any sewer connection or house sewer extension has become stopped and the Medical Health Officer states that a menace to public health exists by reason thereof, and the owner of the premises served is unable to furnish the deposit required under Section 15(a) of this bylaw, or to meet the consequent charges for unstopping and repairing, the owner may sign a statement to that effect and agree to have the said cost of unstopping and repairing charged against the property and collected as ordinary taxes; and thereupon the Superintendent may carry out such unstopping and repairing, the cost thereof, together with the description of the lot, shall be certified by the Superintendent who shall file such certificate with the Collector, and the amount of such cost shall be added to the taxes of such premises on the Collector's Roll, and shall be collected in the same manner as overdue taxes.
16. (a) No person shall connect any roof, drain, property drain, rainwater runoff or owners drain connection or other part of the City's Sewerage System, or drain or permit to be drained into the said sewerage system any storm water or surface drainage water.
(Amended by bylaw 579).

~~No person shall connect any roof, drains, property drains or rainwater run-off in any way to the sewerage system, or drain or permit to be drained into the sewerage~~

~~system, any storm water or surface water.~~

17. (b) No person shall connect any owners sewer connection or any sanitary service installed in a house or building with a drain connection or other part of the City's Storm Drainage System or drain or permit to be drained into the said storm drainage system any sewage or contaminated water. (Amended by bylaw 579).

~~No person shall permit sludge or deposit contained in existing septic tanks to enter the sewer system of the Corporation. Whenever sewer connection is made to premises where a septic tank exists the owner must forthwith discontinue using the septic tank and either (a) remove and dispose of all sludge or deposit and dismantle and remove the said tank; or (b) fill the tank with fresh earth, gravel or sand or coal ashes.~~

17. (c) No person shall permit sludge or deposit contained in any existing septic tank to enter into or be discharged into either the City's sewage system or the City's storm drainage system. Where any connection to the City's sewerage system is made to premises on which a septic tank installation exists, the owner thereof shall forthwith discontinue use of the septic tank and either:

- i. Remove and dispose of all sludge and deposit in said septic tank and dismantle and remove the said tank; or
- ii. Remove and dispose of all sludge and deposit in said septic tank and fill the same with fresh earth, sand, gravel or coal ashes. (Amended by bylaw 579)

- 17.(d) Every owner of every parcel of real property on which any building or structure is situated and which is connected to a sewer connection of the City's Sewerage System shall maintain and keep in repair the owner's sewer connection and all sanitary services discharging therein so that no storm water or surface drainage or other extraneous drainage may enter therein and shall at all times insure that only the domestic sewerage generated on the said premises shall be discharged into the City's sewerage System. (Amended by bylaw 579)

- 17.(e) In all cases where an owner's sewer connection is interrupted for any reason, other than for the purpose of carrying out repairs thereto, and in all cases where the building or structure served by any owners sewer connection is destroyed, torn down, or removed from the site, the owners sewer connection serving the same shall be stopped-up and sealed at the property line in order to prevent the entrance of drainage water into the sewer connection and every such owner shall forthwith notify the Superintendent and shall call for an inspection thereof in conformity with the provision of Section 11 of this bylaw. (Amended by bylaw 579).

- 18.(a) The Superintendent or any employee in the Public Works Department may enter at all reasonable times, upon any property for the purpose of inspecting the premises and the sewer and drainpipes, connections, sanitary services and any other apparatus used in connection with such sewerage or drainage systems. (Amended by bylaw 579)

- 18.(b) The Superintendent may, for the purposes of determining the state of repair and the condition of any owners sewer connection and ascertaining whether or not the provisions of Section 17 hereof have been complied with may perform tests on the said

connection and without restricting the generality of the foregoing, ay perform smoke tests, dye tests, closed circuit television camera tests and examination of other generally accepted engineering method for determining the condition of sewer mains and for determining the degree of infiltration of drainage water thereinto. (Amended by bylaw 579)

18.(c) Where any test carried out by the Superintendent shall indicate, to his satisfaction, that the owner's sewer connection is in a state of disrepair, or that there is infiltration of drainage water thereinto in excess of the quantity permitted under generally accepted good engineering practice or that any roof drain, property drain, rainwater runoff or owners drain connection is discharged thereinto, the Superintendent may by notice in writing addressed to the owner or occupier of the property, order the said owner or occupier to repair or otherwise remedy the owner's sewer connection so that it shall conform in all respects to the requirements of this bylaw to the satisfaction of the Superintendent within thirty (30) days from the date of the said notice and the said notice carry out and complete the works necessary to make the said owner's sewer connection conform to the requirements of this bylaw. (Amended by bylaw 579)

)
18.(d) Every such owner or occupant shall notify the Superintendent when the owner's sewer connection subject to an order pursuant to subsection (3) hereof has been repaired or otherwise made to conform to the requirements of this bylaw and the Superintendent shall inspect the same and satisfy himself that the said connection is in conformity with all requirements of this bylaw and the notice given. The Superintendent may carry out such further tests and examinations as he may deem necessary in order to determine the condition of the said connection. If such tests and examination shall indicate that the works carried out have not resulted in the said connection meeting all requirements of the order and this bylaw the Superintendent shall issue a further order for the repair or renovation of the said connection and the owner of occupier shall pay costs in the sum of Twenty-five (\$25.00) Dollars for every additional inspection examination and test carried out by the Superintendent thereafter. (Amended by bylaw 579)

18.(e) Where any owner or occupier fails or neglects to carry out the works required to make the owner's sewer connection conform to the requirements of this bylaw and the order given by the Superintendent within the time specified in such order or such further order given by the Superintendent he shall be guilty of an infraction of the provisions of this bylaw and liable on summary conviction thereof to the penalty hereinafter provided. (Amended by bylaw 579)

18.(f) Where any owner or occupier fails or neglects to carry out the works required to make the owner's sewer connection conform to the requirements of this bylaw and the order given by the Superintendent within the time specified in such order it shall be lawful for the Superintendent together with such workmen or agents employed by the City to enter upon the said property and to carry out and complete the works required to make the said owner's sewer connection conform in all respects to the requirements of this bylaw and the said work shall be done at the expense of the owner of the said property and the costs thereof shall be recovered by the Corporation in the manner provided by Section 236 of the "Municipal Act" Chapter 255, R.S.B.C. 1960 as amended." (Amended by bylaw 579)

- 19. No rebate, refund or credit whatsoever of any moneys paid or payable for service shall be made save as hereinbefore provided.
- 20. No owner of any property shall connect or drain, or attempt to connect or drain, or allow to be connected or drained such property with or into the sewer connection, sewer systems or drainage system otherwise than in accordance with the provisions of this bylaw.
- 21. Any person who violates any of the provisions of this bylaw shall be guilty of an offence and shall be liable, on summary conviction to a fine not exceeding the sum of Five Hundred Dollars (\$500.00) and costs for each offence.
- 22. The “Sewer Connection and Rental Charge Bylaw, 1959, No. 60”; the “Sewer Connection and Rental Charges Amendment Bylaw, 1959, No. 71”; and the “Sewer Connection and Rental Charges Bylaw, 1959, No. 60, Amendment Bylaw, 1961, No. 111” are hereby repealed.
- 23. This bylaw may be cited for all purposes as the “*Sewer Connection and Rental Charges Bylaw, 1970, No. 396*”.

RECEIVED FIRST READING on the	13 th	day of June,	1970
RECEIVED SECOND READING on the	13 th	day of June,	1970
RECEIVED THIRD READING on the	13 th	day of June,	1970
RECONSIDERED AND FINALLY ADOPTED on the	27 th	day of June,	1970

MAYOR

CITY CLERK

**THE CORPORATION OF THE
CITY OF WHITE ROCK
BYLAW 396**



SCHEDULE "A"

I/WE _____
being the owner(s) of certain premises situated at _____
_____ in the City of White
Rock, and being:

LOT _____ BLOCK _____ QUARTER _____
SECTION _____ TOWNSHIP _____ MAP _____

hereby apply for a sewer connection to the said premises, pursuant to
the following particulars:

Property Address _____
Type of Building _____
Number of Water Closets _____
Number of Urinals _____
Number of rental charges _____
Total annual sewer user charge \$ _____

I herewith tender the sum of \$ _____ to cover the cost of
such connection and \$ _____ as a deposit on the first
year's sewer user charge and further agree to pay the amount assessed
against the aforesaid property from time to time in respect to the
said sewer pursuant to the provisions of the By-laws of the Corporat

I understand that a prorated portion of the above deposit in respect
of the number of complete months in the period from date of
connection back to preceding January 1, is refundable to me after
the connection is made.

DATED AT WHITE ROCK, B. C.

THIS _____ DAY OF
_____, 19 _____.

SIGNATURE OF APPLICANT

ADDRESS OF APPLICANT

FOR OFFICE USE ONLY

Date connected _____ Tax roll No. _____
Legal Description checked _____ No. of units _____
Sewer Roll card _____ Yearly charge _____
\$ _____ added to roll number _____

Date _____ Tax roll no. _____
Name _____
Address _____
Lot _____ Plan _____ Amount Paid _____

SUBMIT ONE COPY OF COMPLETED FORM TO TREASURY DEPT. WHEN PAYING FEES
AND DEPOSIT.

**THE CORPORATION OF THE
CITY OF WHITE ROCK
BYLAW 396**



SCHEDULE "B"
Replaced by²Bylaw 2488

	ANNUAL RENTAL
Each Single-Family Home	\$ 293
Each Self-contained Suite	293
Motel (for each unit)	308
Hotels, Rest Homes and Lodging Houses (for each two sleeping rooms or fraction thereof)	308
Liquor outlets (for each flush)	308
Public Recreational Centres and Public Halls (for each flush)	308
Commercial and business establishments (for each flush)	308
Peace Arch District Hospital (per available bed)	293
Schools (for each flush)	308
Coin-Operated Laundries (for each machine)	189

² Schedule B replaced by bylaws: 505, 579, 645, 787,1307, 1356, 1389, 1439, 1490, 1520, 1559, 1588, 1742, 1786, 1811, 1840, 1868, 1885, 1939, 1972, 2011, 2047, 2085, 2139, 2245, 2295, 2327, 2464, 2488

BYLAW 396 SCHEDULE "C"

SPECIFICATION FOR THE CONSTRUCTION OF SANITARY SEWERS

The owner shall furnish all tools, materials and equipment necessary to carry out the work.

(1) MATERIALS:

Main sewers shall be constructed of an impervious pipe with flexible water-tight joints acceptable to the Superintendent. Connections shall be impervious but may be rigid joints acceptable to the Superintendent of Public Works.

(2) TRENCH EXCAVATION:

Trenches shall be excavated to the line and grade designated by the Superintendent. Except for unusual circumstances where approved by the Superintendent, the trench sides shall be excavated vertical and the trench width shall be excavated only to such width as is necessary for adequate working space.

The maximum trench width at the top of the pipe shall normally be the outside diameter of the pipe barrel plus 16". The top width of the trench shall not exceed the outside diameter of the pipe plus 36". The trench shall be kept free from water until joints are made. Surface water shall be diverted so as not to enter the trench.

The owner shall maintain sufficient pumping equipment on the job to ensure that these provisions are carried out. Trenching operations shall not proceed more than 100 feet in advance of pipelaying except with written approval of the Superintendent of Public Works.

(3) TIMBERING AND SHEETING:

The owner shall provide and install timbering and sheeting as necessary to protect workmen, the work and existing buildings, utilities and other properties. All timbering and sheeting shall be removed prior to backfilling. All sheeting below the top of the pipe shall be cut off and left in place. Removal of timbering shall be accomplished in such a manner that there will be no damage to the work or to other properties. All timbering and sheeting shall be to the owner's design and the cost of the work shall be included in the bid price of trenching and backfilling.

(4) PIPE BEDDING:

Pipe Bedding shall provide uniform support to the barrel of the pipe under all conditions and shall be approved in detail by the Superintendent.

(5) GRADES:

Grades shall be carried by means of a taut grade wire supported on firmly set batter boards at intervals of not more than 30 feet. No less than three batter boards set from grade hubs shall be in use at one time. Grades shall be constantly checked and in the event that batter boards do not line up the work shall be stopped until the situation is corrected.

(6) JOINTS AND PIPELAYING:

All joints shall be made in strict accordance with the manufacturer's specifications. All parts of the joint shall be wiped clean immediately before jointing the pipes.

Floating Pipe - Whenever water is excluded from the interior of the pipe, adequate backfill shall be deposited on the pipe between joints to prevent floating. Any pipe which has floated shall be removed from the trench and relaid as directed by the Superintendent of Public Works.

Unsuitable Conditions for Jointing Pipe - No pipe shall be laid in water or on frozen trench bottom, or when in the opinion of the Superintendent the trench conditions or weather is unsuitable for the work. All pipe shall be laid in accordance with the accompanying plans and profiles.

BYLAW 396 SCHEDULE "C"

(7) BACKFILL:

Selected backfill material approved by the Superintendent of Public Works, free from rock, large stones, frozen material, boulders or other unsuitable substances, shall be deposited in the trench uniformly on both sides of the pipe for the full width of the trench and to the horizontal diameter of the full length of the pipe. This backfill material shall be tamped in 4 inch layers and shall be sufficiently damp to permit thorough compaction under and on each side of the pipe to provide support free from voids.

Additional selected backfill material shall be deposited between pipe joints to an average depth of 12 inches over the top of the pipe.

The balance of the backfill shall contain no rock, stones or boulders larger than 8 inches in its greatest dimension and shall be free from brush or any other perishable or objectionable matter that would prevent proper consolidation or that might cause subsequent settlement. It shall be compacted thoroughly by puddling with hose and long pipe nozzle, or by flooding the trench, or by tamping if the material does not consolidate readily by puddling or flooding in the opinion of the Superintendent of Public Works. Whenever, in the opinion of the Superintendent of Public Works, surface settlement is not important, tamping, puddling or flooding may be omitted and the backfill shall be neatly rounded over the trench to a sufficient height to allow for settlement to the grade after consolidation. When puddling it is important that proper precautions be taken to prevent floating of the pipe when flooding the trench and the owner shall be wholly responsible for damage resulting from neglect of these precautions.

(8) MANHOLES:

Manholes shall be constructed as shown on the accompanying plans. The manhole base slab shall be placed on firm soil. If the foundation material is inadequate, the owner shall notify the Superintendent. The Superintendent may direct the use of foundation gravel or bedding concrete under the normal base. All joints and connections to manholes shall be made with cement mortar and shall be water tight. Joints and connections shall be finished on interior and exterior of manhole.

(9) HOUSE CONNECTIONS:

House connections shall be placed wherever possible to suit existing or proposed buildings. The connection to main sewer shall be made with a 45° or 90° connection.

(10) INFILTRATION TEST:

After backfilling is complete the owner shall co-operate with the Superintendent of Public Works in an infiltration test of the sewer at a time chosen by the Superintendent of Public Works. An infiltration rate greater than 125 Imperial gallons per 1000 feet per inch diameter per day shall be cause for rejection of the work, and the owner shall improve the line until it complies with infiltration requirements.

(11) GENERAL SAFETY PRECAUTIONS:

The owner shall take adequate precautions to protect persons from injury and to avoid property damage, adequate barricades, construction signs, torches, red lanterns and guards as required shall be placed and maintained during the progress of the construction work and until it is safe for traffic to use the trenched highway. Rules and regulations of the local authorities respecting safety provisions shall be observed.

(12) CLEANING UP:

Surplus sewer materials, tools, and temporary structures shall be removed by the owner, and all dirt, rubbish and excess earth shall be hauled to a dump provided by the owner and the construction site shall be left clean and to the satisfaction of the Superintendent of Public Works.