



City of Humboldt
October 10, 2023 - Special Council Meeting - 05:15 PM

- 1** **Call To Order**
- 2** **Adopt Agenda**
- 2.1 Conflict of Interest
- 3** **New Business**
- 3.1 Recommendation - City Manager - North Twenty Place Homes Servicing Agreement
- 📎 Report - North Twenty Place Homes Servicing Agreement
- 4** **Adjourn**



CITY OF HUMBOLDT REPORT

TITLE: North Twenty Place Homes 2023 Servicing Agreement
PREPARED BY: Joe Day, City Manager
REVIEWED BY: Joe Day, City Manager
PREPARED FOR: City Council
DATE: October 10, 2023

RECOMMENDATION

That the Mayor and City Manager be authorized to sign the attached servicing agreement with North Twenty Place Homes Ltd.

BACKGROUND

Servicing agreements are an essential part of the negotiations between the City of Humboldt and land developers to clarify the responsibilities of each party. In instances where a development is able to access all water, sewer and road infrastructure adjacent to the property, service agreements are not necessarily required. In this instance, North Twenty Place Homes is developing a parcel for apartment style buildings, and the developer is required to install sanitary sewer, storm water, and possibly water main infrastructure in the City's right-of-way in order to service the site.

CURRENT SITUATION

City Administration has worked with the principal of North Twenty Place Homes over the past few weeks to agree upon the details related to the proposed development.

The fundamental components of the Servicing Agreement are:

- This servicing agreement outlines the developer's responsibility for installation and repair of water mains, sanitary sewer mains, storm sewer mains, roads, lanes, etc. (per Schedule A).
- The Developer is required to pay Development Levies pursuant to the City's Bylaw (Schedule C)
- Any work that the Developer does on City right-of-way must adhere to the City's standards. (Schedule F)

On Thursday, September 28th, North Twenty Place Homes provided the City of Humboldt with a slightly modified, signed copy of the servicing agreement. The modifications

suggested by the Developer from the City's proposal are acceptable to the City of Humboldt, and the City Manager has initialed those changes on the attached agreement.

OPTIONS

- Approve the Servicing Agreement as presented,
- Not approve the Servicing Agreement as presented,
- Refer the matter back to Administration for further negotiations.

ATTACHMENTS

- Servicing Agreement with North Twenty Place Homes

COMMUNICATION AND ENGAGEMENT

North Twenty Place Homes will be notified of Council's decision.

FINANCIAL IMPLICATION

Provided that the developer installs the infrastructure without the City needing to intervene, the City will not be required to spend any funds in support of this development.

The developer has provided the City with a payment for the Development Levies in the amount of \$74,346.50 which will be later apportioned to the appropriate reserves per the City's Bylaw.

CONCLUSION

The relatively small amount of work that the Developer will need to complete within the City's right of way and the experience that this Developer has, resulted in a quick process for completing the required Service Agreement.

SERVICING AGREEMENT

THIS AGREEMENT made in duplicate this _____ day of _____, 2023.

BETWEEN:

CITY OF HUMBOLDT
(the “City”)
PO BOX 640
715 Main Street
Humboldt, SK S0K 2A0

AND:

NORTH TWENTY PLACE HOMES LTD
(the “Developer”)
520D Ave M South
Saskatoon, SK S7M 2K9

WHEREAS at the time of making this Agreement:

- A. The Developer owns or has an interest in the Land described in Schedule A, attached hereto.
- B. The Developer now proposes to service the Land in accordance with the plan attached as Schedule B.
- C. The City deems it expedient and in the public interest that the Developer enter into this agreement to comply with the City's standards and fulfill certain requirements as a condition of approval of the Plan of Subdivision under Part VII of *The Planning and Development Act, 2007*, S.S. 2007, c.P-13.2.

NOW THEREFORE in consideration of the covenants and promises contained in this Agreement and the City’s consent to the Plan, the parties agree as follows:

1. Definitions

1.1 Where used in this Agreement, the following terms have the following meanings:

- (a) “**Act**” means *The Planning and Development Act, 2007*, and any amendment or replacement thereof;
- (b) “**Agreement**” means this servicing agreement, including the attached Schedules, together with any amendments made from time to time, and the expressions “herein”, “hereto”, “hereof”, “hereby”, “hereunder”, and similar expressions referred to in this agreement shall refer to this agreement and all Schedules hereto and not to any particular article, section, subsection or other subdivision hereof;
- (c) “**Approving Authority**” means the Ministry of Government Relations.
- (d) “**Certificate of Completion**” has the meaning set forth in Section 4.6;

- (e) “**City**” means the City of Humboldt;
- (f) “**City’s Director of Public Works and Utilities**” means the person designated by the City to review, inspect and monitor the construction and installation of the Work;
- (g) “**City Works and Utilities Manager**” means the person designated by the City to supervise the City’s public works and public works and utilities;
- (h) “**Development Levy**”
- (i) “**Development Officer**” means an employee or employees of the City of Humboldt appointed by City Council to act as Development Officers to administer the Zoning Bylaw No. 04/2016.
- (j) “**Developer’s Services**” or “**Services**” means those obligations to be performed by the Developer set forth in this Agreement. Where the context requires, the term “**Developer’s Services**” shall be used interchangeably with the term “**Work**”;
- (k) “**Director of Community Planning**” means the director of Community Planning of the Ministry of Government Relations of the Province of Saskatchewan;
- (l) “**Effective Date**” means the date of last signature by the parties hereto;
- (m) “**Land**” means that land referenced in Schedule A to this Agreement;
- (n) “**Legal Costs**” shall mean the City’s reasonable legal costs related to negotiating, preparing, and registering this Agreement;
- (o) “**Lot**” means a subdivided parcel or lot created in accordance with the Plan of Subdivision as contemplated in the Plan of Proposed Subdivision;
- (p) “**Maintenance Period**” commences at the Effective Date of this Agreement, and continues until issuance of the Maintenance Release;
- (q) “**Municipal Engineer**” means the professional engineer designated by the City to review, inspect and monitor the construction and installation of the Work and/or such other Person (including but not limited to an employee of the City) to whom the City may delegate all or part of the responsibilities assigned to the Municipal Engineer pursuant to this Agreement;
- (r) “**Public Work**” shall mean all Developer’s services constructed on or adjacent to the City Right-of-Ways, including roads or lanes to be constructed, any utility lines or services to be constructed or installed, and any signage or lighting to be installed;
- (s) “**Purchaser**” shall mean any Person who owns any part of the Land, any Person who leases any part of the Land from the registered owner thereof, or any person to whom any other interest in any part of the Land is granted. Without limiting the generality of the foregoing, the term includes the Developer for so long as the Developer owns that part of the Land in question;

- (t) **“Roadway”** means that area identified as roadway on a Plan of Subdivision;
 - (u) **“Sale Agreement”** shall mean an agreement between the Developer and any Purchaser who is not a Party to this Agreement. Notwithstanding the foregoing, any agreement whereby the Developer shall grant a non-renewable Agricultural Lease or Licence respecting all or any part of the Land, and such lease or licence shall be for a term of less than three years, such agreement shall not be considered a “sale agreement” for the purposes of this Agreement;
 - (v) **“Subdivision”** shall mean, in the aggregate, all parcels subdivided from the Land, the remainder, all roadways, streets, lanes and municipal reserve, and any other public lands dedicated pursuant to the Plan of Subdivision. For the sake of clarity, the term “Subdivision” may be used interchangeably with the term “Land”; and
 - (w) **“Work”** means the construction and installation of the Developer’s Services, if any, and all work related in any way thereto. Where the context so requires, this term shall also mean the re-construction, re-installation and maintenance of the Work.
- 1.2 Except as expressly provided in this Agreement, and except where the context clearly requires otherwise, all definitions used in the Act shall apply to this Agreement.
- 1.3 The following schedules (the **“Schedules”**) are incorporated into this Agreement by reference and are deemed to be a part hereof:

Schedule “A” – Developer’s Services/Work
 Schedule “B” - Land Development Area
 Schedule “C” – Offsite / Development Charges
 Schedule “D” – Permitted Encumbrances
 Schedule “E” - Proposed Plan of Subdivision
 Schedule “F” – Servicing Developments and Standards
 Schedule “G” – Opinion of Probable Cost

2. This Agreement a Servicing Agreement

- 2.1 This Agreement is a Servicing Agreement as contemplated by section 172 of the Act, and the City is entitled to all powers and remedies granted by the Act, in relation thereto.
- 2.2 The Developer agrees that the agreements and covenants set forth in this Agreement run with the Land.
- 2.3 The City may register this Agreement against the title to the Land to protect the City’s interests, as provided by section 175 of the Act. In the event that the City should do so, the Developer shall be responsible for all legal fees and expenses relating thereto.
- 2.4 Notwithstanding anything herein contained, the obligation of the City to give its approval to the Director of Community Planning to the subdivision, is subject to the following condition precedent:

If the City registers this Agreement against the title to the Land pursuant to Section 2.3 herein and there is any mortgage or other interests registered against the title to the Land prior to the registration of the City's registered interest based on this Agreement, before the City gives its approval to the Director of Community Planning to the subdivision, the Developer shall obtain the written consent and agreement of any mortgagee or any other interest holders under any such mortgage or interest that the mortgagee or interest holder consents and agrees that, in the event of its obtaining or transferring the equity of redemption of the Land under its mortgage or other interest with the Developer, the title thereto shall be subject to the terms of this Agreement in the same manner as if the mortgagee or interest holder had executed this Agreement.

Any such consent shall be in the form set forth in Schedule D hereto or otherwise as approved by the City.

- 2.5 The condition precedent set forth in Section 2.4 herein is for the exclusive benefit of the City and may be waived by the City, and by the City only.

3. Developer's Servicing Responsibilities

- 3.1 Developer shall be responsible for constructing and installing or causing to be constructed and installed the Work at its own expense and in accordance with the provisions of this Agreement. For clarity, the Work includes the Developer's Services described in Schedules to this agreement.
- 3.2 The Developer's Services shall be installed in a good and workmanlike fashion under the supervision of the City in accordance with the current specifications and development standards of the City as to construction practices and materials, as contained in Schedules to this agreement.
- 3.3 Supervision of Public Work
- (a) For the purposes of this Section of the Agreement, at least 45 days before further construction of Public Work shall commence, the Developer shall submit to the City all plans and specifications (the "**Plans and Specifications**") showing the location and construction details, scaled 1:1000.
- (b) Construction or further construction of Public Work may proceed after:
- (i) The Developer has complied with the requirements of paragraph (a) above;
 - (ii) All necessary approvals for construction and installation are obtained from the requisite federal, provincial and municipal governments (including, without limitation, the City), crown corporations and agencies; and
 - (iii) Detailed plans have been approved by the Council of the City expressed by resolution of such Council, and thereafter communicated to the Developer.

- (c) Any amendments to the Plans and Specifications that may be necessary are subject to approval in accordance with Sections 3.3(b)(ii) and (iii) and Work in accordance with any amendments to the Plans and Specifications may only proceed after such approval has been obtained (hereinafter, the Plans and Specifications as approved by Council shall be referred to as “**Approved Plans and Specifications**”).
- (d) The Public Work shall be constructed and installed in accordance with the Approved Plans and Specifications.
- (e) All Work related to the Public Work shall be done in a good and workmanlike fashion.
- (f) Construction of the Public Work shall be under the supervision of the City Foreman, who shall be entitled to inspect the construction Work at any time or place to ensure that the Public Work is consistent with the Approved Plans and Specifications.
- (g) Where the City Foreman requires notice of construction Work, so as to conduct a proper inspection, reasonable advance notice of the City Foreman's requirement shall be given by the City Foreman to the Developer.
- (h) Where the City Foreman is of the opinion that the Public Work is not being done in a good and workmanlike manner, or is otherwise of a standard not reasonably acceptable to the City, the City Foreman may issue a stop work order (“**Stop Work Order**”) and:
 - (i) All Work covered by the Stop Work Order shall cease forthwith, and not proceed until the Stop Work Order is lifted by the City Foreman;
 - (ii) The Developer shall be responsible for complying with all reasonable directions given for remediation and future Public Work, as may be directed by the City Foreman.
- (i) Any contractor or subcontractor retained by the Developer must be approved in writing by the City Foreman, before work shall commence.

3.4 Certificate of Completion

When the construction of the Public Work has been completed:

- (a) Upon receipt of a written request from the Developer to do so, a final inspection shall be conducted by the City’s Director of Public Works and they shall make a recommendation to the Development Officer as to whether in their opinion the construction is substantially complete;
- (b) Following such report, provided that in the sole discretion of the Development Officer that the construction is substantially complete, the City shall issue a certificate of completion (“**Certificate of Completion**”); and
- (c) Where in the sole discretion of the Development Officer that construction is not substantially complete, the Development Officer may list such deficiencies pertaining to the Public Work to be corrected by the Developer and stipulate a reasonable time

frame or time frames for the rectification of such deficiencies. The Developer shall be bound to rectify such deficiencies in accordance with the time frames stipulated by the Development Officer.

3.5 Compliance as a Pre-Condition

- (a) As a pre-condition to the issuance of a Certificate of Completion, the Developer shall supply the City with a statutory declaration (“**Statutory Declaration**”) that all accounts for work and materials and construction and installation services in relation to Public Work have been paid, except for such holdbacks as may be required pursuant to *The Builders' Lien Act*, and any similar legislation. The Statutory Declaration shall further warrant that there are no claims for lien or otherwise which have been presented to the Developer, or of which the Developer or any Person with a registered mortgage against the Land is aware or has notice, in connection with such work done, or materials supplied for, or on behalf of the Developer, in connection with the construction and provision of services to the Land. The Developer shall also warrant compliance with *The Workers' Compensation Act*; and
- (b) As a pre-condition to the issuance of a Certificate of Completion, the Developer shall cure all outstanding deficiencies or defaults, pursuant to the terms of this Agreement and any other agreement between the Developer and the City.

3.6 Survey Monuments

As a pre-condition to making application for a Certificate of Completion, the Developer shall supply a statement from a Saskatchewan Land Surveyor, as approved by the City, that after the completion of the Public Work the surveyor has found or replaced all standard iron bars as shown on the registered plan of survey for the Subdivision, and has replaced all survey monuments at all block corners, the end of all curves, other than corner roundings, and all points of change and direction on streets in the registered plan.

3.7 Prohibition on Conveyance

No sale or lease of any Lot may be entered into by the Developer, until such time as a Certificate of Completion has been issued for the Public Work and the Developer’s services referenced in Parts I through II have been fully constructed.

4.10 Time for Commencement and Completion of Work

The Developer shall complete the service installation within **365** days of the Effective Date; or such other date as to which the Parties may agree in writing.

4. Liability Insurance

4.1 Obligation to Insure

The Developer, upon execution of this Agreement, shall forthwith deposit with the City a certificate of insurance disclosing that the Developer holds liability insurance with an insurer

satisfactory to the City. Therefore, upon 14 days written demand, the Developer shall deposit proof that the insurance remains in force, in a form satisfactory to the City. The insurance shall remain in force for a period of two (2) years following the Maintenance Period.

4.2 Requirements of Insurance

The policy of liability insurance shall name the City and its officials, employees, agents and servants as insured and shall:

- a) Cover any liability that may arise out of the Work;
- b) Remain in force until the issuance of the Maintenance Release; and
- c) Contain limits of coverage of \$2 million for public liability and property damage, or such lower limit as to which the Development Officer may agree in writing.

5. Security for Performance

5.1 Posting for Security

As security for performance of obligations under this Agreement, and the payment of all obligations of the Developer pursuant to his Agreement, the Developer shall post a security bond with the City as specified by subsection 5.2 within 30 days of the registration of title in the developer's name, and shall be posted at least 20 days before commencement of any Work for the construction or installation of the Developer's Services, or any other work required by this Agreement.

5.2 Form of Security

The Developer may post security by way of:

- a) Depositing with the City, cash in the amount of \$25,000; or
- b) Depositing with the City, a bond issued by a recognized surety company, acceptable to the City, in the amount of \$75,000; or
- c) Depositing with the City, irrevocable letters of credit issued by a chartered bank in Canada, acceptable to the City, in the amount of \$75,000.

5.3 Reduction of Security

The security held by the City may be reduced in accordance with the provisions of this section. Upon written application by the Developer, and upon certification of the completion of Work by the Development Officer, security will be released by the City as follows:

- a) Forty-two (42) days after the expiry of the Maintenance Period, the City shall release the total amount of the security.

5.4 No Reduction on or After Default

In the event that the Developer should be in default under this Agreement, or in the event that the Developer should have previously defaulted pursuant to the terms of this Agreement, the City shall not be obliged to release any security, in whole or in part, held by the City, until the Developer has satisfied the entirety of its obligations pursuant to this Agreement and any other agreement subsidiary of collateral thereto.

6. Maintenance Period

6.1 General Obligation of the Developer

There shall be a maintenance period (“**Maintenance Period**”) during which the Developer shall be obliged to maintain all of the Public Work. Maintenance includes but is not limited to the obligation to remedy any structural or operational deficiencies of the works installed by the Developer and the Developer’s contractor.

6.2 Termination of Maintenance Period

The Maintenance Period shall commence on the date of the Effective Date and be terminated as follows:

- (a) At any time two years or more after the issuance of the Certificate of Completion, the Developer may apply in writing to the City for a maintenance release (“**Maintenance Release**”);
- (b) Within 30 days of receipt of the request for a Maintenance Release, the City shall inspect the Public Work, to determine whether the Developer has satisfied its obligation during the Maintenance Period;
- (c) Within a reasonable time of completing such inspection, the City shall notify the Developer with respect to any maintenance items which have not been properly completed by the Developer during the Maintenance Period, and the Developer shall be responsible for rectifying such items within 45 days of the date of notice or as otherwise agreed to by the Development Officer;
- (d) Upon rectification of all maintenance deficiencies to the satisfaction of the City, or in the event that no maintenance deficiencies are identified by the City, the City shall issue a Maintenance Release, and the Developer's obligation for maintenance shall thereafter cease;
- (e) It shall be a pre-condition to the issuance of the Maintenance Release that the Developer shall cure any deficiency or default pursuant to this Agreement, or any deficiency or default pursuant to any other agreement between the Developer and the City.
- (f) It shall be a pre-condition to the issuance of the Maintenance Release that the Developer shall, at their own expense, cause to have all Sanitary Sewer Mains and Storm Sewer Mains associated with the development inspected via video recording accompanied with a condition report from a contractor acceptable to the City.

- (g) It shall be a pre-condition to the Maintenance Release that the Developer shall at their own expense, provide as-built drawings of the Public Work to the City of all underground water and sewer mains and services associated with the development.

7. City's Servicing Responsibilities

- 7.1 The City shall have no responsibility whatsoever for the provision of any utility or service to the Subdivision not expressly agreed to be assumed by the City, pursuant to the terms of this Agreement. Without limiting the generality of the foregoing, the City shall have no responsibility whatsoever, either during development or at any time thereafter, for the provision or maintenance of the following:
- (a) Water or sanitary or storm sewage systems located within the Subdivision;
 - (b) Service connections for water or sanitary sewage;
 - (c) Lot grading or design for lot grading;
 - (d) Electrical power, natural gas or any other similar utility; and
 - (e) Telephone and/or other such utility.

8. Indemnity by Developer

- 8.1 The Developer hereby indemnifies and saves harmless the Municipality, and Her Majesty the Queen, with respect to any claim, action, judgment, cost or expense incurred by or assessed against the Municipality in respect of damages suffered by any third party arising out of any act or omission of the Developer, together with their agents, service employees and any contractors or subcontractors engaged by the Developer, with respect to the Work contemplated by this Agreement. *until expiry of maintenance period.*
- 8.2 The indemnities granted by the Developer in this Agreement shall extend to all costs incurred by the Municipality in defending any claim, including the retention of consultants and experts, including legal fees on a solicitor and client basis.
- 8.3 This indemnity shall extend to every official, elected or otherwise, of the Municipality, and to every employee, servant, agent and consultant of the Municipality. To the extent required by law, the Municipality declares itself to be the agent and representative of such Person, and accrues the benefit of indemnification for such Persons in that capacity.

9. Elements of Default

9.1 Default

Default shall occur in the event that the Developer fails to:

- (a) Fails to undertake the Work in accordance with the Approved Plans and Specifications;

- (b) Having commenced the Work, fails or neglects to continue the work in a timely and reasonable basis;
- (c) Fails to undertake the Work in accordance with the Approved Plans and Specifications in a good and workmanlike manner;
- (d) Fails to remedy any deficiency relating to the Approved Plans and Specifications identified by the City's Director of Public Works and Utilities or the City within a reasonable time;
- (e) Make payment of any sum owing by the Developer to the City, pursuant to this Agreement; or
- (f) Comply with the terms of this Agreement, or any other Agreement, between the Developer and the City.

9.2 Declaration of Default

Upon the happening of any event of default, the City may claim default by giving written notice by way of prepaid registered mail to the Developer and Lot Owner. In the event that the default is not cured within forty five (45) days from the date such notification is mailed by the City, the City shall be entitled to avail itself of any and all rights it may have with respect to that default, such as are defined pursuant to the terms of this Agreement, or by common law or equity or under any statute.

9.3 City's Right to Cure Default

Upon the City being entitled to enforce its rights upon default by the Developer, the City may, in its sole discretion, do one, any or all of the following, in addition to any other rights or remedies that the City may have available to it, whether under this Agreement, by common law or equity, or under any statute:

- (a) On its own behalf or by way of its servants, agents or contractors, enter upon the Lands and proceed to supply all materials and do all necessary work in connection with the Work, including repair or reconstruction of faulty work, and the replacement of materials which are not in accordance with such specifications and to charge the cost of so doing, together with an engineering fee equal to 10% of the cost of the materials and works to the Developer;
- (b) On its own behalf or by way of its servants, agents or contractors, enter upon the Lands and proceed to repair and/or maintain any Service which is the responsibility of the Developer, up to the expiry of the Maintenance Period, including repair or reconstruction, and the replacement of any materials which had not been supplied in accordance with the requirements of due and proper maintenance, together with an administrative fee of 10% of the cost of such material and work, and to charge that cost to the Developer.

9.4 Other Rights Remedies

In addition to any other right or remedy granted to the City at law, in equity or by statute:

- (a) In the event that the Developer should fail to pay any sum owing to the City within 60 days of the date of any invoice rendered by the City, the City may deduct the sums owing from the cash deposit held as security, or shall be entitled to seek payment from any surety company who has issued a bond posted as security, or shall be entitled to draw upon any letter of credit issued by any chartered bank in favour of the City as security;
- (b) In the event that the Developer should fail to pay any sum owing to the City within 60 days of the date of any invoice issued by the City, the Developer agrees, upon the City's request, to execute a mortgage of the Developer's then remaining interest in the Lands, to better secure the repayment of sums owing by the Developer to the City;
- (c) In the event that a sum owing from a Lot Owner to the City should not be paid to the City within 60 days of the date of any invoice issued by the City, such sum may, in the sole discretion of the City, be added to the taxes owing on the Lot as custom work fees, and may be collected in the same manner as taxes on land and improvements;
- (d) In the event that any monies owing by the Developer to the City pursuant to this Agreement, or any other Agreement relating to the development of the Lands, should not be paid by the Developer, or in the event that any monies owing by a Lot Owner should not be paid to the City within 60 days of any invoice issued by the City, the City shall be entitled to recover the same from the Developer or Lot Owner as a debt due and owing to the City, together with interest thereon at a rate of 10% per annum from the date of the invoice issued by the City, together with solicitor-and-client costs of any legal proceedings brought to collect such debt;
- (e) To the extent permitted by law and equity, the City may bring action in a court of competent jurisdiction against the Developer, seeking specific performance of the terms of this Agreement, and/or a mandatory and/or prohibitory injunction, to enforce compliance with the terms of this Agreement; and
- (f) To the extent permitted by law and equity, the City may bring action in a court of competent jurisdiction against the Lot Owner, seeking specific performance of the terms of any Lot Sale Agreement, and/or a mandatory and/or prohibitory injunction, to enforce compliance with the terms of the Lot Sale Agreement.

9.5 Right to Refuse Permit

In addition to any other remedy it may have, the City may refuse to issue any building or development permit for any building or development within the Subdivision until all Work is complete in accordance with the requirements of this Agreement and until all fees and charges have been paid in accordance with this Agreement.

10. Costs

September 27, 2023

10.1 Fee for Application and Review


The Developer shall pay, upon execution of this Agreement, a fee to the City in the sum of \$750 as consideration for the City entering this Agreement, and in recognition of the City's costs in connection herewith.

11. Arbitration Provisions

- 11.1 In the case of a dispute between the Parties hereto concerning any aspect of this Agreement, either Party shall be entitled to give the other Party notice of such dispute and demand arbitration thereof. Within fourteen (14) days after such notice and demand have been given, each Party shall appoint an Arbitrator who shall jointly select a third. The Parties agree that the decision of any two of the Arbitrators shall be final and binding upon the Parties. *The Arbitration Act, 1992* shall apply to any arbitration hereunder, and the costs of arbitration shall be apportioned equally between the Parties.
- 11.2 If the two Arbitrators appointed by the Parties do not agree upon a third, or a Party who has been notified of a dispute fails to appoint an Arbitrator, then the third Arbitrator, or an Arbitrator to represent the Party who fails to appoint an Arbitrator, may be appointed by a Justice of the Court of Queen's Bench upon application by either Party.


12. General Provisions

- 12.1 The terms of this Agreement, covenants, provisions and Schedules shall run with the Land and shall be binding upon both Parties and their subsequent heirs, successors, administrators, permitted assigns or transferees, as the case may be, unless specifically stated otherwise herein.
- 12.2 The division of this Agreement into subdivision, and the insertion of headings are for convenience of reference only and do not affect the construction or interpretation of this Agreement.
- 12.3 This Agreement may be altered or added to with the mutual written consent of the Parties and any alterations or additions shall be executed with the same formality as this Agreement and subsequently form part of this Agreement unless specified otherwise herein.
- 12.4 In this Agreement and attached Schedules, unless there is something in the subject matter or context inconsistent with the same:
- (a) The singular includes the plural and the plural includes the singular;
 - (b) A reference to any statute extends to and includes any amendment or re-enactment of such statute;
 - (c) The masculine includes the feminine; and
 - (d) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term.

- 12.5 It is understood that the City may only be bound upon resolution of Council. Accordingly, the Developer understands that no modification of this Agreement, representation, warranty, collateral warranty, or other agreement between the Parties may be validly binding upon the City, until such time as a binding resolution or bylaw has been passed in relation thereto, and has been communicated to the Developer.
- 12.6 If any provision of this Agreement is found to be invalid, it is the intention of the Parties that the remainder of the Agreement shall remain in full force.
- 12.7 The Developer acknowledges and agrees that the limitation period that shall apply to any claim commenced by the City against the Developer to enforce the performance of any of the obligations of the Developer hereunder shall be six ⁽⁶⁾ years. 
- 12.8 Any notice to the other Party shall be sufficiently served if hand-delivered or if sent by prepaid registered mail to the other Party. In the event of the City giving notice by prepaid registered mail, it shall be sufficient to mail notice to the address for the Developer as entered on the tax roll of the City at the time such notice is given.
- 12.9 This Agreement shall be construed in accordance with and be governed by the laws of Saskatchewan, and the courts of the Province of Saskatchewan shall have non-exclusive jurisdiction over any matter arising in relation thereto.
- 12.10 If a Party is more than one person, the obligations of that Party under this Agreement shall be joint and several.

13. Cancellation of Agreement

~~In the event that the Plan of Subdivision is not registered within 365 days from the date hereof, the City may, at its option on one month's notice to the Developer, declare this Agreement to be null and void. The City shall not be obligated to repay the Developer for any or all of any payments made to the City from the Developer under this agreement.~~

not applicable 

IN WITNESS WHEREOF the City has executed this Agreement the day and year first above written.

CITY OF HUMBOLDT

(Seal)

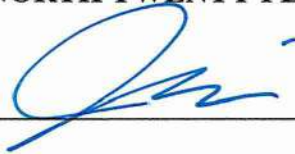
Per: _____ Mayor

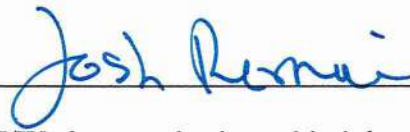
Per: _____ City Manager

IN WITNESS WHEREOF the Developer has executed this Agreement the day and year first above written.

NORTH TWENTY PLACE HOMES LTD

(Seal)

Per:  _____

Per:  _____

I/We have authority to bind the corporation

**SCHEDULE A
DEVELOPER'S SERVICES / WORK**

Part I: Services to be Provided by Developer:

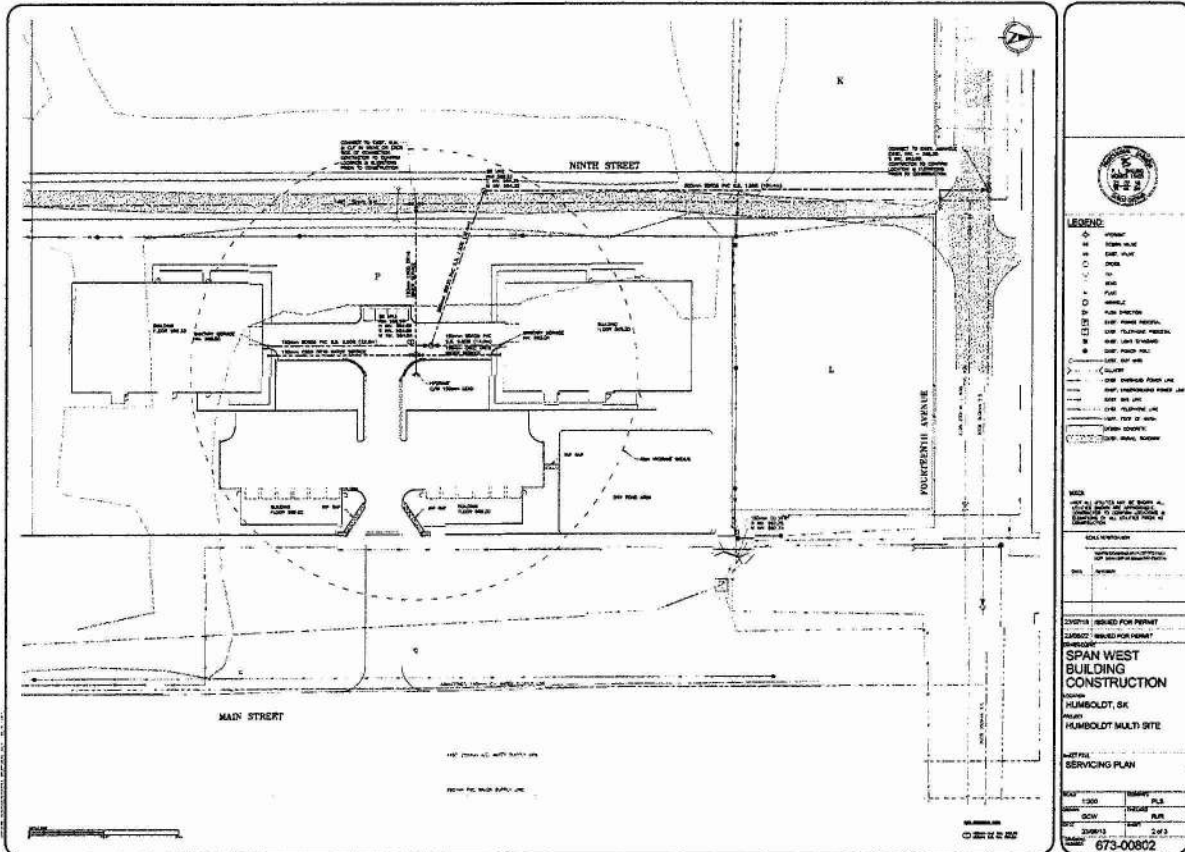
1. Construction drawings and as-built drawings for all services to be constructed, installed or dedicated; by the Developer (The Public Work);
2. Lot grading plan for proposed parcel;
3. Registration of all and any required interests and easements;
4. Temporary traffic control plans as necessary;
5. Temporary service accommodations to adjacent properties as necessary;
6. Any other documents, reports, or works required by the City relating to the subdivision.

Part II: Services to be Constructed or Installed or caused to be Constructed or Installed by the Developer

	Street	From	To	Developer Responsibility	Required Completion Date
Water Mains (only if fire-flow tests reveal that existing main is inadequate) Including all water mains, valves, hydrants, flush outs, etc.	Lane that is on west boundary of subject property	12 th Avenue Watermain	Proposed water service connection.	To Be Determined	Oct. 1, 2024
	Developer may be required to cost share any portion of watermain replacement that is necessary if fire flow tests indicate upsizing is required.				
Water Mains Including all water mains, valves, hydrants, flush outs, etc.	Developer is responsible for repair and replacement of any and all existing water mains, services, and valves relating to service connection.			100%	Oct. 1, 2024
Sanitary Sewer Mains Including all sanitary sewer mains and manholes, etc.	Lane that is on west boundary of subject property	14 th Avenue	Proposed water service connection	100%	Oct. 1, 2024
Stormwater Management Onsite stormwater retention, storm pipes and culverts, etc		Subject Property	14 th Avenue	100%	Oct. 1, 2024
Roadway Reconstruction (to pre-existing condition) Including all curb, base, asphalt, etc.	12 th Avenue; 14 th Avenue			100%	Oct. 1, 2024
Lane Reconstruction & Maintenance	Developer responsible for maintenance and repair of all lanes damaged by work relating to the development.			100%	Oct. 1, 2024
Driveway Apron	Developer responsible for paved surface between edge of property line to existing Highway20 paved surface.			100%	Oct. 1, 2024
Service Connections Including all water, sewer, and storm sewer connections from main lines to building.	Throughout Subdivision.			100%	Oct. 1, 2024
Electric Power, Telephone and Cable Service, and Natural Gas Service	Developer is responsible for electrical power, cable and telephone service and natural gas service as required by Sask Power, SaskTel, Access Communications, and Sask Energy..			100%	Oct. 1, 2024

September 27, 2023

SCHEDULE B LAND DEVELOPMENT AREA



Appendix B - Approximate Land Development Area

The above site plan is conceptual only.

The purpose of this site plan is to illustrate the general locations of the work proposed in Schedule A.

The City does not approve any specific buildings, placement of buildings, or final placement of utilities. The Developer shall confirm with the City before development.

**SCHEDULE C
OFFSITE / DEVELOPMENT LEVY CHARGES**

Pursuant to Bylaw 15/2015 A Bylaw of the City of Humboldt to Provide for Off-Site Charges For Land Subdivisions and Developments Within The City,

Section 1.0 - Base Charge for Development Levies,

1.1 The Base charge for Development Levies shall be calculated as follows:

- (a) In the case of a proposed residential development, where the density of the proposed development:
 - i. Will be less than 80 units per hectare, the Development Levy shall be \$82,976.00 for every hectare of Net Developable Area; and
 - ii. Will be greater than 80 units per hectare, the Development Levy shall be \$165,953.00 for every hectare of Net Developable Area.

Therefore based on the subject property having less than 80 units per hectare, and the Net Developable Area of 0.89 hectares, the calculated Development Levy Charge is: \$74,346.50.

**SCHEDULE D
PERMITTED ENCUMBRANCES**

None Applicable.

**SCHEDULE E
PROPOSED PLAN OF SUBDIVISION**

Not Applicable.

SCHEDULE F
SERVICING DEVELOPMENT STANDARDS

MINIMUM DESIGN STANDARDS FOR LOCAL IMPROVEMENTS FOR
PRELIMINARY PROPOSAL FOR DEVELOPMENT

Development of new areas requires the approval of the City Council. It should be clear to the Developer that the City wishes to be fully informed in regard to the proposed development prior to granting approvals for the Subdivision. To this end the Developer is requested to present his proposal to the City for study and advice prior to approval in principle of the subdivision and development.

Prior to any development taking place, the Developer shall submit a preliminary proposal of development to the City. The proposal shall include pertinent information as to standards of construction, requirements for capacity of water mains, sewer mains, roadways, street patterns, utility easements and other significant aspects relating to the proposed development.

The preliminary proposal shall include plans of the proposed development at a standard engineering scale (1:1000 typical). The following shall be included in the set of plans:

1. Existing Site Plan
 - Existing Contours
 - Site Features, Facilities, & all Utilities
 - Identify any demolition. (A separate demolition plan may be required.)
 - All property lines, right of way, lots & block #'s shall be clearly identified
2. Proposed Site Plan
 - Any proposed lots, blocks, & right of way, municipal reserves, buffer strips
 - All buildings, parking areas, access locations, and road ways
 - Transportation plan indicating roadway type.
3. Utility Plan
 - Site Plan with water, sewer, and any other utilities identified
 - Elevation data for sanitary sewer including rim & invert elevations.
 - Identify all discharge or tie in locations.
 - Provide Sewer Design confirming adequate capacity of sewer mains.
4. Grading Plan / Storm Management Plan
 - Site Plan with existing and proposed contours
 - All stormwater infrastructure including pipework, structures, and any attenuating areas
 - Critical elevation information including high points, drainage paths
 - Storm Management Plan confirming capacity of all storm infrastructure, including storm pond irrigation system.
 - Label effective grade points
 - Identify all discharge or tie ins locations
 - Sedimentation & erosion control measures

- 5 Any other information that is necessary to aid the City in assessing and considering the proposed development.

At such time as the City approves the Preliminary Report along with required revisions, amendments or deletions, the Developer may proceed with the detailed design and preparation of plans and specifications for the development.

The Developer shall submit to the City four complete sets of plans and specifications for the proposed construction. No construction shall commence or be undertaken until the plans and specifications have been approved in writing by the City.

Prior to the commencement of the construction the Developer shall provide two permanent reference points in the Development Area. The elevation of each reference point shall be established to a geodetic datum. These reference points shall be available for use for all construction activities in the Development Area. They are the responsibility of the developer to maintain, protect, or replace.

All services to be installed by the Developer shall be installed in such a manner as to least interfere with the existing services and any cost incurred by the City on account of the installation of services by the Developer shall be charged to the Developer who will pay the City promptly for such expenditures incurred.

Upon completion of the construction the Developer shall submit to the City, two sets of prints and one cad drawing of the as-built works completed. These plans shall be in a form and to the detail required by the City.

CLOSING OF ROADS FOR EXISTING FACILITIES

- (i) Where the Developer is reasonably required to close any street or a part of a street within the City that is not within the Subdivision in order to construct or install any of the Developer's Services, the Developer may close the street upon providing reasonable notice to the City as set forth in the paragraphs below provided that any closure of any street or part of a street will be for the minimum time reasonably necessary to complete the Work and any street shall be restored to its prior condition.
- (ii) The Developer shall provide the City with 10 days' notice of its intention to temporarily close any street or part of a street within the City that is not within the Subdivision in order to construct or install any of the Developer's Services, and shall further take all necessary safety precautions, including obtaining City approval, and ensuring the adequate warning of the closure of the street, during the time of such temporary closure.
- (iii) Notwithstanding paragraph (ii) above, where the street or part of a street within the City that is proposed to be temporarily closed is any portion of a provincial highway, as defined in *The Highways and Transportation Act, 1997* or provides continuity to a provincial highway and for which there is a plan on file in the Ministry of Highways and Infrastructure, the Developer shall in addition to the notice provided for in paragraph (ii) above, provide the City with 30 days' notice of its intention to close the street so that the City in turn has sufficient time to give notice pursuant to s. 15(2) of *The Cities Act*

(Saskatchewan) to the minister responsible for the administration of such Act of the proposed temporary closure.

ROAD CROSSINGS

Developed roads shall be returned to their original conditions. Where it is necessary to excavate across an existing road or lane, excavations shall be backfilled and compacted to the satisfaction of the City.

STANDARDS

Outlined herein are the standards intended to be the minimum standards for construction a new development. It shall be the developer's responsibility to ensure all works are constructed in accordance with City of Humboldt's standards and conform to best engineering and construction practices.

ROADS

GENERAL

All lanes shall be graveled and all streets paved. Concrete curbs and gutters, (and sidewalks) shall be constructed according to approved plans.

GEOMETRIC DESIGN STANDARDS

- (A) Curb to curb width of all streets shall be determined by the City at the time application is approved.

Width of collector and arterial streets shall be as designated by the City.

(B) GRADES

- Minimum gutter grades around curves shall be 0.50%.
- Minimum gutter grades straight sections shall be 0.30%.
- All roads shall be crowned on a slope of 3%.
- Surface drainage will be carried across streets at intersection in concrete swales.

(C) STREETS

All streets shall be constructed as follows:

SUB-GRADE: Must meet a minimum CBR of 8. **Remove all organic or otherwise unacceptable sub-grade material** replace with acceptable material with a minimum CBR of 8 compacted in 150 mm lifts to a minimum of 98% of the Standard Proctor Density. Top 150 mm of Sub-grade compacted to a minimum of 100% of Standard Proctor Density and graded to within 20 mm of final cross section and grade.

BASE ROAD STRUCTURE:

- 1) Geotextile/Cloth Material: All road structures require this product to be applied to the Sub-Grade under the sub-base of the road structure (Collector and Arterial). For local streets, the product shall be under the base course. The Product shall be Naue Geogrid Combigrid 30/30 or similar. Woven cloth with similar properties may also be accepted.
- 2) Local Streets: a minimum of 240 mm of crushed gravel base course with a minimum CBR of 65 compacted to a minimum of 100% Standard Proctor Density.
- 3) Collector and Arterial Streets: a minimum of 200mm of a good quality, well-graded pit-run gravel or sub-base material with a minimum CBR of 35 compacted to a minimum of 100% of the Standard Proctor. In addition to the sub-base, 240 mm of crushed gravel base course with a minimum CBR of 65 compacted to a minimum of 100% Standard Proctor Density.

ASPHALT SURFACING:

- 1) Driveway Aprons: 60 mm of hot mix asphalt surface course with fog coat on the surface
- 2) Local Streets: 60 mm of hot mix asphalt surface course with fog coat on the surface
- 3) Collector Streets: 80 mm of hot mix asphalt surface course with fog coat on the surface
- 4) Arterial Streets: 100 mm of hot mix asphalt surface course with fog coat on the surface
- 5) General – All Asphalt Surfacing:
 - Prime approved base surface with approved priming materials, prior to placing hot asphalt.
 - All hot mixed asphalt shall comply with the City of Humboldt, Hot Mix Asphalt Surface Course.
 - Aggregate to be type 71 gradation.
 - Asphalt binder to be 150-200A penetration.
 - Air voids in compacted mix to be 2 percent to 4 percent.
 - Density of finished pavement to be minimum 98 percent of Marshall Density.

(D) LANES

All lanes shall be constructed as follows:

- 150 mm compacted sub-grade
- 100 mm of crushed gravel base course with a minimum CBR of 65 compacted to a minimum of 100% Standard Proctor Density.
- If pavement is required, the lanes must be constructed to a “Local Streets” structure.

CONSTRUCTION ROADS

Roads provided to new development areas that do not have sub-grade preparation and base gravel placed and approved by the Director of Public Works and Utilities shall be considered a Construction Road. Construction roads shall have sufficient gravel to provide access to construction trades at all times. This road shall be posted by the Developer that it is a “Construction Zone - authorized personnel only, no public access” at all entrance points. The sign shall measure

no less than 9 square feet and shall include the name and phone number of the land developer responsible for the construction of the road. Should the road become impassable as deemed by the Director of Public Works and Utilities or Works and Utilities Manager, the road will be closed until once again deemed passable.

Construction zones will not be permitted to be opened without access to operational fire hydrants. No conditional development or conditional building permits will be issued for an area which there is no approved access via construction road. The water will not be turned on for any circumstance until the roadbed is approved by the Director of Public Works and Utilities and no person shall occupy the dwellings until the water is turned on.

CURBS AND GUTTERS AND SIDEWALKS

- Curbs, gutters, and sidewalks shall be constructed on both sides of streets. All curbs, gutters, and sidewalks shall be constructed of poured-in-place concrete in accordance with the City of Humboldt Standards.
- Curb returns at street intersections shall have a minimum radius of 8.000 meters (measured along back of curb) or as required by the City.
- The minimum curb radius in crescents and cul-de-sacs shall be 12.000 meters.

CONCRETE

Concrete for all sidewalk, curb and gutter construction shall have an air content of at least 5% and no more than 8% and shall have a minimum 28 day compressive strength of 32.0 MPa.

LOT DRAINAGE

The Developer shall submit to the City an overall plan of the area to be developed on which shall be indicated the individual lots with the proposed grading of the lots. Rear lot grades shall be 100mm above design lane grade. Also indicated on this plan shall be the design sidewalk or top of curb elevations and the invert to elevation of the sanitary sewer connection at the property line. Front finished grade elevations are to be set at 450 mm above the design sidewalk or top of curb elevations.

Lot Drainage shall take into account storm water drainage during major rainfall events consistent with engineering best practices. Basins that hold stormwater without a spill location to prevent property damage will not be allowed.

EARTHWORK

Detailed Earthwork Construction details are listed in section 2000 of the Construction Specifications. The developer shall match existing grades at the edge of their property.

TOPSOIL REMOVAL

The topsoil shall be stripped from all road right-of-ways and lanes prior to construction of any utilities.

BACKFILL

All utility trench backfill shall be compacted to a minimum of ninety-six (96%) percent of the Standard Proctor Density. The top 1 meter below subgrade must be compacted to a minimum of ninety-eight (98%) percent of the Standard Proctor Density when backfilling within the road right-of-way.

WATER DISTRIBUTION SYSTEM

The water distribution system shall be adequate to supply the peak hourly demands or the peak day demands plus fire flows, whichever is greater. **Fire flow requirements shall be as recommended by the Insurers Advisory Organization.**

WATER MAINS

- Minimum size of pipe shall be 150 mm inside diameter.
- Main sizes may be increased or decreased by the City at their discretion as determined for hydrant fire flows and network looping needs for the area.
- Mains shall be located either within the roadway or boulevard and at least 2.0 meters horizontally from any proposed sidewalk, curb or other service structure.
- Mains shall be installed to provide a minimum depth of cover of 3.0 meters below final finished grade.
- Sand bedding 100 mm below the pipe and at half way up the pipe for the full trench width shall be provided on all mains.
- Pipe for water mains shall be AWWA-C900-81 PVC – DR18 pipe complete with factory installed elastomeric gaskets, or as otherwise approved.
- Water mains shall be augured or tunneled under existing or future walks, curbs or swales.
- The ends of stub pipes shall be marked with a 38mm x 89mm wooden marker extending from the top of the stub pipe to a minimum 600mm above finished grade.

HYDRANTS

- Maximum spacing of hydrants shall be such that the curb in front of any dwelling is no more than 120.0 meters from any hydrant, as measured along the traveled road surface.
- Hydrants shall be Canada Valve Inc. “Century” or as otherwise approved. Depth of bury 3m. The hydrant shall have 2 – 62mm Western Canada Thread hose nozzles and a 100mm NH pumper nozzle. Operating nuts shall be triangular and match the City of Humboldt’s present equipment. Hydrants shall be painted yellow.
- Hydrant leads shall be augured or tunneled under existing or future walks.
- A 10.88kg (24 lb.) zinc anode shall be attached to hydrants.

VALVES

- Valves shall be provided on the mains so that no more than three (3) valves are closed to isolate any one section of water main. Valving shall be provided such that only one hydrant is isolated at any one time.
- Valves shall be located at the extension of the street property lines at street intersections or as otherwise approved by the City.
- Valves on hydrant leads may be located in the roadway.
- Valves shall be iron body, be resilient seated gate valves conforming to AWWA C509-87, counter clockwise opening, with ends to suit the pipe.

- Valve boxes shall be complete with 25mm square solid steel operating extension stems, stone disc and operating nut with shirt.
- The top operating nut shall be within 300 mm of design grade.
- A 5.44kg zinc (12 lb.) anode shall be attached to valves.

WATER SERVICE CONNECTIONS

- All pipes shall be installed in an augured excavation beneath all future sidewalks and curbs.
- Service pipe from the main property line shall have a minimum depth cover of 2.800 metres from finished grade.
- Service connections shall be located 3 metres from the front corner of the lot and 300mm outside the front property of the lot.
- Curb stops shall be located so that they do not conflict with driveways or sidewalks
- Water Service pipe shall be 25mm ASTM D2737 SDR 9 polyethylene tubing or otherwise as approved.
- Service boxes shall be set vertical with the tops at the sidewalk elevation. At the time of sidewalk construction, the letters “CC” shall be neatly marked into the concrete directly opposite each service box.
- Curb stop stem shall be stainless steel. Sacrificial anodes shall be installed on the curb stop box. The bottom 1.5 metres of the curb stop box wrapped with denso tape.
- The Works and Utilities Department must be contacted for assessment for any new service connection prior to installation or reuse of any existing service connection. Old connections that are not re-used will have to be cut off at the mains.

DUPLEX /MULTIPLE UNIT DWELLING CONNECTIONS

The Public Works Department must be contacted regarding new service connection requirements prior to installation or reuse of any existing service connections. All semi-detached dwellings must have separate service connections to the mains for each dwelling unit. Any duplexes that may be subdivided at a future date will also require separate connections to the mains for each unit. Old connections that are not re-used will have to be cut off at the mains.

Multiple unit dwellings with individual meters for each dwelling unit must provide a separate heated meter room. A key must be provided to the City to access this room for meter reading and for the turning on and off of each individual meter as necessary. Individual meters will not be installed within dwelling units. Multiple unit dwellings with one meter for the entire building will not be billed individually.

CURB CONNECTION AND DRIVEWAY LOCATION

All attempts to design/plan the service installation location away from the anticipated driveway location should be pursued. If driveway placement is required above the utility services, including curb stop, the contractor or homeowner must

- Contact Public Works and Utilities at least 48 hours prior to installing the driveway and have the curb stop tested.

- Any inspection chambers, cleanouts, or curb stops, must be inspected and repaired prior to installation of any driveway.
- The contractor or homeowner is responsible for any damage or repairs necessary, unless they are a warrantied item from the original underground installer.
- The contractor or homeowner must install an approved curb stop protector box. These can be purchased from Public Works and Utilities.
- Driveways and Access geometry must conform to city bylaws.

TESTING

Testing of the water distribution system shall be carried out after the service connections are installed according to AWWA Specifications. Leakage testing shall be carried out to a pressure of 1035 kPa.

Provide chlorine residual and bacterial testing results.

SANITARY SEWAGE COLLECTION SYSTEM

The sanitary sewage collection system shall be of a sufficient capacity to carry peak hourly sewage flows plus infiltration.

SEWER MAINS

- Minimum size shall be 200mm diameter.
- Main sizes may be increased by the City as considered necessary.
- Sewer Mains shall be PVC sewer pipe conforming to ASTM D3034, DR35 or as otherwise approved.
- Mains shall be located within the roadway or boulevard and at least 2.0 meters horizontally from any proposed sidewalk, curb or other service structure.
- Mains shall be installed to provide a minimum depth to invert of 2.8 meters from finished grade. Shallower pipes shall require the approval of the City.
- Pipes shall be bedded in sand from 100 mm below the pipe halfway up the pipe for the full trench width. Improved foundations shall be provided where soil conditions require same.
- Sewer mains shall be augured or tunneled under existing or future walks, curbs or swales.
- The ends of stub pipes shall be marked with a 38mm x 89mm wooden marker extending from the top of the stub pipe to minimum 600mm above finished grade.

MANHOLES

- Manhole bodies shall be of pre-cast concrete sections with a minimum inside diameter of 1050 mm.
- Manhole steps shall be of steel safety steps galvanized after fabrication.
- Frames and covers shall be of cast iron and asphalt dipped. Norwood F-39 or as otherwise approved.
- Maximum spacing between manholes shall be 110 meters.

SEWER SERVICE CONNECTIONS

September 27, 2023

- All pipes shall be installed in an augured excavation beneath all future sidewalk and curbs.
- Service pipe at the front property line of each lot shall have a minimum depth of 2.8 meters below final lot grade.
- Service pipe shall be of a minimum of 100 mm diameter.
- Service pipe shall be of PVC or as otherwise approved.
- Service pipe shall be connected to the sewer main with an approved saddle.
- The Works and Utilities Department must be contacted for assessment for any new service connection prior to installation or reuse of any existing service connection. Old connections that are not re-used will have to be cut off at the mains.

DUPLEX /MULTIPLE UNIT DWELLING CONNECTIONS

The Public Works Department must be contacted regarding new service connection requirements prior to installation or reuse of any existing service connections. All semi-detached dwellings must have separate service connections to the mains for each dwelling unit. Any duplexes that may be subdivided at a future date will also require separate connections to the mains for each unit. Old connections that are not re-used will have to be cut off at the mains.

Multiple unit dwellings with individual meters for each dwelling unit must provide a separate heated meter room. A key must be provided to the City to access this room for meter reading and for the turning on and off of each individual meter as necessary. Individual meters will not be installed within dwelling units. Multiple unit dwellings with one meter for the entire building will not be billed individually.

STORMWATER MANAGEMENT SYSTEM

DESIGN METHODOLOGY

The developer shall submit a stormwater management system report confirming the capacity of all proposed storm-sewer works. The plan shall take the following into account:

The stormwater management system shall be adequate to restrict the peak post-development stormwater runoff rates to predevelopment rates or to the capacity of the infrastructure downstream from the development; whichever is smaller.

In areas identified as a drainage moratorium, the stormwater management system shall be adequate to restrict the post-development stormwater volume to predevelopment runoff volumes. This management system shall take into account the storage of water onsite and the proposed method of managing the stored water, whether it is managed by evaporation or an irrigation system. The estimated volume of storage shall follow engineering best practices. The drainage plan shall include an emergency conveyance system to prevent property damage during wet years where evaporation / irrigation is not practical to handle the water stored on site.

The hydraulic sizing of drainage and conveyance structures in urban areas always requires estimation of peak flow rates. Peak flow is the maximum rate of flow passing a given point during or after a rainfall event. Historically, the Rational Method is the most widely used method of estimating the peak runoff rates for the design of urban drainage systems. Alternative modelling methods may be allowed pending approval from the City of Humboldt.

The Rational Method is based on an empirical formula relating the peak flow rate to the drainage area, the rainfall intensity and a runoff coefficient. The Rational formula is:

$$Q = 0.0028 C I A \text{ (m}^3\text{/s)}$$

Where

Q = peak runoff rate

C = dimensionless runoff coefficient

I = rainfall intensity for a duration that equals time of concentration (t_c) of the basin (mm/hr)

See figure 1 below for more information.

A = basin area (hectares), and

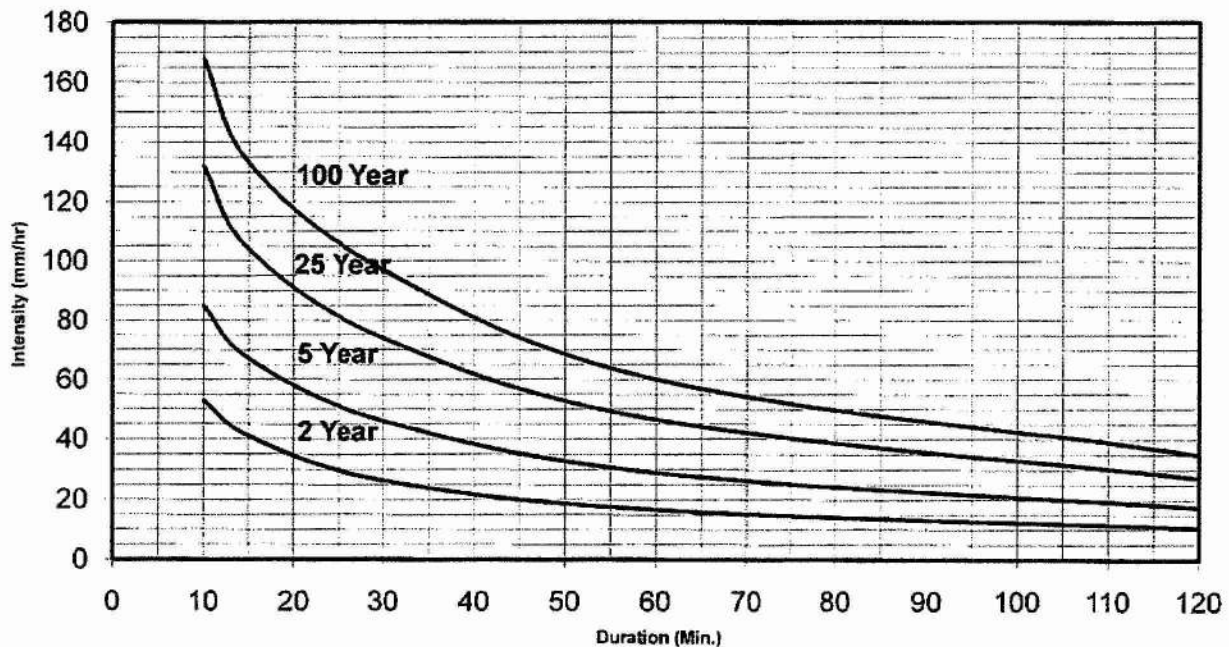
t_c = time of concentration for the basin for the particular event (min).

The fundamental assumptions underlying the Rational Method are:

- The rainfall intensity is constant over a period that equals the time of concentration of the basin;
- The rainfall intensity is constant throughout the basin;
- The frequency distribution of the event rainfall and the peak runoff rate are identical (this assumption is true for all event-based computations);
- The time of concentration of a basin is constant and is easily determined; and
- The runoff coefficient is invariant, regardless of season of the year or depth or intensity of rainfall.

Typically, rainfall intensities are determined from Intensity-Duration-Frequency curves (IDF curves) or Depth-Duration-Frequency curves (DDF curves). These are plots of rainfall intensity (or depth) versus duration of event rainfall. The runoff coefficient C varies with the type of development proposed for the site. As the impervious area increases, the runoff coefficient will increase.

Figure 1
Intensity-Duration-Frequency (IDF) Curves
University of Saskatchewan and Saskatoon Airport
1926 to 1986 (61 years)



STORMWATER PIPING

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Minor storm networks shall be designed for 1:5 year 1 hour events, while major storm networks without stormwater detention shall be designed for 1:100 year 1 hour events. The minor systems consist of drainage works that transport flows from a catchment during minor rainstorms. The major systems consist of drainage routes that transport flow during major storm events.

STORMWATER DETENTION SYSTEMS

Stormwater detention systems shall be designed such to minimize runoff during small rainfall events, and shall have capacity to store surcharge water due to peak runoff restrictions as stated above. Stormwater detention systems shall be designed for 1:100 year 24 hour events.

Wet Ponds

Wet detention ponds are stormwater control structures designed to retain and treat the contaminated stormwater runoff. Although there are several different versions of the wet pond design, the most common design is the extended detention wet pond where adequate storage is provided above the permanent pool in order to detain storm water runoff and provide settling. Runoff from each rain event is detained and treated in the pond until it is displaced by runoff from the next storm. Sedimentation processes remove particulates, organic matter and metals, while nutrients are removed through biological uptake

Design Guidelines for Wet Ponds

Minimum drainage area	5 hectares
Runoff detention time	< 24 hours
Side slopes above permanent pool	4:1 to 5:1.
Side slopes in permanent pool	5:1 to 7:1
Length to width ratio	4:1 to 5:1

Dry Ponds

Generally, dry ponds should be implemented if wet ponds cannot be implemented due to site or planning constraints. The design guidelines for dry ponds are presented below.

Design Guidelines for Dry Ponds

Minimum drainage area	5 hectares
Runoff detention time	up to 48 hours
Side slopes	4:1 to 5:1
Length to width ratio	3:1 to 5:1

Dry ponds may be used for Municipal Reserve at City's discretion, only if detention time is less than 24 hours.

Other Storage Methods

The developer may propose alternate storage methods to the City of Humboldt. Approval of the proposed storage method will depend on if it meets standard engineering practices and is located in such a location that it is accessible for maintenance.

GAS, POWER, TELEPHONE SERVICES AND STREET LIGHT INSTALLATION

Installing gas, power, street light, telephone and television cable services shall be arranged between the Developer and the respective utility/service companies. The Developer shall pay costs for these services. The City shall approve the utility design and locations.

**SCHEDULE G
OPINION OF PROBABLE COSTS**

Not Applicable