



TOWN OF LAKE COWICHAN  
**REQUEST FOR QUOTATION (RFQ) – RFQ#03-2026**

Issued Date	July 9, 2026
Closing Date	<b>July 30 ,2026</b>
Term of Engagement	Aug 17 <sup>th</sup> to Sept 15th, 2026
Primary Contact	Jas Sandhu <a href="mailto:jas.sandhu@lakecowichan.ca">jas.sandhu@lakecowichan.ca</a> 250 701-3858
Note:	Individuals and companies intending on submitting a quote for this work can contact Jas Sandhu to schedule a site visit prior to the closing date and time of the RFQ.
Submission Requirements	All proposals <b>must</b> be submitted in-person in a sealed envelope at the Reception Desk – Town Hall during working hours Monday to Friday 8:30 am to 4:30 pm with the exceptions of holiday(s) <b>39 South Shore Road, Lake Cowichan, British Columbia, V0R 2G0.</b>

## 1. INTRODUCTION

The Town of Lake Cowichan (“Town”) invites qualified and experienced vendors to submit a quotation for the provision of the services as outlined below to the Town of Lake Cowichan. This Request for Quotation (RFQ) is intended to obtain competitive pricing and information from suppliers capable of meeting the specifications and service requirements outlined in this document. Quotations will be evaluated in accordance with the criteria described herein, with the objective of achieving best overall value while ensuring quality, reliability, and compliance with applicable policy requirements.

## 2. SCOPE OF WORK

The Town is seeking proposals from qualified contractors (individuals or companies) to provide installation of approximately 125m of 150mm water main complete with all appurtenances’ as shown on (PVC) design drawing set 26-210 No. 0 and itemized in attached Schedule of Quantities. located at Maple Ave, Lake Cowichan, BC. The work will primarily focus on: WATER MAIN INSTALATION:

- a. Securing necessary permits to complete work.
- b. Labour, equipment and materials.
- c. Water health tests where required.
- d. Contract will be a CCDC
- e. All works to be in accordance with the current Town of Lake Cowichan and MMCD specifications unless otherwise noted on drawings; if there is a discrepancy the most stringent shall apply.

## 3. PROPOSAL QUALIFICATIONS AND REQUIREMENTS

All responses to the RFQ must include, at a minimum:

- All inclusive pricing for all requested goods and/or services, including fees and taxes
- Delivery and/or mobilization costs
- Identification of the Workers who will be performing the required work.
- Explanation of experience, qualifications, or training of the Workers assigned to perform the work requested.
- Confirmation of valid business license to conduct business within the Town.
- Confirmation of valid WorkSafe BC Insurance Coverage
- Confirmation of valid general liability insurance in the amount of \$3,000,000.
- Confirmation of start date and completion date with a project schedule
- Include an hourly rates sheet.

**Note:**

*The Town will require confirmation/proof of business license, WorkSafe insurance, and general liability insurance from the successful proponent prior to the commencement of any work on this project. The Town may also require the production of receipts confirming legal disposal of any items related to this project.*

**4. EVALUATION CRITERIA**

Quotations will be reviewed and evaluated by the Town to determine **best overall value**. Evaluation will be based on **4 criterion** and not be based solely on lowest price. The Town reserves the right to consider any information submitted in the quotation, as well as other information available to the Town, in making its evaluation.

**1. Price and Value for Money – 50%**

*The total cost of the quotation, including all applicable fees and charges, and the overall value offered relative to the proposed quality of services to be provided.*

**2. Proponent Qualification and Experience – 25%**

*The Proponent's demonstrated experience, qualification, and capacity to successfully deliver similar services in accordance with the Town's requirements.*

**3. Delivery Schedule and Availability – 15%**

*The Proponent's demonstrated ability to meet required timelines, availability, and any delivery or service schedules identified in the RFQ.*

**4. Completeness of Proposal – Compliance with RFQ Requirements – 10%**

*The extent to which the quotation is clear, complete, and fully compliant with the instructions, specifications, and mandatory requirements set out in this RFQ.*

**5. GENERAL TERMS AND CONDITIONS:**

5.1 All quotes must be valid for **30 calendar days**.

5.2 The Town reserves the sole and absolute right to determine, at its discretion, whether any quotation is compliant, valid, or responsive to the requirements of this RFQ. Without limiting the generality of the foregoing, the Town may deem a quotation to be non-compliant or invalid if it is incomplete, unclear, conditional, contains qualifications or assumptions not expressly permitted, deviates from the

RFQ requirements, is submitted late, or does not meet the Town's needs as determined by the Town.

- 5.3 The Town may, but is not obligated to, waive minor irregularities or request clarification where it is in the Town's interest to do so, and such waiver or clarification shall not be construed as a precedent or obligation to waive similar irregularities in any other quotation.
- 5.4 This RFQ should not be interpreted as an agreement to purchase goods or services.
- 5.5 It is the sole responsibility of the proponent to ensure that quotation arrives prior to the closing date and time and at the specified location.
- 5.6 All pricing should be in Canadian currency.
- 5.7 The Town shall not be held liable or accountable for any errors or omission in any part of this RFQ or response to Bidder's questions.
- 5.8 While the Town and/or its employees and agents have made effort to ensure the accurate representation of information in this RFQ, the information contained in or provided with the RFQ, is supplied solely as a guideline to bidders. The information is not guaranteed or warranted to be accurate by the Town and/or its employees or agents, not is it necessarily comprehensive or exhaustive.
- 5.9 Bidders are expressly advised to schedule a site visit prior to submitting a quote. Bidders should not rely exclusively on any information provided in or with this RFQ and should independently verify all such information. Nothing in this RFQ is intended to relieve bidders from the responsibility of conducting their own investigations and research and forming their own opinions and conclusions with respect to the matters addressed in this RFQ.
- 5.10 When quotations have been received and an award decision made, the successful proponent will be held to its quotation as of the closing of the RFQ irrespective of subsequent representation that mistakes have been made in the quotation originally submitted.
- 5.11 Information submitted to the Town in response to this RFQ will be collected and managed in accordance with Section 21, of the *Freedom of Information and Protection of Privacy Act*.
- 5.12 Any attempt by a proponent to contact persons not expressly identified as the contact person in this RFQ, to include Town Staff, Members of Council with the

express intent of securing a competitive advantage, may result in the disqualification of the quotation, at the sole discretion of the Town.



3111 Woodpark Dr

Victoria, BC V9C 1P2

**Maple Avenue Water Main - Schedule of Quantities and Prices**

Project Name Maple Avenue Water Main

Project Number: 1586-C

Client : Town of Lake Cowichan

Date Estimate Prepared: 30/6/2026

Estimate Prepared By: C Williams

**SCHEDULE OF QUANTITIES AND PRICES**

(All prices and *Quotations* including the *Contract Price* shall include all *Taxes* , but shall not include *GST*.)

Any work called for in these Contract Documents, shown on the plans, or which is necessary for the completion of the Work called for in these Contract Documents and which is not specifically listed as a separate payment item in this Appendix shall be deemed incidental to the performance of the Work and to the general purpose of the Contract; no separate payment will be made on account of any such Work, but the costs of any such incidental Work shall be included in the Unit and Lump Sum Prices.

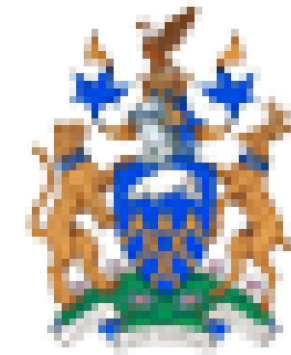
**Summary Sheet**

Section A	General Requirements	\$	-
Section 01	Water Main	\$	-

**TOTAL** \$ -

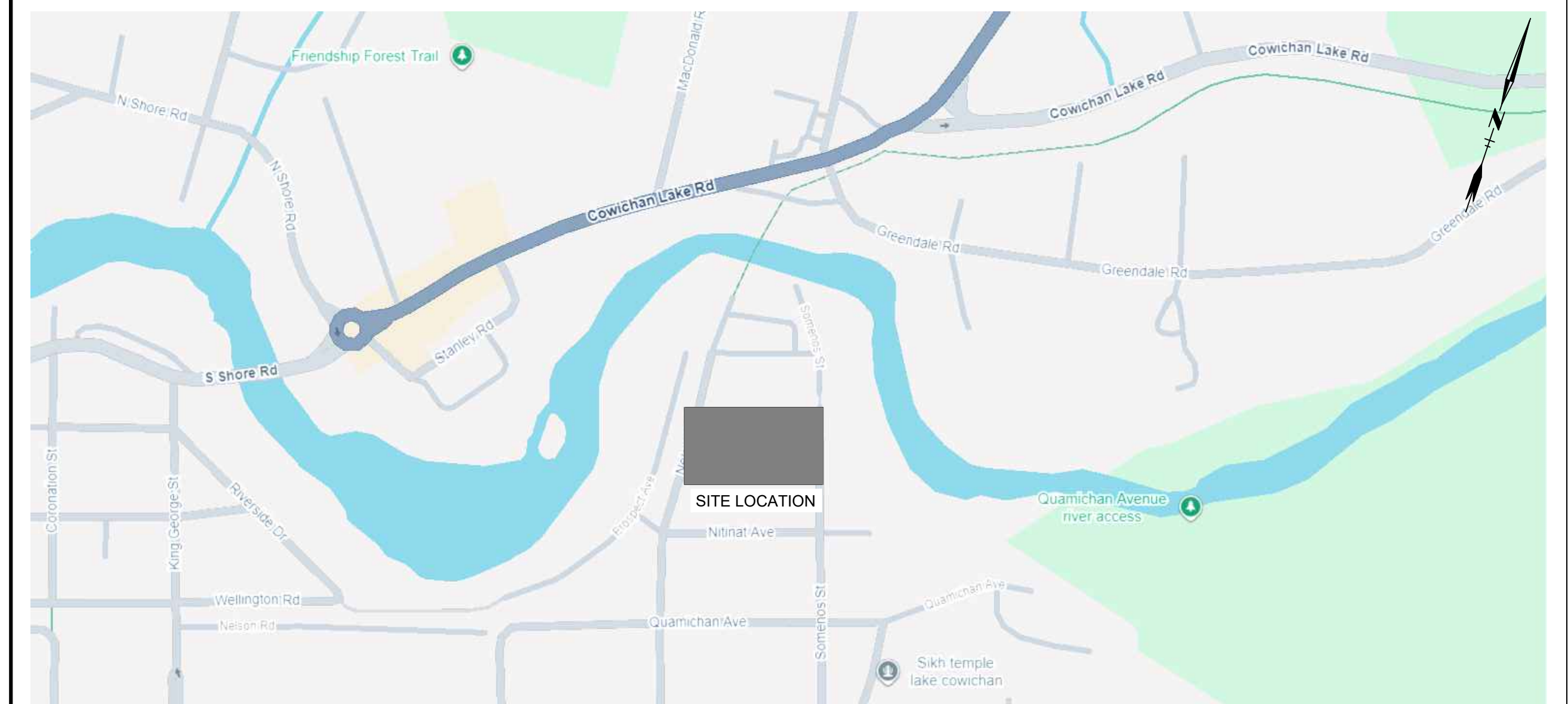
A	GENERAL REQUIREMENTS					
ITEM NUMBER	SPECIFICATION TITLE	Quantity	Unit	Unit Cost	Amount	Total
A.1	Geotechnical Testing		L.S.		\$ -	
A.2	Survey Layout/Calculations/Record survey		L.S.		\$ -	
A.3	Mobilization		L.S.		\$ -	
A.4	Traffic Control		L.S.		\$ -	
A.5	Hydrostatic Pressure Testing, Flushing, Disinfection & Baterial Testing		L.S.		\$ -	
					<b>SUB-TOTAL</b>	<b>\$ -</b>
<b>SECT 01</b>	<b>Water Main</b>					
ITEM NUMBER	SPECIFICATION TITLE	Quantity	Unit	Unit Cost	Amount	Total
1.1	<b>Water Main - 150mm - C900 PVC</b> <i>c/w with all fittings &amp; valves including trench excavation, trench backfill with existing material as per PVC DWG set 1586-C No. "0".</i>	123	L.M		\$ -	
1.2	<b>Long Water Services - Supply and install 25mm PE service to existing water box c/w backfill as per detail "2" and trench material re-used.</b> <i>Existing Box and setters to be re-used.</i>	6	Each		\$ -	
1.3	<b>Short Water Services - Supply and install 25mm PE service to existing water box c/w backfill as per detail "2" and trench material re-used.</b> <i>Existing Box and setters to be re-used.</i>	5	Each		\$ -	
1.4	<i>Mueller Hi-Flo hydrant assembly as per MMCD std. dwg W4 c/w with all fittings and valves including trench excavation, backfill as per detal "2" with trench material disposal</i>	1	Each		\$ -	
1.6	<b>Asphalt Patching - Supply and Install 50mm of Hot Mix Asphalt (HMA) on sub-base gravels noted in Detail '3" as per PVC dwg set No. 0</b>		Sq.m		\$ -	
1.6	<b>Tie In's &amp; Service Connections</b>		L.S		\$ -	
					\$ -	
					<b>SUB-TOTAL</b>	<b>\$ -</b>

# TOWN OF LAKE COWICHAN



# MAPLE AVENUE WATERMAIN REPLACEMENT

## LOCATION PLAN



## DRAWING INDEX

TITLE	DWG NO.	ISS/REV	SHEET NO.
COVER SHEET AND GENERAL NOTES	C-00		1
PLAN & PROFILE	C-01		2
DETAILS	C-02		3

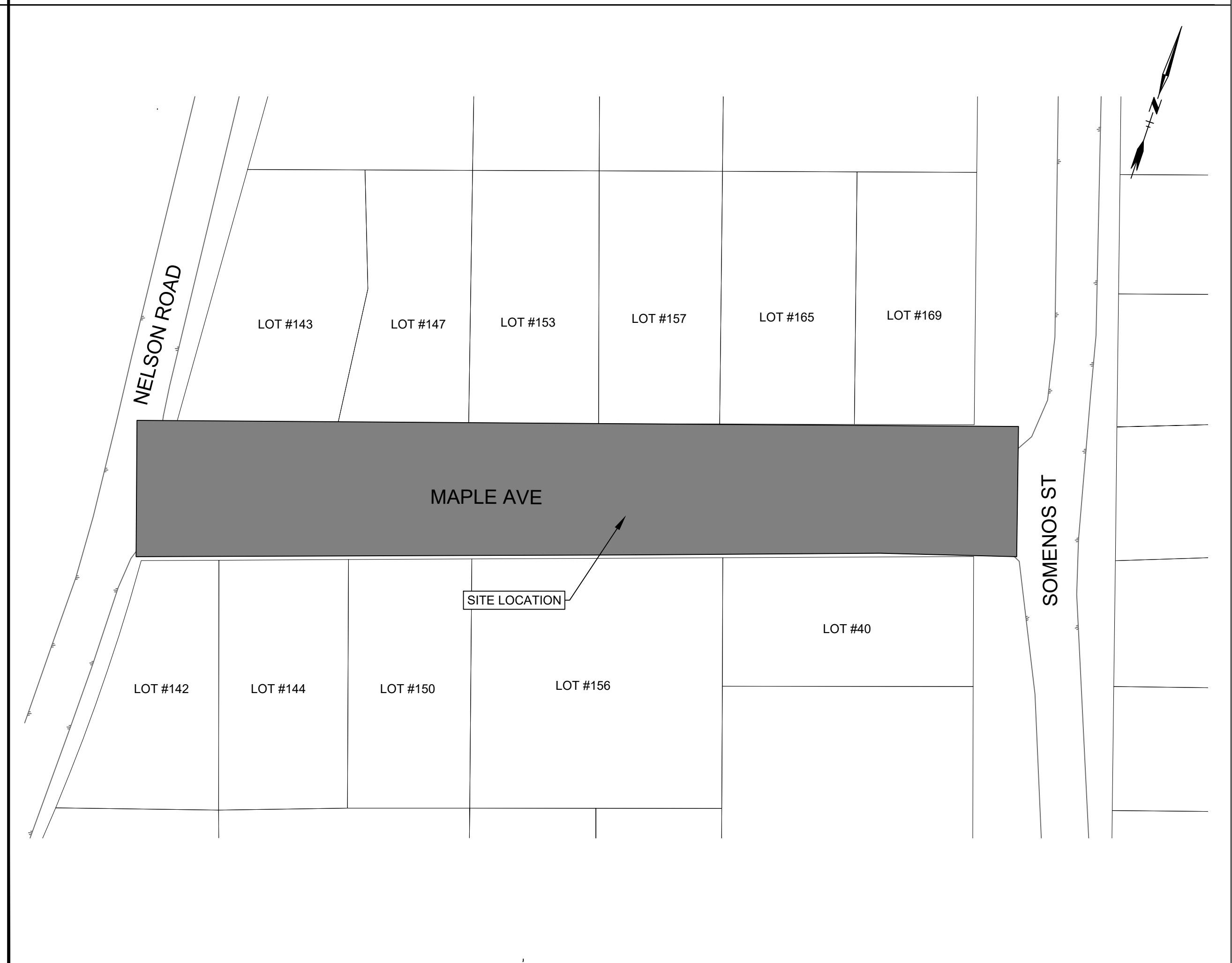
## GENERAL NOTES

- GENERAL NOTES :**
- ALL CONSTRUCTION AND MATERIALS TO BE IN ACCORDANCE WITH THE MOST CURRENT TOWN OF LAKE COWICHAN ENGINEERING SPECIFICATIONS, MMCD SPECIFICATIONS AND DETAILS, AND THESE DRAWINGS.
  - ALL PRODUCTS TO BE IN ACCORDANCE WITH TOWN OF LAKE COWICHAN APPROVED PRODUCTS LIST. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING THE VARIOUS PARTS OF THE WORK.
  - EXISTING SERVICES SHOWN ON THIS DRAWING ARE APPROXIMATE ONLY AND CANNOT BE GUARANTEED FOR ACCURACY. CONTRACTOR TO CONFIRM LOCATION OF ALL EXISTING SERVICES IN THE FIELD PRIOR TO CONSTRUCTION.
  - A PERMIT AND SECURITY DEPOSIT ARE REQUIRED FOR WORKS WITHIN A MUNICIPAL ROAD ALLOWANCE AND/OR MUNICIPAL RIGHT OF WAY AND MUST BE OBTAINED BEFORE WORKS COMMENCE. NOTIFY TOWN OF LAKE COWICHAN 48 HOURS PRIOR TO CONSTRUCTION.
  - MAINTAIN VEHICULAR ACCESS TO EXISTING LOTS.
  - CAREFULLY RELOCATE EXISTING LANDSCAPE FEATURES, TRAFFIC SIGNS AND SITE FEATURES TO ACCOMMODATE CONSTRUCTION WORK. ALL EXISTING WORKS TO BE RETURNED TO AS FOUND OR BETTER CONDITION.
  - A PERMIT TO CONSTRUCT WORKS ADJACENT TO BOULEVARD OR BY-LAW PROTECTED TREES MUST BE OBTAINED FROM TOWN OF LAKE COWICHAN BEFORE WORKS COMMENCE. ARBORIST REQUIRED WHEN WORK IS INSIDE CRITICAL ROOT ZONE OF BOULEVARD TREES AND PRIVATE BY-LAW PROTECTED TREES.
  - CONTACT BC (1-800-474-6888), BC HYDRO, SHAW/ROGERS CABLE, AND FORTIS GAS FOR UNDERGROUND UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
  - DISPOSE OF ALL EXCAVATED MATERIAL UNSUITABLE FOR REUSE AT A SUITABLE OFF-SITE DISPOSAL AREA, IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
  - ALL ELEVATIONS ARE METRIC GEODETIC.
  - ANY UNSCHEDULED UTILITY SERVICE DISRUPTIONS TO BE RECTIFIED IN A TIMELY MANNER. CONTRACTOR TO KEEP STANDARD REPAIR COMPONENTS ON SITE AT ALL TIMES. CONTRACTOR TO IMMEDIATELY NOTIFY TOWN OF LAKE COWICHAN REPRESENTATIVE OF ANY UNSCHEDULED UTILITY SERVICE DISRUPTION.
- ROAD AND TRAFFIC CONTROL NOTES :**
- ALL TRAFFIC CONTROL TO CONFORM TO MOST CURRENT WORKSAFE BC, MMCD, AND MINISTRY OF TRANSPORTATION SPECIFICATIONS (TRAFFIC CONTROL MANUAL FOR WORK ON ROADWAYS), AND THESE DRAWINGS.
  - PRIOR TO CONSTRUCTION, CONTRACTOR TO PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN TO TOWN OF LAKE COWICHAN FOR ACCEPTANCE. DOCUMENT TO INCLUDE DETAILS OF ALL WORK SITES AND LANE CLOSURE REQUIREMENTS.
  - PROVIDE TRAFFIC CONTROL, SIGNAGE, BARRICADES AND ILLUMINATION, AND DETOUR ROUTING AS REQUIRED TO MAINTAIN TRAFFIC FLOW AND EMERGENCY VEHICLE ACCESS.
  - ALL FLAG PERSONS TO HAVE PROOF OF CERTIFICATION. FLAG PERSONS ARE STRICTLY REQUIRED WHEN THERE IS ONLY ONE OPEN LANE OF TRAFFIC.
  - AT THE END OF EVERY DAY, EXCAVATIONS SHALL BE COVERED WITH STEEL TRAFFIC PLATES SUITABLE FOR VEHICULAR TRAFFIC (MINIMUM H20 LOADING) WHEREVER POSSIBLE.
  - 24 HOUR EMERGENCY CONTACT INFORMATION FOR CONTRACTOR REPRESENTATIVE TO BE PROVIDED TO THE TOWN OF LAKE COWICHAN.
  - TOWN OF LAKE COWICHAN TO BE ADVISED OF ROUTING FOR DETOURS, IF REQUIRED, PRIOR TO ACCEPTANCE.
  - CONTRACTOR TO CONFORM TO TOWN OF LAKE COWICHAN CONSTRUCTION NOISE RESTRICTIONS OUTLINED IN CITY BY-LAW 518.
  - ALL ROADS ARE KEPT CLEAN OF DEBRIS ON A REGULAR BASIS.
  - ALL EXISTING ASPHALT TO BE CUT SQUARE WITH ASPHALT SAW.

- WATER NOTES :**
- ALL WATERMANS TO BE PVC C900.
  - ALL WATERMAIN FITTINGS TO BE DUCTILE IRON TO AWWA C153, MINIMUM PRESSURE RATING: 238PSI.
  - ALL VALVES TO BE GATE VALVES, MIN. PRESSURE RATING 280 PSI.
  - NEW SERVICE LINES TO BE CONNECTED TO EXISTING SERVICE LINES WITH COUPLER. IF CONNECTION TO EX SERVICE LINE IS NOT POSSIBLE A NEW SERVICE IS TO BE INSTALLED.
  - A MINIMUM OF 3m HORIZONTAL CLEAR SEPARATION AND 450mm CLEAR VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER SERVICES AND ALL SANITARY SEWER AND DRAIN SERVICES. WHERE A SANITARY OR STORM DRAIN SERVICE IS LOWER THAN THE WATER SERVICE BY MORE THAN 450mm IN ELEVATION THE HORIZONTAL OFFSET MAY BE REDUCED TO NO LESS THAN 1.0m. ISLAND HEALTH APPROVAL IS REQUIRED FOR ANY REDUCTION IN THE SEPARATION.
  - FOR CROSSING OF EXISTING SEWERS WHERE THE WATER MAIN DOES NOT HAVE THE REQUIRED 450mm VERTICAL SEPARATION, WRAP THE JOINTS WITH PETROLIUM TAPE 3.0m ON EITHER SIDE OF THE WATERMAIN. A MINIMUM OF 15cm CLEAR HORIZONTAL AND 150mm CLEAR VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN WATERMANS AND ELECTRICAL CONDUITS, GAS MAINS AND TELEPHONE CONDUITS.
  - A MINIMUM OF 1.0m HORIZONTAL, CENTRE TO CENTRE AND 150mm CLEAR VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER SERVICES AND ELECTRICAL, GAS AND TELEPHONE SERVICES.
  - WATER SERVICES 50mmØ AND LESS TO BE CROSSLINKED POLYETHYLENE (PEX) TO AWWA C904 & CSA B137.5, MINIMUM 19mmØ, UNLESS OTHERWISE NOTED.
  - ALL WATERMAIN FITTINGS MUST BE FIRE RESTRAINED WITH THRUST BLOCKS INSTALLED AT TEES AND BENDS. REINSTATE ALL EXISTING WATER SERVICES AND ABANDON MANS ONLY AFTER NEW WATERMAIN HAS BEEN APPROVED FOR USE.
  - CONTRACTOR TO CONDUCT PRESSURE TEST, FLUSH AND DISINFECT WATERMANS IN ACCORDANCE WITH MMCD AND AWWA STANDARDS IN THE PRESENCE OF ENGINEER OR REPRESENTATIVE. WATER SAMPLES FOR HEALTH TESTS TO BE COLLECTED AND PROCESSED BY CONTRACTOR.
  - NEUTRALIZE CHLORINE SOLUTIONS IN ACCORDANCE WITH MINISTRY OF THE ENVIRONMENT AND FISHERIES AND OCEANS PRIOR TO DISCHARGE TO ANY DRAINAGE COURSE.
  - CONNECTIONS TO EXISTING WATERMANS AND METERS TO BE BY CONTRACTOR UNDER THE SUPERVISION OF TOWN OPERATIONS STAFF. CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE FOR WORK BY TOWN OF LAKE COWICHAN FORCES.
  - EXISTING SERVICES MUST BE EXPOSED AT CROSSING AND TIE-IN POINTS PRIOR TO CONSTRUCTION FOR GRADE CHECK.
  - PIPES THAT ARE TO BE ABANDONED SHALL BE SAW-CUT A MINIMUM OF 15cm FROM EXISTING CONNECTION WITH ENDS CAPPED AND ENCASED IN CONCRETE. REMOVE/FILL ALL REDUNDANT CASTINGS ONCE TURN-OVER IS COMPLETE.
  - ALL RESIDENTS TO BE NOTIFIED IN WRITING A MINIMUM OF 48 HOURS PRIOR TO ANY SCHEDULED WATER SERVICE OR ACCESS DISRUPTIONS. MAXIMUM SHUTDOWN 4 HOURS.
  - THE CONTRACTOR IS TO MEET THE CONDITIONS EXPRESSED IN THE WATERMAIN CONSTRUCTION PERMIT NO. XXXXX ISSUED BY ISLAND HEALTH AUTHORITY TO THE OWNER AND SHALL NOT COMMENCE WATERMAIN CONSTRUCTION WITHOUT A COPY OF SAID PERMIT. ANY FIELD CHANGES OR DEVIATIONS ARE TO BE PRE-APPROVED BY THE ISLAND HEALTH PUBLIC HEALTH ENGINEER THROUGH THE CONTRACT ADMINISTRATOR.

- GEOTECHNICAL TESTING FOR SITE WORKS:**
- THE CONTRACTOR WILL BE REQUIRED TO RETAIN AND PAY FOR THE SERVICES OF A QUALIFIED INDEPENDENT GEOTECHNICAL TESTING AGENCY UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER, AND PAY THE COST OF TESTING SERVICES FOR QUALITY CONTROL INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
- SIEVE ANALYSIS OF SANDS AND AGGREGATES TO BE SUPPLIED, OR AS PROVIDED BY MATERIAL SUPPLIER
  - STANDARD PROCTOR DENSITY CURVES FOR BACKFILL MATERIALS
  - STANDARD PROCTOR DENSITY CURVES FOR APPROVED BORROW MATERIALS
  - REVIEW AND APPROVAL OF SUB-BASE AND SUBGRADE
  - COMPACTION CONTROL TESTS FOR BACKFILL AND EMBANKMENT MATERIAL TO BE TO A MINIMUM OF 98%MPD, INCLUDING THE FOLLOWING:
    - TRENCH BACKFILL - ONCE PER EVERY 25m OF TRENCH AT 0.5m VERTICAL LIFTS.
    - GRANULAR BASE ROAD, CURBS AND SIDEWALKS - ONCE PER 25 LINEAL METRES.
  - CONCRETE STRENGTH TESTS MINIMUM THREE SPECIMEN CYLINDERS IN ACCORDANCE WITH CSA A23.1) FOR THE FOLLOWING:
    - CONCRETE SIDEWALKS - ONCE PER 100sq.m (MIN. ONE PER DAY DURING CONCRETE PLACEMENT)
    - CURB AND GUTTER - ONCE PER 50 LINEAL METRES (MINIMUM ONE PER DAY DURING CONCRETE PLACEMENT)
    - CONCRETE DRIVEWAY CROSSINGS - ONE PER CROSSING
  - ASPHALT MIX DESIGNS AND TESTING INCLUDING THICKNESS AND COMPACTION
- THE CONTRACTOR IS TO COORDINATE DIRECTLY WITH THE GEOTECHNICAL ENGINEER AND PROVIDE ALL SUPPORTING DOCUMENTATION TO WSP FOR REVIEW AND ACCEPTANCE.

## KEY PLAN



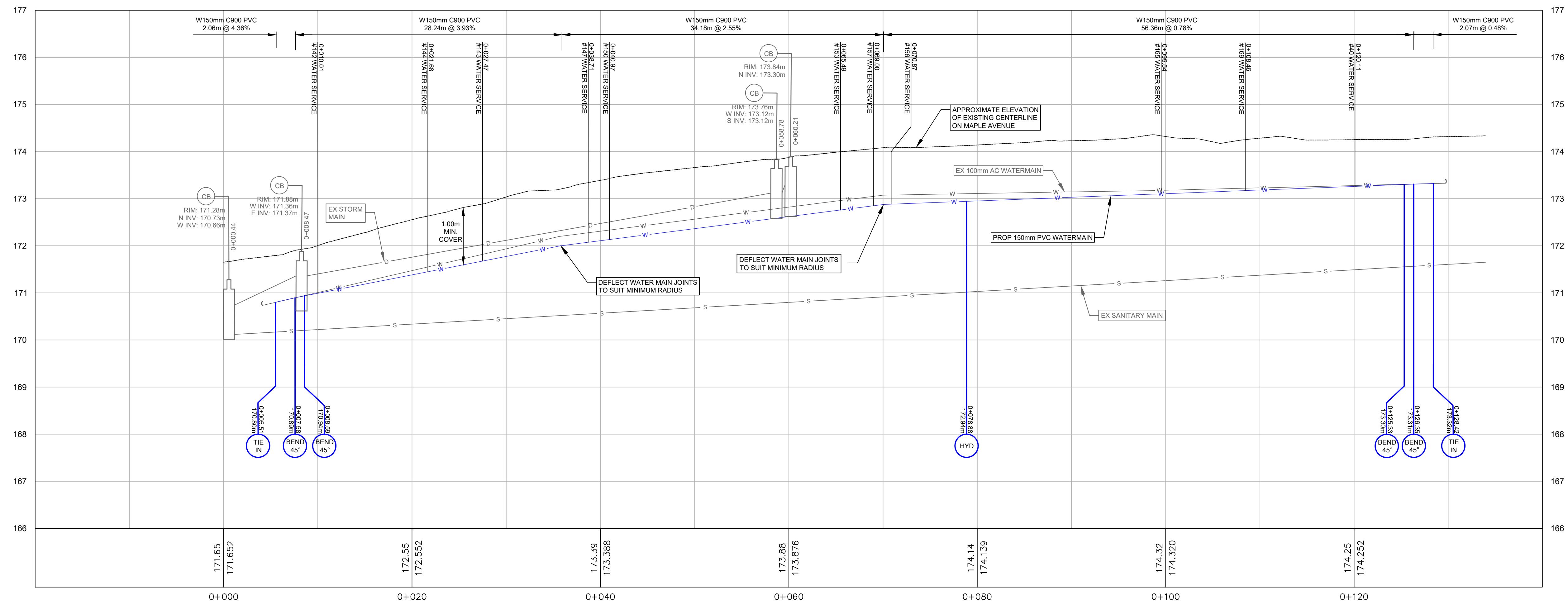
JUNE 30, 2026  
**ISSUED FOR TENDER**

DESIGNED BY: CW DRAWN BY: CW CHECKED BY: JS	APPROVED BY: DESIGN START DATE: CURRENT DATE:	SCALE H: SCALE V: SCALE	
REVISIONS			
REV#	DATE	DESCRIPTION	BY
1	26/06/20	ISSUED FOR TENDER	CW
0	25/08/20	ISSUED FOR APPROVAL	CW

**PACIFIC VISTA CONSULTING**  
Pacific Vista Consulting Ltd.  
3111 Woodpark Drive, Victoria, BC V9C 1P2  
Telephone: 250-516-4143

TOWN OF LAKE COWICHAN
MAPLE AVENUE WATERMAIN REPLACEMENT
COVER SHEET AND GENERAL NOTES

PACIFIC VISTA CONSULTING LTD.  
SEAL



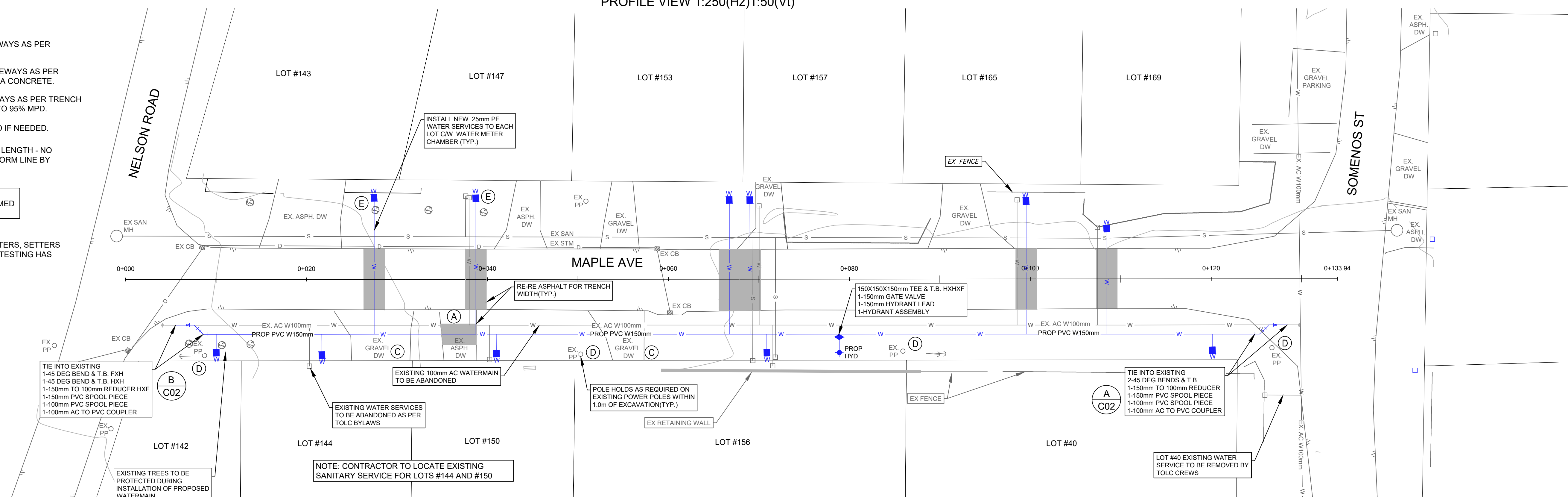
MAPLE AVENUE 0+000-0+133.94  
PROFILE VIEW 1:250(Hz)1:50(Vt)

**CONSTRUCTION NOTES:**

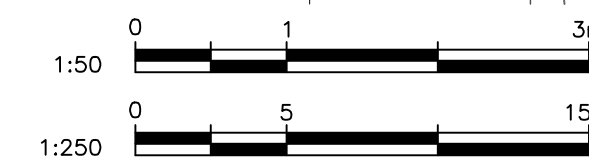
- (A) REINSTATE EXISTING ASPHALT DRIVEWAYS AS PER TRENCH DETAIL WITH 50mm ASPHALT.
- (B) REINSTATE EXISTING CONCRETE DRIVEWAYS AS PER TRENCH DETAIL WITH 150mm OF 32 MPA CONCRETE.
- (C) REINSTATE EXISTING GRAVEL DRIVEWAYS AS PER TRENCH DETAIL WITH 19mm CDC COMPACTED TO 95% MPD.
- (D) CONTRACTOR TO PROVIDE POLE HOLD IF NEEDED.
- (E) ENSURE WATER SERVICE IS ONE FULL LENGTH - NO COUPLERS PERMITTED AND CLEAR STORM LINE BY MIN. 150mm

NOTE: EXISTING WATER SERVICE LOCATIONS ARE APPROXIMATE AND SHOULD BE CONFIRMED IN THE FIELD DURING CONSTRUCTION

NOTE: CONTRACTOR TO SWITCH OVER EXISTING METERS, SETTERS AND BOXES ONTO NEW SERVICES AFTER ALL TESTING HAS BEEN COMPLETED



MAPLE AVENUE 0+000-0+133.94  
PLAN VIEW 1:250(Hz)



ISSUED FOR TENDER  
JUNE 30 2026

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND SERVICES ON THIS DRAWING MAY NOT BE ACCURATE OR COMPLETE. THE ACTUAL HORIZONTAL AND VERTICAL LOCATIONS MUST BE CONFIRMED BY UTILITY COMPANIES AND THE CONTRACTOR PRIOR TO THE START OF ANY EXCAVATION

REQUEST LOCATE TICKETS AT

**LEGEND - Proposed services shown in bold or colour**

WATER	SEWER MANHOLE	HYDRANT	ASPHALT	GAS	NON-METABLE CURB
SEWER	DRAIN MANHOLE	VALVE	CONCRETE	UNDERGROUND HYDROTEL/SHAW	MOUNTABLE CURB
DRAIN	SEWER CLEANDOUT	METER	GRAVEL	FLAT CURB	MC
DITCH/SWALE	DRAIN CLEANDOUT	REDUCER	BRICK	COBRADAVANT LIGHT	FC
CULVERT	MONUMENT	FLUSH	EDGE OF PAVEMENT	ORNAMENTAL STREETLIGHT	BC
HEADWALL	LOT PIN	TREE	LEAD PLUG	POWER POLE	IG
CATCHBASIN	LEAD PLUG	BUSHLINE		ANCHOR	

**REVISIONS**

No.	DESCRIPTION	DATE
1	ISSUED FOR TENDER	26/06/30
0	ISSUED FOR APPROVAL	25/08/20

SEAL

**PACIFIC VISTA CONSULTING**

Pacific Vista Consulting Ltd.  
3111 Woodpark Drive, Victoria, BC V9C 1P2  
Telephone: 250-516-4143

**DESIGNER**

ENGINEER	JJS
DATE	JUNE 30, 2026
B.M.	
ELEV.	
SCALE	H V

**PROJECT** TOWN OF LAKE COWICHAN  
MAPLE AV.

**TITLE:** WATERMAIN EXTENSION

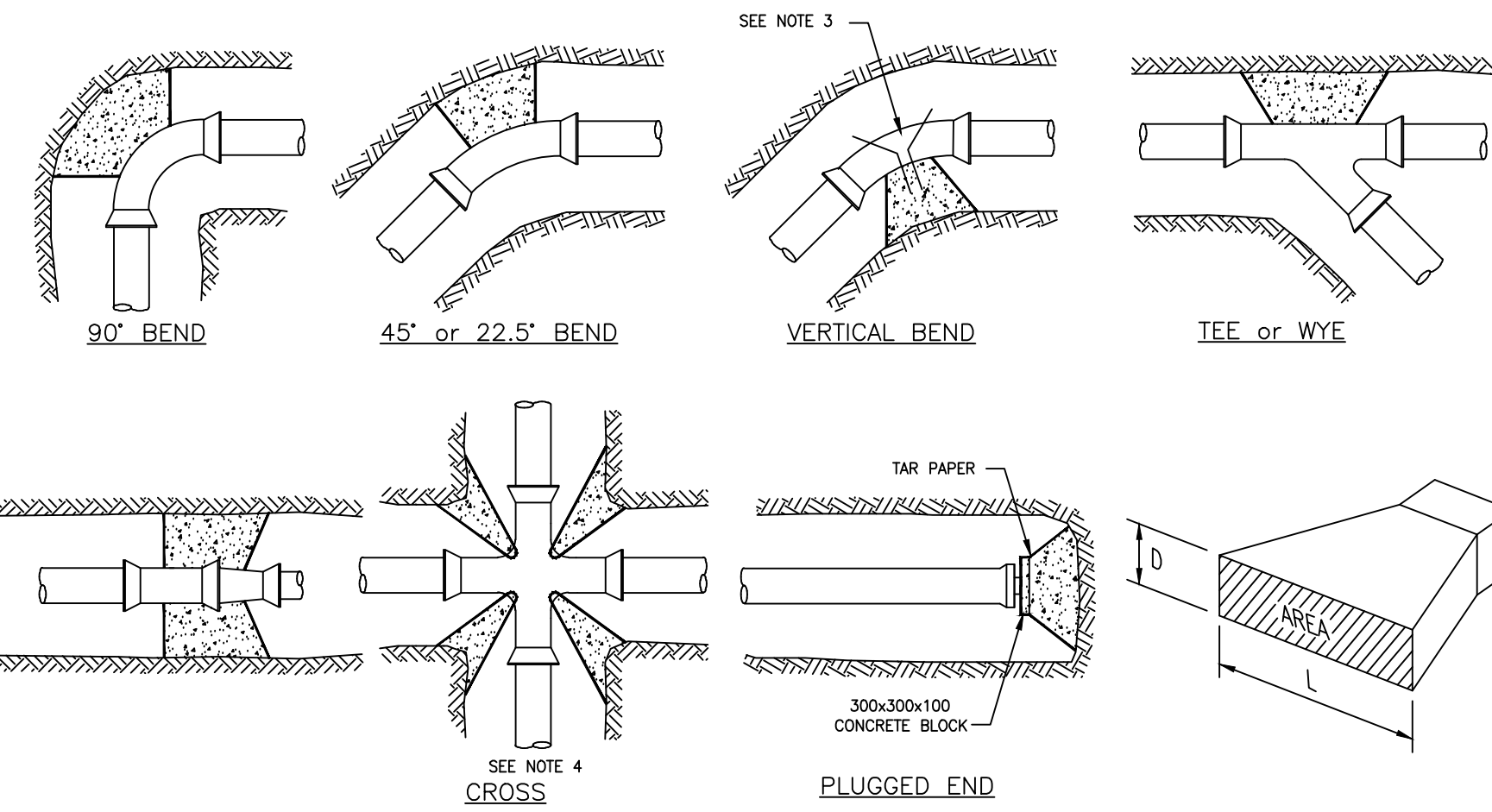
**PVC PROJECT NUMBER** 26-210

**GOVERNING AUTHORITY FILE No.** TOWN OF LAKE COWICHAN

**SHEET** 1 OF 2

**DRAWING No.** C-01

**REV.** 1

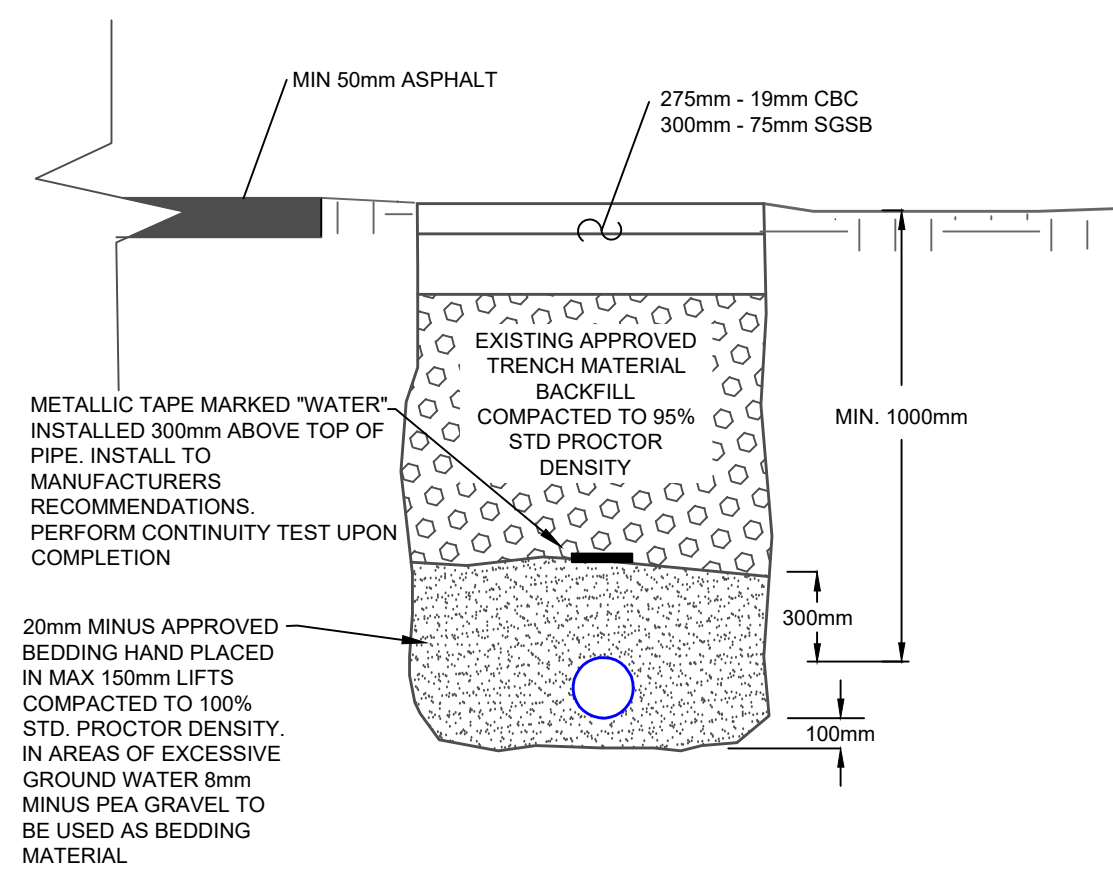


MINIMUM THRUST AREA BASED ON WATER PRESSURE OF - 1000KPa (150psi) AND SOIL BEARING CAPACITY OF - 100KPa (2000psf)

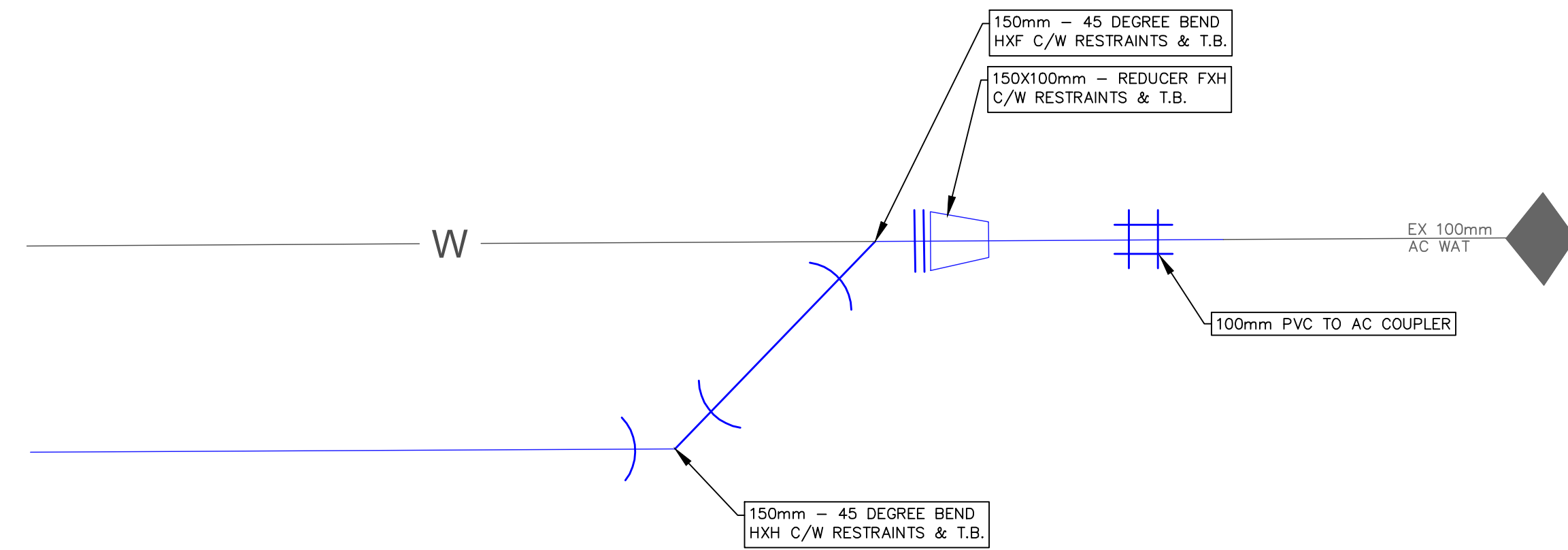
FITTING	PIPE SIZE	AREA SQ. METERS	L x D AT FACE
90° SIZE	100	0.2	0.7 x 0.3m
	150	0.4	1.0 x 0.4m
	200	0.7	1.2 x 0.6m
	250	1.1	2.0 x 0.6m
	300	1.6	2.0 x 0.8m
45° SIZE	100	0.2	0.7 x 0.3m
	150	0.3	1.0 x 0.3m
	200	0.4	1.0 x 0.4m
	250	0.6	1.0 x 0.6m
	300	0.9	1.5 x 0.6m
22.5° SIZE	100	0.1	0.5 x 0.2m
	150	0.2	0.7 x 0.3m
	200	0.2	0.7 x 0.3m
	250	0.3	0.8 x 0.4m
	300	0.5	1.0 x 0.5m
CAPPED END OR TEE	100	0.2	0.7 x 0.3m
	150	0.3	0.8 x 0.4m
	200	0.5	1.0 x 0.5m
	250	0.8	1.2 x 0.7m
	300	1.1	1.4 x 0.8m

- NOTES:
- SOIL BEARING CAPACITY USED IS THAT FOR SOFT CLAY. FOR SOFTER SOILS THRUST BLOCKS SHALL BE DESIGNED BY THE ENGINEER.
  - THRUST BLOCKING FOR FITTINGS LARGER THAN 3000 SHALL BE DESIGNED BY THE ENGINEER.
  - VOLUME OF CONCRETE IN VERTICAL BEND ANCHORS TO BE DETERMINED BY THE ENGINEER. USE 2-20M RETAINING BARS PER CUBIC METER.
  - FOR CROSSES USE VALUE FOR 45° BEND IN EACH QUADRANT.
  - WHERE PIPE SIZE DIFFERS IN ANY ONE FITTING USE VALUE FOR LARGER SIZE.
  - CONCRETE NOT TO ENCRoACH ON PIPE BARREL, BUT TO BEAR ON FITTING ONLY.
  - CONCRETE TO BE 20MPa (3000psi) COMPRESSIVE STRENGTH.

DETAIL 1 TYPICAL THRUST BLOCK SCALE: NTS

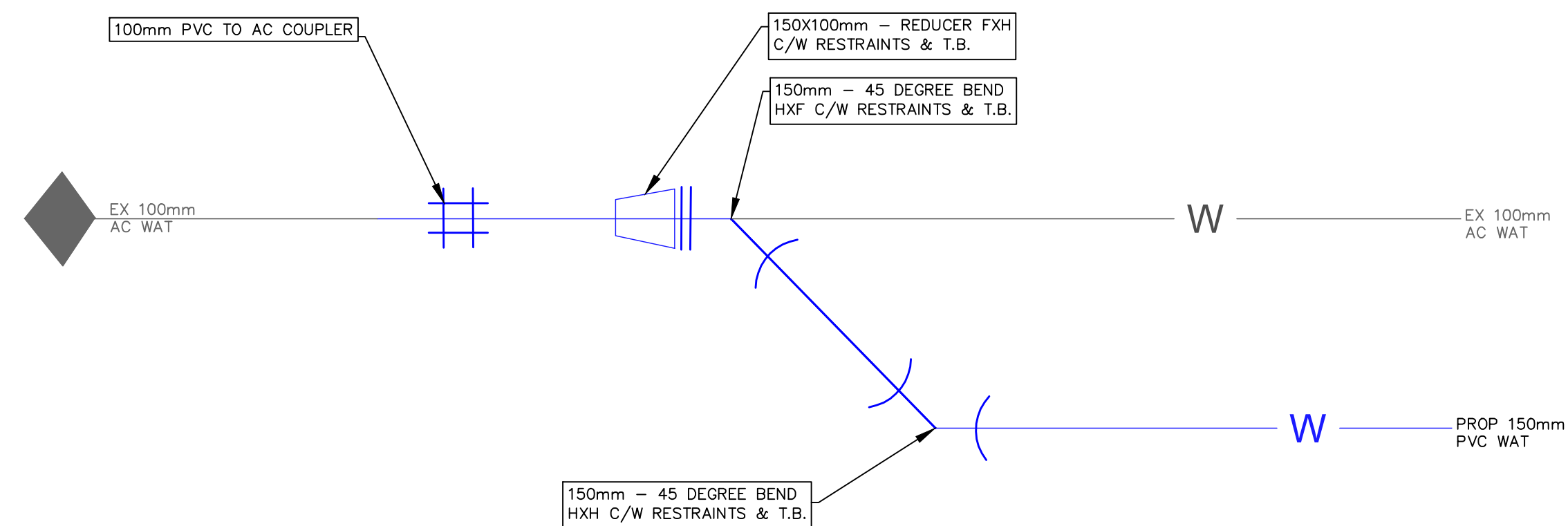


DETAIL 2 TYPICAL WATERMAIN TRENCH SCALE: NTS



NOTE:  
TIE-IN TO BE COMPLETED UNDER THE SUPERVISION OF T.O.L.C. CREWS AFTER SUCCESSFUL PRESSURE & HEALTH TESTS.

DETAIL A MAPLE AVENUE NE WATER TIE-IN SCALE: 1:50



TIE INTO EXISTING PARTS LIST:  
1-45 DEG BEND & T.B. HXF  
1-45 DEG BEND & T.B. HXH  
1-150mm TO 100mm REDUCER HXF  
1-150mm PVC SPOOL PIECE  
1-100mm PVC SPOOL PIECE  
1-100mm AC TO PVC COUPLER

NOTE:  
TIE-IN TO BE COMPLETED UNDER THE SUPERVISION OF T.O.L.C. CREWS AFTER SUCCESSFUL PRESSURE & HEALTH TESTS.

DETAIL B MAPLE AVENUE SW WATER TIE-IN SCALE: 1:50

ISSUED FOR TENDER

JUNE 30 2026

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND SERVICES ON THIS DRAWING MAY NOT BE ACCURATE OR COMPLETE. THE ACTUAL HORIZONTAL AND VERTICAL LOCATIONS MUST BE CONFIRMED BY UTILITY COMPANIES AND THE CONTRACTOR PRIOR TO THE START OF ANY EXCAVATION

REQUEST LOCATE TICKETS AT



LEGEND - Proposed services shown in bold or colour

WATER	SEWER MANHOLE	HYDRANT	ASPHALT	GAS	NON-METAL CURB	NMC
SEWER	DRAIN MANHOLE	VALVE	CONCRETE	UNDERGROUND HYDROTEL/SHAW	MOUNTABLE CURB	MC
DRAIN	SEWER CLEANOUT	METER	GRAVEL	COBRADWIT LIGHT	FLAT CURB	FC
DITCH/SWALE	DRAIN CLEANOUT	REDUCER	BRICK	ORNAMENTAL STREETLIGHT	BARRIER CURB	BC
CULVERT	MONUMENT	FLUSH	EDGE OF PAVEMENT	INVERT GLITTER	INVERT GLITTER	IG
HEADWALL	LOT PIN	TREE	ROAD SIGN	POWER POLE	ANCHOR	
CATCHBASIN	LEAD PLUG	RUSHLINE				

REVISIONS

SEAL

No.	DESCRIPTION	DATE
1	ISSUED FOR TENDER	26/06/30
0	ISSUED FOR APPROVAL	25/08/20

**PACIFIC VISTA CONSULTING**  
Pacific Vista Consulting Ltd.  
3111 Woodpark Drive, Victoria, BC V9C 1P2  
Telephone: 250-516-4143

DESIGNER: J.S.  
ENGINEER: J.S.  
DATE: JUNE 30, 2026  
B.M.:  
ELEV.:  
SCALE: H V

PROJECT: TOWN OF LAKE COWICHAN  
MAPLE AV.  
TITLE: WATERMAIN EXTENSION

PVC PROJECT NUMBER: 26-210  
GOVERNING AUTHORITY FILE No.: TOWN OF LAKE COWICHAN  
SHEET: 2 OF 2  
DRAWING No.: C-01  
REV.: 1