



City of Coquitlam

Request for Proposals

RFP No. 16-04-04

Water Meters, Registers and Parts

Issue Date: May 11, 2016

**City of Coquitlam
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PROPOSAL SUBMISSION FORM

DEFINITIONS

“Contract” means the contract for services or City Purchase Order that will be issued to formalize with the successful Proponent through negotiation process with the City based on the proposal submitted and will incorporate by reference the Request for Proposals and any additional subsequent information, any addenda issued, the Proponent’s response and acceptance by the City.

“City” means City of Coquitlam

“Proponent” means responder to this Request for Proposals.

“Proposal” means the submission by the Proponent.

“RFP” “Request for Proposals” shall mean and include the complete set of documents, specifications, drawings and addenda incorporated herein, and included in this Request for Proposals.

“Services” means and includes the provision by the successful Proponent of all services, duties and expectations as further described in this RFP.

“Supplier” means the person(s) firm(s) or corporation(s) appointed by the City to supply the materials and services described in the Request for Proposal and all associated documentation, which may also include mutually agreed revisions subsequent to submission of a Proposal. Both “Supplier” and “Proponent” are complementary in terms of duties, obligations and responsibilities contemplated at the Request for Proposals stage, through evaluation process, execution and performance of the services.

“Supply” “Provide” shall mean supply and pay for and provide and pay for.

“Shall” “Must” “Will” “Mandatory” means a requirement that must be met.

1. INSTRUCTIONS TO PROPONENTS

1.1. Description of Services

The City of Coquitlam (“City”) requests Proposals from qualified, experienced Proponents for the supply of **Water Meters, Registers and Parts** on an as and when requested basis for the City of Coquitlam. Deliveries of the goods will be to the City’s Works Yard.

Proponents are asked to provide as much information as possible when responding to this RFP and the Proponent should identify any specific requirements with which they are unwilling or unable to comply with.

Also refer to:

- Appendix A – Product Information and Price Worksheet
- Appendix B – Water Meter Specifications

1.2. Obtaining Documents

RFP Documents are available for downloading from the City of Coquitlam website:
www.coquitlam.ca/BidOpportunities

1.3. Term of Contract

The term of the contract will be for one (1) year effective July 1, 2016 to June 30, 2017.

Upon mutual agreement of price and terms, the contract may be extended for up to four (4) additional one (1) year terms.

1.4. Closing Date & Time

Proposals will be received by the City of Coquitlam on or before 2:00 pm local time:

Thursday, May 26, 2016

1.5. Instructions for Proposal Submission

Proposal submissions are to be consolidated into one (1) .pdf file and uploaded electronically through Qfile, the City's file transfer service accessed at website: qfile.coquitlam.ca/bid

1. In the "Subject" field enter: RFP Number and Name
2. Add files in .pdf format and Send
(Ensure your web browser remains open until you receive 2 emails from Qfile to confirm upload is complete.)

Proposals submitted shall be deemed to be successfully received when displayed as new email in the in-box of the City email address. The City will not be liable for any delay for any reason including technological delays, or issues by either party's network or email program, and the City will not be liable for any damages associated with Proposals not received.

The City reserves the right to accept Proposals received after the closing date and time but is under no obligation to evaluate.

Proposals will not be opened in public.

Proposals may be withdrawn upon request by an authorized representative of the company sent to email: bid@coquitlam.ca prior to time set as closing time for receiving Proposals.

1.6. Inquiries

All inquiries are to be directed in writing by email quoting the RFP name and number to: bid@coquitlam.ca

Questions are to be submitted in writing 3 business days prior to the closing date.

The City shall determine, at its sole discretion, whether the query requires response, and such responses will be made available to all Proponents by issue of Addenda posted on the City's website that will be incorporated into and become part of the RFP.

No oral conversation will affect or modify the terms of this RFP or may be relied upon by the Proponent.

1.7. Addenda

Proponents are required to check the City's website for any updated information and Addenda issued before the Closing Date at the following website address:

www.coquitlam.ca/BidOpportunities

If a change, or additional information related to the original version of the Request for Proposals is warranted, the City's response will be communicated to all Proponents by means of written Addenda prior to the closing date and posted on the City's website. Upon submitting a Proposal, Proponents are deemed to have received all Addenda posted on the City website and deemed to have considered the information for inclusion in the Proposal submitted.

Should there be any discrepancy in the documentation provided, the City's original file copy shall prevail.

1.8. General Information

Wherever possible, the City wishes to purchase goods and services which represent minimal impact to the environment, or that offer value to a sustainability objective.

The City reserves the right to cancel any order or contract if not fulfilled within a reasonable time and in accordance with the terms and conditions specified at their sole discretion. Time shall be of the essence.

The City will not assume any responsibility or liability for any costs incurred by the Proponent in the preparation of a Proposal.

1.9. Brand Names

References to brand names, make, names of manufacturer, trade name, or vendor catalogue number are for the purpose of establishing a grade or quality of material only. It is not intended to rule out competition from equal brands or makes. All proposed products, brand names, part numbers, and specifications met are to be provided on **Appendix A**. The City's Water Meter Specifications are provided in **Appendix B** as reference.

1.10. Privacy

Proponents are advised that submissions are subject to the Freedom of Information and Protection of Privacy Act and contents may be disclosed if required to do so pursuant to the Act.

1.11. Prices

All Prices shall be all-inclusive stated in (Canadian Funds) and shall remain **FIRM** for the initial one (1) year term.

1.12. Evaluation Criteria

The criteria for evaluation of the Proposals may include, but is not limited to:

Corporate Experience and Resources

- Ability to provide all products as specified in Appendix A
- Demonstrated successful performance providing similar products and services
- References

Technical

- Delivery Lead times

Financial

- Pricing
- Restocking Fees
- Minimum Order Quantities
- Sustainable Value
- Value added

And, upon selection of one or more lead proponent(s):

- Interviews may be conducted
- references may be contacted

Reference checks will be confidential and will not be reviewed or discussed with Proponents.

1.13. Selection Process

The City's evaluation team will review proposals and rank them based on the evaluation criteria outlined above. The City reserves the right to consider other criteria that may become evident during the evaluation process to obtain best value. The City may at its discretion interview one or more Proponents or request clarifications or additional information from any Proponent and may use that information as part of the evaluation.

Proponents agree that upon submission of their proposal, the City may disclose the name of their company. However, no prices, scores, weights or totals will be provided to any Proponents.

Should there be additional similar services required the City reserve the right to sole source with the successful Proponent.

1.14. Negotiation

The City reserves the right, prior to contract award, to negotiate changes to the scope of the services or to the contract documents (including pricing to meet budget) with the proponent or any one or more proponents, proposing the “best value” without having any duty to advise any other proponent or to allow them to vary their proposal as a result of changes to the scope of the services or to the contract documents; and the City may enter into a changed or different contract with the proponent(s) proposing the “best value”, without liability to proponents who are not awarded the contract.

1.15. Irrevocability and Acceptance of Proposals

The City requests that Proposals remain open for acceptance for a period of not less than sixty (60) days from the closing date and time.

The City reserves the right to waive formalities in, accept or reject any or all Proposals, cancel this RFP, or accept the Proposal deemed most favourable in the interest of the City.

The City reserves the right to accept or reject any or all Proposals. The lowest Proposal may not necessarily be accepted, rather will be analyzed to determine best overall value to the City.

The City reserves the right to cancel this RFP at any time without recourse by the Proponent.

No alterations, amendments or additional information will be accepted after the closing date and time unless invited by the City.

Should a Proposal be accepted, a purchase order will be provided on an as and when requested basis.

1.16. No Claim

Except as expressly and specifically permitted in these Instructions to Proponents, no Proponent shall have any claim for any compensation of any kind whatsoever, relating to this RFP, including accepting a non-compliant bid, and by submitting a Proposal, each Proponent shall be deemed to have agreed that it has no claim.

1.17. No Contract

No contractual, tort, or other legal obligations are created or imposed on the City, or any other individual, officer or employee of the City with respect to the RFP documentation or by submission or consideration by the City of any Proposal.

1.18. Conflict of Interest

Proponents shall disclose any actual or potential conflicts of interest and existing business relationships it may have with the City, its elected or appointed officials or employees.

1.19. Non-Solicitation

Proponents and their agents will not contact any member of the City Council with respect to this RFP at any time prior to the award of a Contract or the termination of the RFP, and the City may reject the Proposal of any Proponent that makes any such contact.

1.20. Liability for Errors

While the City has used considerable effort to ensure an accurate representation of information in this RFP, the information contained is supplied solely as a guideline for Proponents. The information is not guaranteed or warranted to be accurate by the City, nor is it necessarily comprehensive or exhaustive. Nothing in this RFP is intended to relieve the Proponents from forming their own opinions and conclusions with respect to the work in this RFP.

1.21. Proposal Submission

Proponents should complete and submit the information requested in this section of the RFP document on this Proposal Submission Form or in a format that has been approved and is acceptable to the City.

1.22. Examination of Proposal Documents

The Proponent must carefully examine the Proposal Documents. The Proponent may not claim, after the submission of a Proposal, that there was any misunderstanding with respect to the requirements and conditions imposed by the City of Coquitlam.

There will be no opportunity to make any additional claim for compensation or invoice for additional charges that were not considered and included in the Proposal price submitted, unless the City, at its sole discretion, deems that it would be unreasonable to do so, or there are additional requirements due to unforeseen circumstances.

All information in this RFP Document, General Conditions, Specifications, and Appendices, and any resulting Addenda will be incorporated into any Contract between the City and the successful Proponent, and therefore must be considered by the Proponent in preparing their Proposal.

1.23. Award

While it is the City's intention to award a contract to a single supplier, the City may award all, some or none of the goods described in this document to a single Supplier or may split award to more than one supplier.

2. GENERAL CONDITIONS OF CONTRACT

2.1 Notification of Award

The City will notify the successful Proponent (“Supplier”) in writing of its decision to award the contract.

The following general conditions will apply to this Contract. Proponents are to include with their proposal submission a full description of any deviations if they are unable to comply with any of these general conditions.

2.2 Indemnity

The Supplier shall indemnify and save harmless the City from and against all losses and all claims, demands, payments, suits, actions, recoveries, and judgements of every nature and description brought or recovered against him and/or the City, by reason of any act or omission of the Supplier, its agents, Sub-Suppliers or employees in the execution of the work.

2.3 Equipment, Materials and Workmanship

All equipment, materials and labour utilized and all workmanship shall comply with all current codes, standards, regulations, specifications and statutes pertaining to the services including, but not exclusively:

- a) Canadian Standards Association (CSA)
- b) Master Municipal Construction Documents (MMCD)
- c) American Water Works Association (AWWA)
- d) American Society for Testing & Materials (ASTM)
- e) BC Provincial Motor Vehicle Act

All necessary federal, provincial and local permits required for safe completion of the work shall be obtained and kept available at the work site for inspection.

2.4 Inspection of Goods

- a) All Goods shall be subject to inspection and test by, and shall meet the approval of the City. In case any Goods are not in conformity with the Specifications, the City shall have the right to reject them or to require correction. Goods not accepted will be returned to the Supplier at the Supplier’s expense.
- b) Acceptance or rejection of the Goods shall be made as promptly as practical, but failure to inspect and accept or reject the Goods shall not relieve the Supplier from responsibility for such Goods that do not meet the Specifications.

2.5 Default

The City reserves the right, at its sole discretion, to immediately terminate the contract, in whole or in part, and utilize the services of any other Supplier, if the successful Supplier:

- Fails to make delivery of the goods
- Fails to meet the City's standard of expected and agreed level of service and performance
- Be adjudged bankrupt or makes general assignment for the benefit of creditors

2.6 Cancellation

The contract may be cancelled by the City for any reason without cause or penalty upon 30 days written notice.

The Supplier would be compensated for all materials provided up to the date of notification.

2.7 Dispute Resolution

The parties will make reasonable efforts to resolve any dispute, claim or controversy arising out of this contract using the following dispute resolution procedures:

- a) Negotiation – the parties will make reasonable efforts to resolve any dispute by amicable negotiations and will provide frank, candid and timely disclosure of all relevant facts, information and documents to facilitate negotiations.
- b) Mediation – If all or any of a Dispute cannot be resolved by good faith negotiations within 30 days, either party may refer the matter to mediation. Within 10 days of delivery of notice, the parties will mutually appoint a mediator. If the parties fail to agree on the appointment of the mediator, then either party may apply to the BC International Commercial Arbitration Centre for appointment of a mediator. The parties will continue to negotiate in good faith to resolve the Dispute with the assistance of the mediator. The place of mediation will be Coquitlam, British Columbia. Each party will bear its own costs of participating in the mediation.
- c) Litigation – If within 90 days of the request of the mediation, the Dispute is not settled, or if the mediator advises that there is no reasonable possibility of the parties reaching a negotiated resolution, then either party may without further notice, commence litigation. The location of litigation will be Vancouver, British Columbia.

2.8 Confidentiality

The Supplier agrees that proprietary City information obtained in providing the services will be treated as confidential and not disclosed.

2.9 Advertisement

The Supplier shall not advertise its relationship with the City without prior written consent from the City.

2.10 Subletting

The Supplier will not, without the written consent of the City of Coquitlam, assign, and sublet or transfer any subsequent contract or any part thereof.

2.11 Law

The RFP and any resultant award shall be governed by and construed in accordance with the laws of the Province of British Columbia.

2.12 Non-exclusivity

The intent of the City is to have one supplier for all of the products (Water Meters, Registers, and Parts), but the acceptance of any proposal, and upon award, does not entitle any Supplier to exclusive rights for the supply of goods.

2.13 Payments – Invoicing

- a) Each invoice shall be submitted in .pdf format sent to email:
apinvoices@coquitlam.ca

All invoices shall include the Purchase Order number as provided by the City.

- b) The Supplier shall be paid net 30 days or best effort from receipt of invoice and acceptance of the goods, whichever is the later, unless alternate payment terms have been agreed to between the Supplier and the City.

- c) Invoices shall show the appropriate amounts for value added taxes.

City of Coquitlam
RFP NO. 16-04-04

Appendix A - Product Information and Price Worksheet

Quantities provided are based on annual historical and forecasted usage and are not a commitment by the City. Actual Quantities may vary based on future needs.

Complete and submit with the Proposal Submission Form

Vendor:

Meter Product list

| Line # | Coquitlam Item # | Description | Current Product Information and Usage | | | Proposed Products | | |
|--------|------------------|--|--|-----------------------------|------|-------------------|----------------------|------------------------|
| | | | Manufacturer | Estimated Annual Quantities | Unit | Manufacturer | Supplier Part Number | Price Quote (per Unit) |
| 1 | 5955 | METER - NEPTUNE HP R900i 3" (75MM) M3 | Neptune Technology Group (Canada Ltd.) | 25 | EA | | | |
| 2 | 5956 | METER - NEPTUNE HP R900i 4" (100MM) M3 | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 3 | 5957 | METER - NEPTUNE HP R900i 6" (150MM) M3 | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 4 | 5906 | METER - NEPTUNE R900i T10 5/8" (16MM) M3 | Neptune Technology Group (Canada Ltd.) | 5 | EA | | | |
| 5 | 5907 | METER - NEPTUNE R900i T10 3/4" (19MM) M3 | Neptune Technology Group (Canada Ltd.) | 4 | EA | | | |
| 6 | 5908 | METER - NEPTUNE R900i T10 1" (25MM) M3 | Neptune Technology Group (Canada Ltd.) | 1 | EA | | | |
| 7 | 5909 | METER - NEPTUNE R900i T10 1 1/2" (38MM) M3 | Neptune Technology Group (Canada Ltd.) | 14 | EA | | | |
| 8 | 5910 | METER - NEPTUNE R900i T10 2" (50MM) M3 | Neptune Technology Group (Canada Ltd.) | 32 | EA | | | |
| 9 | 5958 | METER - NEPTUNE TRU/FLO 3" (75MM) M3 | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 10 | 5959 | METER - NEPTUNE TRU/FLO 4" (100MM) M3 | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 11 | 5960 | METER - NEPTUNE TRU/FLO 6" (150MM) M3 | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 12 | 5975 | METER - SENSUS C2 2" (50MM) M3 | Sensus | 0 | EA | | | |
| 13 | 5976 | METER - SENSUS C2 3" (75MM) M3 | Sensus | 7 | EA | | | |
| 14 | 5977 | METER - SENSUS C2 4" (100MM) M3 | Sensus | 0 | EA | | | |
| 15 | 5978 | METER - SENSUS C2 6" (150MM) M3 | Sensus | 1 | EA | | | |
| 16 | 5979 | METER - SENSUS R2 3" (75MM) M3 | Sensus | 0 | EA | | | |
| 17 | 5980 | METER - SENSUS R2 4" (100MM) M3 | Sensus | 0 | EA | | | |
| 18 | 5981 | METER - SENSUS R2 6" (150MM) M3 | Sensus | 0 | EA | | | |
| 19 | 5970 | METER - SENSUS SRII 5/8" (16MM) M3 | Sensus | 0 | EA | | | |
| 20 | 5971 | METER - SENSUS SRII 3/4" (19MM) M3 | Sensus | 0 | EA | | | |
| 21 | 5972 | METER - SENSUS SRII 1" (25MM) M3 | Sensus | 0 | EA | | | |
| 22 | 5973 | METER - SENSUS SRII 1 1/2" (38MM) M3 | Sensus | 0 | EA | | | |
| 23 | 5974 | METER - SENSUS SRII 2" (50MM) M3 | Sensus | 0 | EA | | | |
| 24 | 5982 | METER - SENSUS T2 3" (75MM) M3 | Sensus | 0 | EA | | | |
| 25 | 5983 | METER - SENSUS T2 4" (100MM) M3 | Sensus | 0 | EA | | | |
| 26 | 5984 | METER - SENSUS T2 6" (150MM) M3 | Sensus | 0 | EA | | | |

City of Coquitlam RFP 16-04-04 - Appendix A - Product Information and Price Worksheet

| Register Product List | | | Current Product Information and Usage | | | Proposed Products | | |
|-----------------------|------------------|--|---|-----------------------------|------|-------------------|----------------------|------------------------|
| Line # | Coquitlam Item # | Description | Manufacturer | Estimated Annual Quantities | Unit | Manufacturer | Supplier Part Number | Price Quote (per Unit) |
| 1 | 5964 | REGISTER - NEPTUNE R900i (INSIDE) 5/8" (16MM) M3 | Neptune Technology Group (Canada Ltd.) | 1 | EA | | | |
| 2 | 5965 | REGISTER - NEPTUNE R900i (INSIDE) 3/4" (19MM) M3 | Neptune Technology Group (Canada Ltd.) | 1 | EA | | | |
| 3 | 5966 | REGISTER - NEPTUNE R900i (INSIDE) 1" (25MM) M3 | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 4 | 5934 | REGISTER - NEPTUNE R900i (INSIDE) 1 1/2" (38 MM) M3 | Neptune Technology Group (Canada Ltd.) | 6 | EA | | | |
| 5 | 5935 | REGISTER - NEPTUNE R900i (INSIDE) 2" (50MM) M3 | Neptune Technology Group (Canada Ltd.) | 8 | EA | | | |
| 6 | 5967 | REGISTER - NEPTUNE R900i (INSIDE) 3" (75MM) M3 | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 7 | 5968 | REGISTER - NEPTUNE R900i (INSIDE) 4" (100MM) M3 | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 8 | 5969 | REGISTER - NEPTUNE R900i (INSIDE) 6" (150MM) M3 | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 9 | 6003 | REGISTER - NEPTUNE R900i (OUTSIDE) 5/8" (16MM) M3 | Neptune Technology Group (Canada Ltd.) | 4 | EA | | | |
| 10 | 6004 | REGISTER - NEPTUNE R900i (OUTSIDE) 3/4" (19MM) M3 | Neptune Technology Group (Canada Ltd.) | 3 | EA | | | |
| 11 | 6005 | REGISTER - NEPTUNE R900i (OUTSIDE) 1" (25MM) M3 | Neptune Technology Group (Canada Ltd.) | 1 | EA | | | |
| 12 | 6006 | REGISTER - NEPTUNE R900i (OUTSIDE) 1 1/2" (38 MM) M3 | Neptune Technology Group (Canada Ltd.) | 8 | EA | | | |
| 13 | 6007 | REGISTER - NEPTUNE R900i (OUTSIDE) 2" (50MM) M3 | Neptune Technology Group (Canada Ltd.) | 24 | EA | | | |
| 14 | 6008 | REGISTER - NEPTUNE R900i (OUTSIDE) 3" (75MM) M3 | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 15 | 6009 | REGISTER - NEPTUNE R900i (OUTSIDE) 4" (100MM) M3 | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 16 | 6010 | REGISTER - NEPTUNE R900i (OUTSIDE) 6" (150MM) M3 | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 17 | 5936 | REGISTER - NEPTUNE UNNETWORKED R900i M3 2" (50MM) T.T. | Neptune Technology Group (Canada) Ltd. | 0 | EA | | | |
| 18 | 5937 | REGISTER - NEPTUNE UNNETWORKED R900i M3 3" (75MM) T.T. | Neptune Technology Group (Canada) Ltd. | 1 | EA | | | |
| 19 | 5938 | REGISTER - NEPTUNE UNNETWORKED R900i M3 4" (100MM)T.T. | Neptune Technology Group (Canada) Ltd. | 0 | EA | | | |
| 20 | 5986 | REGISTER - SENSUS ECR 5/8" (16MM) | Sensus | 0 | EA | | | |
| 21 | 5987 | REGISTER - SENSUS ECR 3/4" (19MM) | Sensus | 0 | EA | | | |
| 22 | 5988 | REGISTER - SENSUS ECR 1" (25MM) | Sensus | 0 | EA | | | |
| 23 | 5989 | REGISTER - SENSUS ECR 1 1/2" (38MM) | Sensus | 0 | EA | | | |
| 24 | 5990 | REGISTER - SENSUS ECR 2" (50MM) | Sensus | 0 | EA | | | |
| 25 | 5991 | REGISTER - SENSUS ECR 3" (75MM) | Sensus | 5 | EA | | | |
| 26 | 5992 | REGISTER - SENSUS ECR 4" (100MM) | Sensus | 0 | EA | | | |
| 27 | 5993 | REGISTER - SENSUS ECR 6" (150MM) | Sensus | 0 | EA | | | |
| 28 | 5994 | REGISTER - SENSUS WP (WATERPROOF) 5/8" (16MM) | Sensus | 0 | EA | | | |
| 29 | 5995 | REGISTER - SENSUS WP (WATERPROOF) 3/4" (19MM) | Sensus | 0 | EA | | | |
| 30 | 5996 | REGISTER - SENSUS WP (WATERPROOF) 1" (25MM) | Sensus | 0 | EA | | | |
| 31 | 5997 | REGISTER - SENSUS WP (WATERPROOF) 1 1/2" (38MM) | Sensus | 0 | EA | | | |
| 32 | 5998 | REGISTER - SENSUS WP (WATERPROOF) 2" (50MM) | Sensus | 0 | EA | | | |
| 33 | 5999 | REGISTER - SENSUS WP (WATERPROOF) 3" (75MM) | Sensus | 2 | EA | | | |
| 34 | 6000 | REGISTER - SENSUS WP (WATERPROOF) 4" (100MM) | Sensus | 0 | EA | | | |
| 35 | 6001 | REGISTER - SENSUS WP (WATERPROOF) 6" (150MM) | Sensus | 1 | EA | | | |

City of Coquitlam RFP 16-04-04 - Appendix A - Product Information and Price Worksheet

| Parts Product List | | | Current Product Information and Usage | | | Proposed Products | | |
|--------------------|------------------|---|---|-----------------------------|------|-------------------|----------------------|------------------------|
| Line # | Coquitlam Item # | Description | Manufacturer | Estimated Annual Quantities | Unit | Manufacturer | Supplier Part Number | Price Quote (per Unit) |
| 1 | 1472 | CHAMBER - MEASURING NEPTUNE T10 X2" (50MM) | Neptune Technology Group (Canada) Ltd. | 0 | EA | | | |
| 2 | 4055 | GASKET - HP TRU FLO NEPTUNE MAIN CASE 2" (50MM) | Neptune Technology Group (Canada) Ltd. | 0 | EA | | | |
| 3 | 4152 | GASKET - STRAINER NEPTUNE 3" (75MM) | Neptune Technology Group (Canada) Ltd. | 2 | EA | | | |
| 4 | 4153 | GASKET - STRAINER NEPTUNE 4" (100MM) | Neptune Technology Group (Canada) Ltd. | 0 | EA | | | |
| 5 | 4154 | GASKET - STRAINER NEPTUNE 6" (150MM) | Neptune Technology Group (Canada) Ltd. | 0 | EA | | | |
| 6 | 4057 | GASKET - TRU FLO MAIN CASE 4" (100MM) | Neptune Technology Group (Canada) Ltd. | 1 | EA | | | |
| 7 | 4056 | GASKET - TRU FLO NEPTUNE MAIN CASE 3" (75MM) | Neptune Technology Group (Canada) Ltd. | 2 | EA | | | |
| 8 | 1755 | PAD - PIT RECEPTACLES SMOOTH TYPE C/W 25 FT WIRE | Neptune Technology Group (Canada) Ltd. | 2 | EA | | | |
| 9 | 5985 | BOX- RF MIU R900 V4 - (3 WIRE PITT VERSION WITH PITT LID ANTENNA) | Neptune Technology Group (Canada Ltd.) | 8 | EA | | | |
| 10 | 5961 | MEASURING CHAMBER - NEPTUNE 3" (75MM) | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 11 | 5962 | MEASURING CHAMBER - NEPTUNE 4" (100MM) | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 12 | 5963 | MEASURING CHAMBER - NEPTUNE 6" (150MM) | Neptune Technology Group (Canada Ltd.) | 0 | EA | | | |
| 13 | 5911 | PIT ANTENNA - NEPTUNE WITH 20" CABLE | Neptune Technology Group (Canada Ltd.) | 6 | EA | | | |
| 14 | 4151 | GASKET - MAIN TURBINE 8" (200MM) | Sensus | 0 | EA | | | |
| 15 | 4146 | GASKET - STRAINER SENSUS 3" (75MM) | Sensus | 0 | EA | | | |
| 16 | 4147 | GASKET - STRAINER SENSUS 4" (100MM) | Sensus | 0 | EA | | | |
| 17 | 4148 | GASKET - STRAINER SENSUS 6" (150MM) | Sensus | 0 | EA | | | |
| 18 | 4149 | GASKET - STRAINER SENSUS 8" (200MM) | Sensus | 0 | EA | | | |
| 19 | 1017 | GASKET- MAIN FLANGE FOR 1 1/2" (38MM) SENSUS METER | Sensus | 0 | EA | | | |
| 20 | 1018 | GASKET- MAIN FLANGE FOR 2" (50MM) METER SENSUS | Sensus | 0 | EA | | | |
| 21 | 1019 | GASKET- MEASURING CHAMBER FOR 1 1/2" (38MM) METER SENSUS | Sensus | 0 | EA | | | |
| 22 | 1020 | GASKET- MEASURING CHAMBER FOR 2" (50MM) METER SENSUS | Sensus | 1 | EA | | | |
| 23 | 4839 | GASKET - METER 1/8" (3MM) NEOPRENE FULL FACE | Jones | 0 | EA | | | |
| 24 | 4842 | GASKET - METER 1/8" (3MM) NEOPRENE FULL FACE | Jones | 2 | EA | | | |
| 25 | 4837 | GASKET - METER REGULAR 1/8" (3MM) NEOPRENE "DROP IN" | Jones | 0 | EA | | | |
| 26 | 4840 | GASKET - METER REGULAR 1/8" (3MM) NEOPRENE "DROP IN" | Jones | 0 | EA | | | |
| 27 | 4838 | GASKET - METER THIN NEO 1/16" (1.5MM) "DROP IN" | Jones | 0 | EA | | | |
| 28 | 4841 | GASKET - METER THIN NEO 1/16" (1.5MM) "DROP IN" | Jones | 0 | EA | | | |
| 29 | 4414 | METER TAILPIECES - BRASS 1" (25MM) SET | Legend Valve Co. | 2 | SET | | | |
| 30 | 4413 | METER TAILPIECES - BRASS 3/4" (19MM) SET | Legend Valve Co. | 5 | SET | | | |
| 31 | 5817 | KIT - WATER METER C/W BOLTS/NUTS/GASKETS 2" (50MM) | N/A | 0 | SET | | | |
| 32 | 5816 | KIT - WATER METER C/W BOLTS/NUTS/GASKET 1 1/2" (38MM) | N/A | 0 | SET | | | |
| 33 | 4415 | FLANGE - METER BRASS 1 1/2" (38MM) W/GASKETS SS BOLTS/NUTS | Robar | 1 | SET | | | |
| 34 | 4416 | FLANGE - METER BRASS 2" (50MM) W/GASKETS SS BOLTS/NUTS | Robar | 0 | SET | | | |

Please note: Items with a 0 quantity have been included to establish pricing and may be ordered as required.

CITY OF COQUITLAM

WATER METER SPECIFICATIONS

July, 2015

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1. **Preamble**

The following specifications detail the City's requirements for the installation of meters on City water service connections.

An applicant is responsible for the supply and installation of meters and associated piping, chambers and equipment on metered water service connections. The City must accept the installation prior to activation of the service.

The specifications identifies acceptable meter types, location and installation requirements.

2. **Definitions**

ANSI: American National Standards Institute.

ASTM: American Society for Testing and Materials.

AWWA: American Water Works Association

Activation: Opening of the service valve to permit the flow of water.

Applicant: A person, company or agency that makes application for a water service connection from the City water system as required by the City's Water Distribution Bylaw 2973.

Engineer: A professional engineer registered in the province of British Columbia practicing in the field of Civil or Mechanical Engineering.

FM: Factory Mutual Engineering and Research Organization, a research and testing agency accepted by the Insurance Industry.

NSF: NSF International

ULC: Underwriters' Laboratories of Canada, a research and testing agency accepted by the Insurance Industry.

Water Distribution Bylaw: Refers to the City of Coquitlam Water Distribution Bylaw 2973 as amended.

3. **Services to be Metered**

The Water Distribution Bylaw identifies service connections that require meters. This includes but is not limited to all property intended for commercial, industrial, institutional, agricultural, and public.

All service connections to such properties including fire and domestic services shall have meters.

4. **Location of Meters**

Meters shall be placed at the interface between the City and private water system. In most circumstances the interface occurs at the property line of the site. The meter and meter chamber shall be located entirely on private property unless approved otherwise by the City.

Where a City water main is within private property in a right-of-way, place the meter at the right-of-way boundary line.

Where possible locate meters in landscaped areas. If unavoidable meters may be placed in pedestrian areas or parking stalls. If meter is placed in a parking stall the pit-pad should be placed in a smaller box where it may be easily accessed. Meters must not be located in driveways or roadways.

Vaults and chambers should be placed in proximity to the site drainage system to permit installation of a gravity drain.

5. **Meter Types**

There are three types of cold-water meters accepted for use by the City. These are displacement, turbine and compound types.

The actual meter or combination of meters accepted for use must accurately account for the total water use of the property serviced. All meters must be new. Used or reconditioned meters are not acceptable.

Displacement meters are to be either nutating disk or oscillating piston type to AWWA C-700. Meters are to have a lead free bronze (NSF/ANSI 61, Annex G and Annex F) case with cast iron or plastic frost protection cover. Meters 38mm and 50mm in size are to have oval two bolt flanged ends.

Acceptable displacement type meters are:

- Sensus SR11
- Neptune T-10

Turbine meters are to conform to the AWWA C-701 class II. All turbine meters are to have lead free bronze (NSF/ANSI 61, Annex G and Annex F), stainless steel or ductile iron with epoxy coating cases with flanged connections. 38mm and 50 mm sizes are to have oval two bolt flanges. Meters are to have horizontal turbines.

Acceptable turbine type meters are:

- Sensus OMNI R², T²
- Neptune HP

Compound meters are to conform to AWWA C-702. All compound meters are to have lead free bronze (NSF/ANSI 61, Annex G and Annex F), stainless steel or ductile iron with epoxy coating cases with flanged connections. Meters 50mm in diameter are to have oval two bolt flanges.

Acceptable compound meters are:

- Sensus OMNI C²
- Neptune TRU/FLO

6. Registers

All meters are to have direct reading, sealed absolute encoder registers. The unit of measure shall be cubic meters. Registers must be new. Used or reconditioned registers are not acceptable. All registers shall be programmed to read all digits left of the decimal place (minimum 5 digits).

Registers shall have an antenna that will allow remote electronic reading of the meter with a portable data acquisition unit. The antenna shall be designed for mounting in the meter chamber lid.

Acceptable encoder registers for indoor use are:

- Sensus Electronic Register ECR, 3 wire with Neptune R900, V4 wall meter interface unit (MIU)
- Neptune E-Coder / R900i, V4 inside version

Acceptable encoder registers for pit installations are:

- Sensus Electronic Register ECR WP (waterproof), 3 wire with Neptune R900, V4 pit MIU and pit lid antenna
- Neptune E-Coder / R900i, V4 pit version and pit lid antenna (wire length to suit)

NOTE: If a customer has a meter located outside and it is not easily read, a second register display spliced into the existing register and run to a more accessible location at the customer's expense.

7. Meter Selection

The type or combination of types of meters to be used for recording water consumption from a service connection must accurately record consumption over the expected range of flow. The size selected shall ensure pressure losses are within acceptable limits and provide long meter life.

The following table provides a guide for acceptable meter types and sizes for a range of uses and flows.

| WATER USE | LAND USE | SIZE | | ACCEPTABLE METER TYPE | FLOW RATES (l/sec) | | |
|----------------------------------|-------------------------|------|-------|-----------------------|--------------------|------------------------|--------------|
| | | mm | in | | Operating Range | Normal Continuous Flow | Maximum Flow |
| Domestic | Commercial | 16 | 5/8 | Displacement | 0.032-1.26 | 0.63 | 1.26 |
| | Institutional | 19 | 3/4 | Displacement | 0.047-1.89 | 0.95 | 1.89 |
| | Industrial | 25 | 1 | Displacement | 0.063-3.15 | 1.58 | 3.15 |
| | | 38 | 1 1/2 | Displacement* | 0.126-6.31 | 3.15 | 6.31 |
| | | 50 | 2 | Displacement* | 0.158-10.09 | 5.05 | 10.09 |
| | | 75 | 3 | Compound | 0.032-28.39 | 10.09 | 28.39 |
| | | 100 | 4 | Compound | 0.063-63.09 | 15.77 | 63.09 |
| | | 150 | 6 | Compound | 0.095-126.2 | 31.55 | 126.2 |
| Irrigation/ Bulk Water Use | Agricultural | 38 | 1 1/2 | Turbine | 0.032-10.09 | 6.31 | 10.09 |
| | Golf Courses | 50 | 2 | Turbine | 0.032-10.09 | 6.31 | 10.09 |
| | Parks | 75 | 3 | Turbine | 0.158-31.55 | 15.14 | 31.55 |
| | Some Industrial Uses | 100 | 4 | Turbine | 0.189-63.09 | 26.5 | 63.09 |
| | | 150 | 6 | Turbine | 0.252-126.18 | 58.04 | 126.18 |
| | | 200 | 8 | Turbine | 0.316-220.82 | 100.95 | 220.82 |

* acceptable meter types are displacement or approved equal

Conversion Factors: l/sec to USGPM multiply by 15.850
L/sec to IGPM multiply by 13.198

Individual turbine meters are acceptable only in applications involving continuous high flows such as dedicated irrigation systems or some industrial processes. Use of turbine meters requires approval by the City.

8. Dedicated Fire Services

Fire service connections are to be metered to detect unauthorized use. Provide all fire services with a double detector check valve in combination with an appropriately sized "tattle tail" displacement type meter and double check valve on a bypass. Install tattle tail meters in accordance with these specifications.

9. Combined Fire Domestic Services

All new water service connections to the municipal water system shall have a separate fire line and domestic service pipe, unless approved otherwise by the City.

Where the City approves the use of a combined domestic and fire service, an FM approved ULC listed compound meter assembly shall be provided to measure all flows. The compound meter assembly shall include a strainer, check valve, turbine meter and a smaller domestic meter on a bypass. The meter set

shall be factory assembled. Acceptable preassembled meter sets are Neptune HP Protectus III, and Sensus OMNI F² (FireLine) with check valve and smaller domestic meter on a bypass.

10. Installation Requirements

Installation requirements are summarized on the following table and illustrated on the appended typical drawings.

| Size mm | Type | By Pass* | | Strainer Required | Strainer Type | Chamber | | |
|---------|----------------|----------|-------|-------------------|---------------|-----------|-----------|-----------|
| | | Required | Size | | | Type | Size mm | Model |
| 16x19 | Displacement | No | - | No | - | Meter Box | 300x500 | Brooks 37 |
| 19-25 | Displacement | No | - | No | - | Meter Box | 425x750 | Brooks 66 |
| 38-50 | Displacement | Yes | 25 mm | No | - | Meter Box | 560x860 | AEC 5686 |
| 75 | Compound | Yes | 50 mm | Yes | Straight | Vault | 1200x2000 | AEC 2121 |
| 100 | Compound | Yes | 50 mm | Yes | Straight | Vault | 3260x1760 | AEC 3151 |
| 150 | Compound | Yes | 50 mm | Yes | Straight | Vault | 3260x1760 | AEC 3151 |
| 150 | Combined | Yes | 50m m | Yes | FM/UL | Vault | 3260x1760 | AEC 3151 |
| 100-150 | Detector Check | No | - | No | - | Vault | 1200x2000 | AEC 2121 |
| 200 | Detector Check | No | - | No | - | Vault | 3260x1760 | AEC 3151 |

* A bypass is not required for dedicated irrigation meters.

The applicant's engineer must design installations for meters not shown on the above table

Installation and Piping Requirements:

Install meters horizontally with register casings plumb, facing upward. Where installed in a meter box, center meter in box.

All connecting piping, valves and fittings shall be equal to the diameter of the meter for a distance of at least 5 pipe diameters up and down stream of the meter.

Where required, install strainers immediately upstream of the meter using a flanged connection. Strainers shall be of the same manufacture and size as the meter.

Provide isolation valves upstream and downstream of the meter to allow removal of meter and strainer cases. Install one valve on bypasses. Provide a lock wing on the operating nut of bypass valves 50mm and smaller.

For all compound and turbine meter installations provide a straight section of horizontal pipe, 5 pipe diameters in length, between the strainer and the upstream isolating valve. Do not install elbows, bends, non-concentric reducers, check valves, backflow preventors and/or PRV's within 10 pipe diameters upstream of 5 pipe diameters downstream of a meter.

Provide a test point for all meters 75mm in diameter and greater. In the absence of a test plug on the meter case, install a testing tee with a 50mm diameter threaded nipple and cap between the meter and the downstream isolating valve.

For meters 75mm in diameter and larger provide a mechanical flange adapter on the downstream side of the meter to provide flexibility for meter and strainer case removal.

Support all meters, valves and bypasses within chambers with adjustable pipe stands. Bricks, concrete or wood blocking are not acceptable means of support.

Vaults and chambers require drain connection to a storm drainage system. Where a gravity connection to the storm system is not available, the city may approve one of the following options:

- Installation of a electric sump pump
- Installation of a rock pit. A Professional Engineer specializing in geotechnical design must design rock pits
- Installation of a hydraulic sump ejector assembly.

Antenna Installation:

One antenna shall be installed for each register. In non-traffic areas mount antenna in the chamber lid in accordance with the manufacturer's instructions. Where the lid is in a traffic area, mount the antenna in an adjacent Brooks 37 Box as shown on Drawing WM 7. Remote wiring connections shall be either factory or field sealed to ensure connections are water proof. Field seals shall be in accordance with the manufacturer's instructions.

11. Materials

Pipe

Copper Pipe: Copper pipe to be Certified Type K soft copper to ASTM B 88m.

All copper tubing joints are to be compression type or Victualic. Acceptable compression fittings are McDonald "T", James Jones "Super Grip", Ford "Quick Joint" or Mueller "110". Soldered joints are not permitted

Red Brass Pipe: Red Brass pipe to meet AWWA C-800.

Red brass joints to be threaded to ANSI B1.20.1.

Steel Pipe: Steel pipe is to meet AWWA C-200, electrically welded. Steel to ASTM A36. Epoxy coat the interior and exterior of all steel pipe and fabrications to AWWA C-210 or AWWA C-213.

Steel pipe joints are to be flanged to AWWA C-208 or made with mechanical couplers, mechanical flange adapters, and "Uniflange" or "EZ Flange" style adapters.

Stainless Steel Pipe: Stainless steel pipe is to be Schedule 10S, dual certified 304 series stainless steel.

Grooved ends to be roll grooved per Victaulic Standard Groove specifications.

Fittings

Brass: Brass fittings to 75mm to meet AWWA C-800. All fitting joints to be compression type, threaded to ANSI B1.20.1, flanged or Victaulic. Acceptable compression fittings are specified in the latest edition of the City's MMCD supplemental specifications and approved products list.

Steel: Steel fittings are acceptable in sizes 75mm and larger. Fabricated steel fittings to meet AWWA C-208 and AWWA C-207. Epoxy coat steel fittings to AWWA 210 or AWWA-213. All fitting connections shall be shop welded, flanged or Victaulic. Flange dimensions and drilling are to be ANSI B16.1

Stainless Steel: Welded stainless steel fittings to be Class 150 weld-neck or slip-on type with continuous weld.

All grooved fittings to be Schedule 10S, 304 series stainless steel. Couplings to be Victaulic Style 489.

Valves

All valves are to be suitable for buried service.

Valves on domestic service connections up to 50mm in diameter shall be bronze ball or cylinder corporation style valves meeting AWWA C-800. Valves shall have rubber o-ring seals. Connections shall be threaded, compression type or flanged. Actuation is to be by a tee-head style operating nut. Provide a lock wing on the tee-head and case for all bypass valves (locking mechanisms on levers are not acceptable).

Valves on domestic service connections 75mm to 250mm in diameter are to be cast iron, resilient seat, NRS gate valves to AWWA C-509 with flanged ends. Stem seal to be o-ring type. Actuation of buried valves or valves in vaults shall be by a standard 50mm square operating nut. Valves within man entry chambers shall be operated by hand wheel. Provide a Nelson style valve box over buried valves.

Fire service valves within vaults or chambers shall be resilient seat, OS&Y gate valves to AWWA 509.

Detector Check Valves

Double detector check valves are to comply with AWWA C-510. Detector check valves for fire service use must be FM approved and ULC listed.

Flange Adapters

Mechanical Flange adapters for 50mm to 200mm sizes shall be to AWWA C219.

Connections between flanged fittings and steel piping may be made with “Uni-flange” or “EZ-flange” adapters.

Bolts and Nuts

Bolts and nuts are to be stainless steel to ASTM F-593 and F-594. Rolled threads, fit and dimension to AWWA C-111.

Meter Boxes

The box, vault or chamber shall be precast concrete to the dimensions provided in the table below. Vaults shall be design for boulevard (off road) use with static H-20 loading. Chambers shall be designed for roadway use with H-20 loading or deep installations. The minimum headroom for chambers shall be 1.9 meters for man entry.

Boxes shall have galvanized steel, cast iron or aluminum lids capable of withstanding H-20 static loads. Lids shall include a “bolt down” capability.

Vaults sized 1200 x 2000 shall have two hinged aluminum lids providing an 800mm x 1700mm opening. Vaults sized 1760 x 3260 shall have three hinged aluminum lids providing an 820mm x 2590mm opening. Vault lids shall be capable of withstanding H-20 static loading. Lids shall include a “bolt down” capability.

Lids for chambers shall be 1200mm x 1200mm square split hinged aluminum. Chamber lids shall be capable of withstanding H-20 loading. Lids shall include a “bolt down” capability.

Lids for boxes, vaults and chambers in non-traffic areas shall be predrilled for remote reading receptacles.

Where the depth from the top of the lid frame to the chamber floor exceeds 1.5 meters provided an aluminum ladder securely fastened to the chamber floor and wall. Ladders shall have a telescoping aluminum post fixed to the ladder to enable safe man entry or exit (Bilco LadderUP Safety Post LU4 or approved equal).

Damp proof the exterior of all vaults by applying an asphalt emulsion coating to all exterior surfaces. Make construction joints water tight with an appropriate sealant.

Acceptable boxes, vaults and chambers are as follows:

| Type | Size (mm) | Model | Hatch Size (mm) |
|----------|-----------|------------------|-----------------------|
| Boxes | 300x500 | Brooks 37 | 300x450 cast iron |
| | 425x750 | Brooks 66 | 450x750 galv. steel |
| | 560x860 | AE Concrete 5686 | 630x940 aluminum |
| Vaults | 1200x2000 | AE Concrete 2121 | 2 – 880x880 aluminum |
| | 1760x3260 | AE Concrete 3151 | 3 – 880x880 aluminum |
| Chambers | 1760x3260 | AE Concrete 3152 | 2 – 600x1200 aluminum |

12. Inspection Procedure

A request for water service connections is initiated by application for a Plumbing Permit through the City's Development Services Department.

The Applicant's Engineer shall determine from the City whether the service connection requires a meter and shall select the appropriate meter type for the intended use in accordance with the City's Water Meter Specifications. Plans submitted as part of the Plumbing Permit Application must indicate the meter size, type and chamber location. The plans shall also indicate the expected range of flows and the average expected flow for the proposed installation.

For non-typical meter installations, or for meters of 200mm diameter and greater, the applicant's Engineer must provide detailed drawings giving complete details of the installation.

The City Development Services Department will inspect the meter installation to ensure conformance to this specification and the B.C. Plumbing Code.

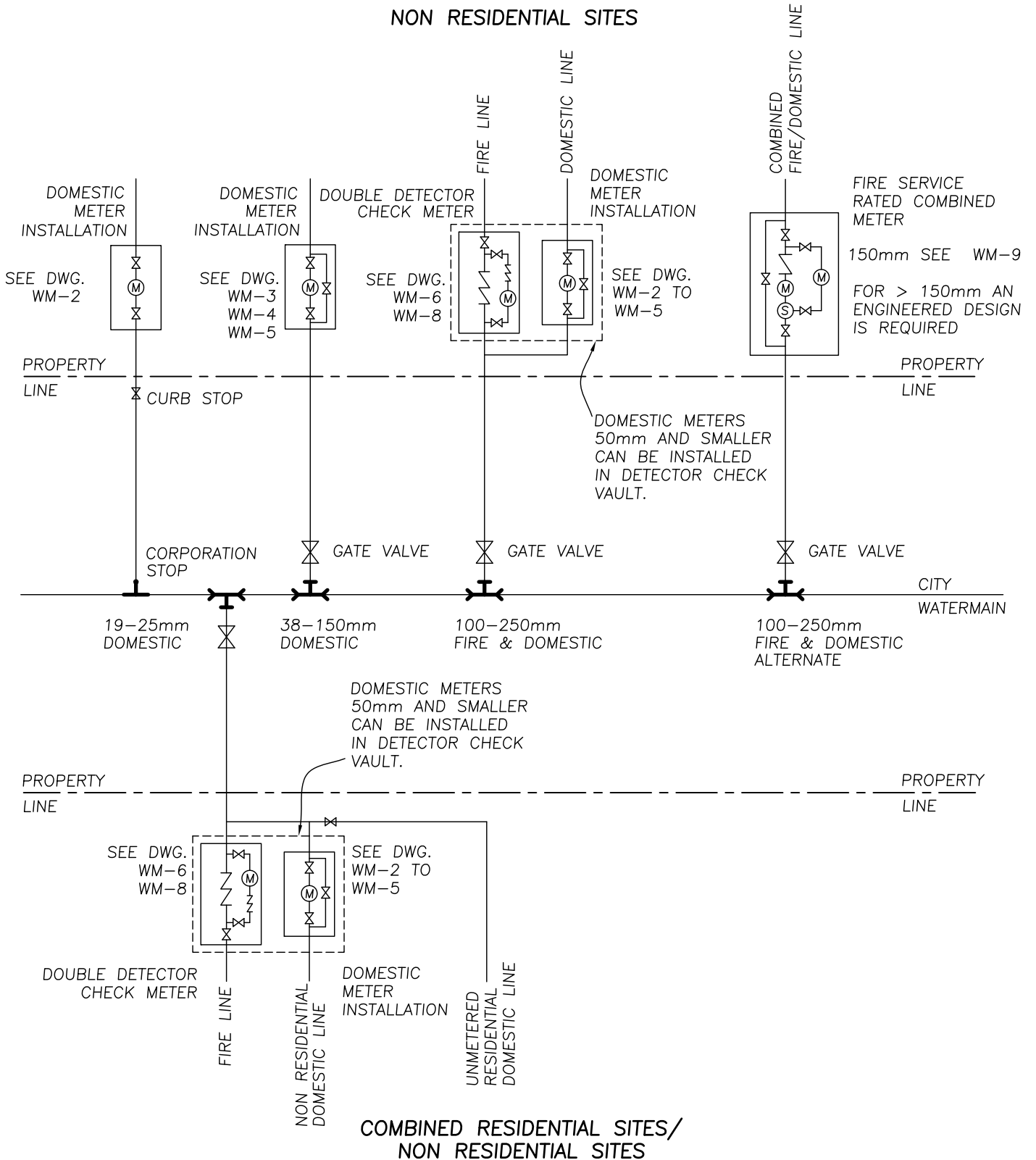
Upon approval of the installation by the Plumbing Inspector, the developer is to call the Engineering and Public Works Department (604-927-3500) to lock the bypass valve where applicable, take the initial meter reading and activate the service connection. All factory tags and labels are to remain on the meter until the Public Works department removes them.

13. Temporary Water Services

Temporary water service connections required during construction phase of a development project must also be metered. Meters installed on temporary service connections are to conform to the requirements of this specification in all respects. The meter must be in place prior to the activation of the service. Only City Engineering personnel may only deactivate temporary services. Contact the City Engineering Customer Service Desk at 927-3500 prior to removing a meter from a temporary service connection.

Water Meter Specification
Detailed Drawings

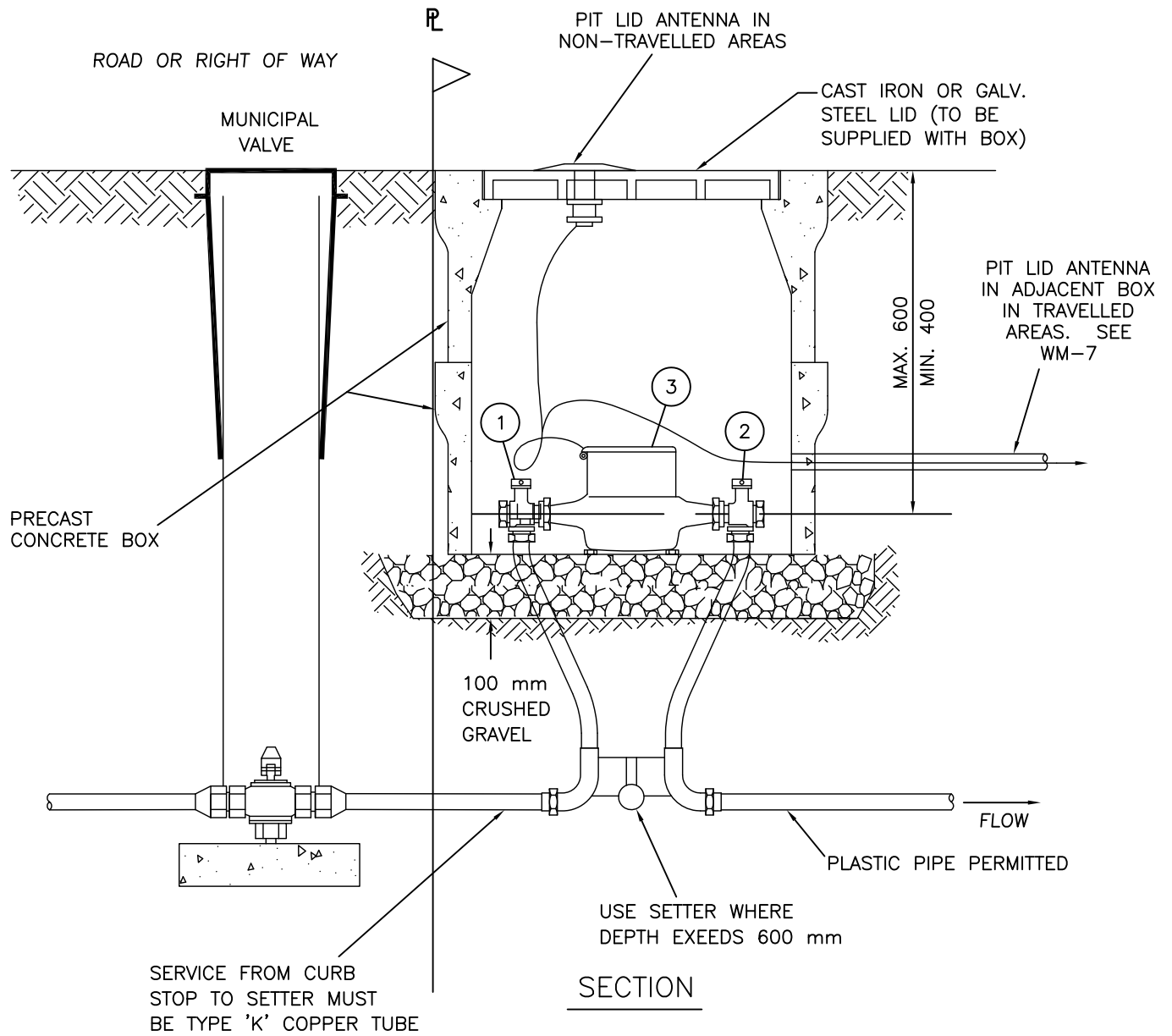
NON RESIDENTIAL SITES



Coquitlam Water Utility

TYPICAL SERVICE INSTALLATION

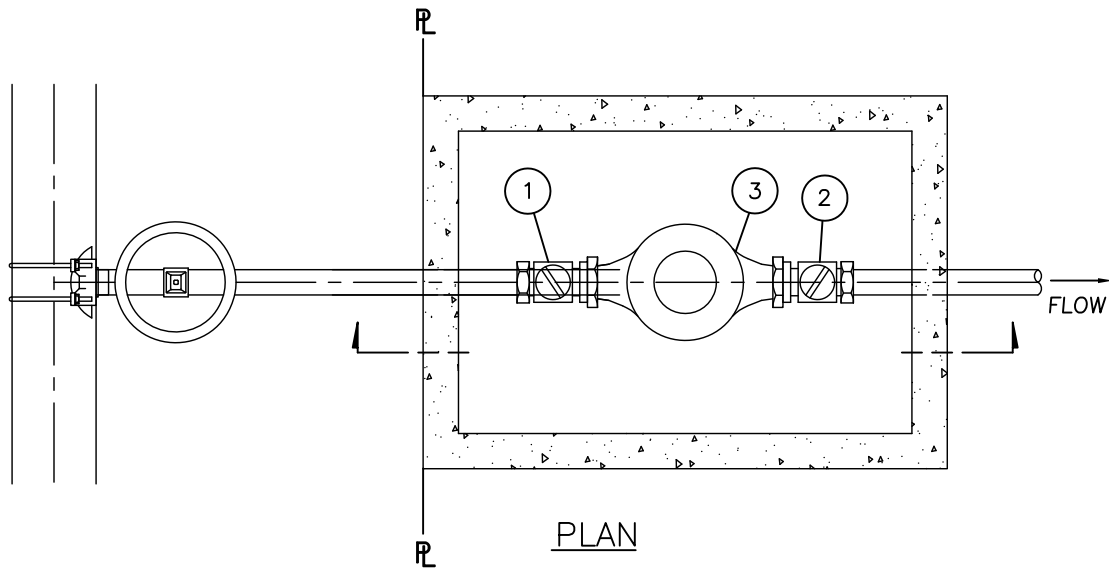
| | | | | | |
|--|---------------------|------------------|--------------|-------------------|-------|
| Combined Residential/Non Residential Sites added | | 5 | 10/06 | M.C. | |
| Bypass added to fire service meter. | | 4 | 10/04 | M.C. | |
| REVISIONS | | | | No. | DATE: |
| DESIGNED BY: M.C. | DRAWN BY: A.S.K. | CHECKED BY: M.C. | APPROVED BY: | | |
| SCALE: N.T.S. | DATE: October 17/94 | | | DRAWING NO.: WM-1 | |



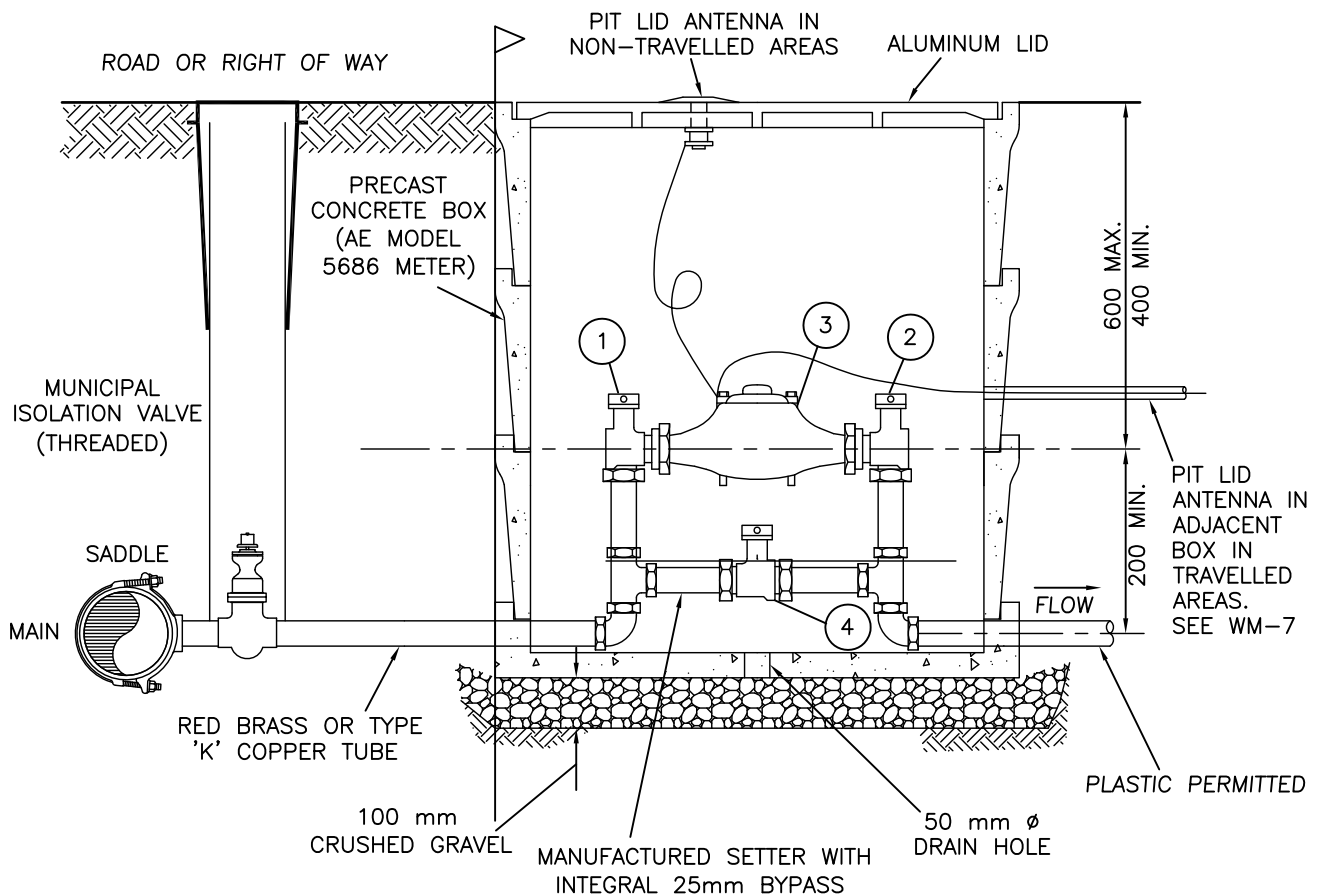
| BOXES | | | |
|----------|-------|---|-----------|
| 16 mm | METER | - | BROOKS 37 |
| 16x19 mm | METER | - | BROOKS 37 |
| 19 mm | METER | - | BROOKS 66 |
| 25 mm | METER | - | BROOKS 66 |

| No. | DESCRIPTION |
|-----|--------------------------|
| 1 | CURB STOP WITH LOCKWING |
| 2 | DOWNSTREAM CURB STOP |
| 3 | METER, NEPTUNE OR SENSUS |

| Coquitlam Water Utility | | | | |
|---|------------------|-------------|-------------------|------|
| 16 mm ϕ - 25 mm ϕ DISPLACEMENT METER INSTALLATION | | | | |
| minor text changes | 5 | 07/15 | D.K.S. | |
| minor text changes | 4 | 01/15 | D.K.S. | |
| REVISIONS | No. | DATE: | CKD. | APP. |
| DESIGNED BY: MC | DRAWN BY: A.S.K. | CHECKED BY: | APPROVED BY: | |
| SCALE: N.T.S. | DATE: 11/10/94 | | DRAWING NO.: WM-2 | |



PLAN



SECTION

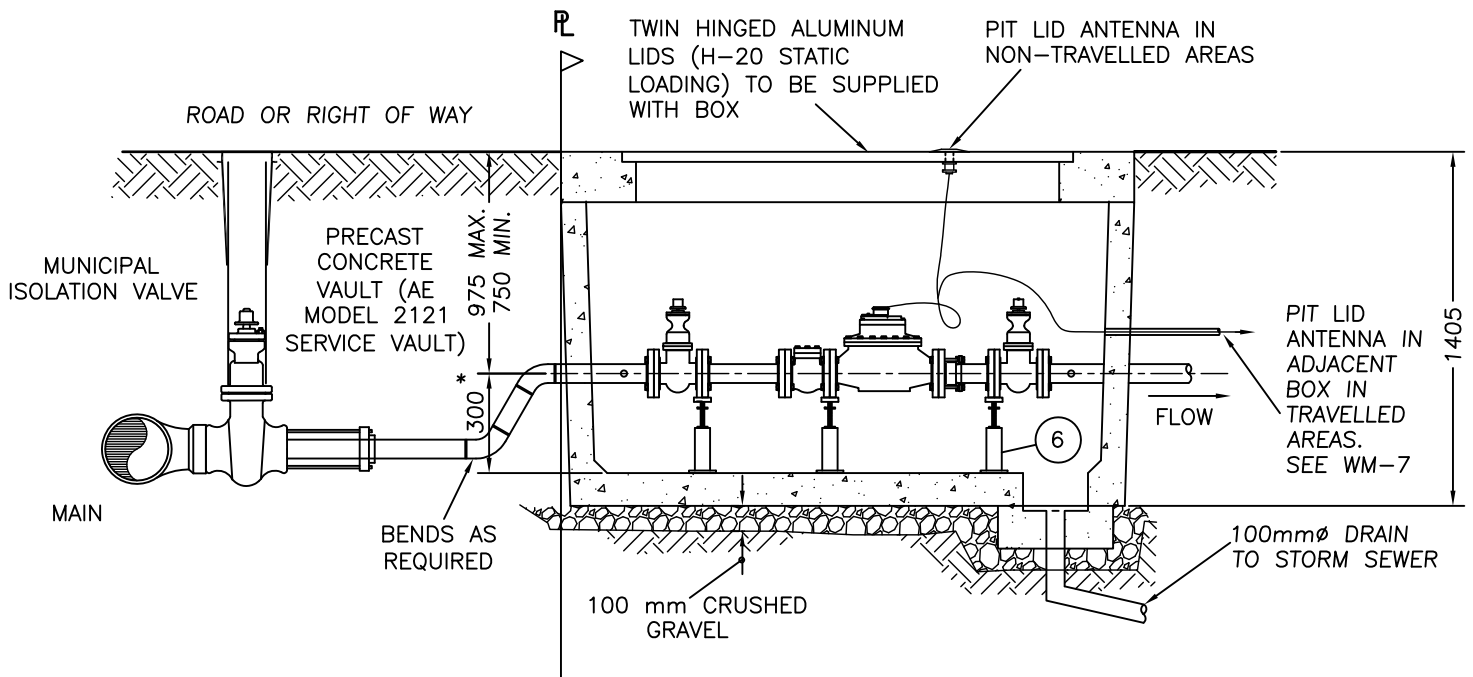
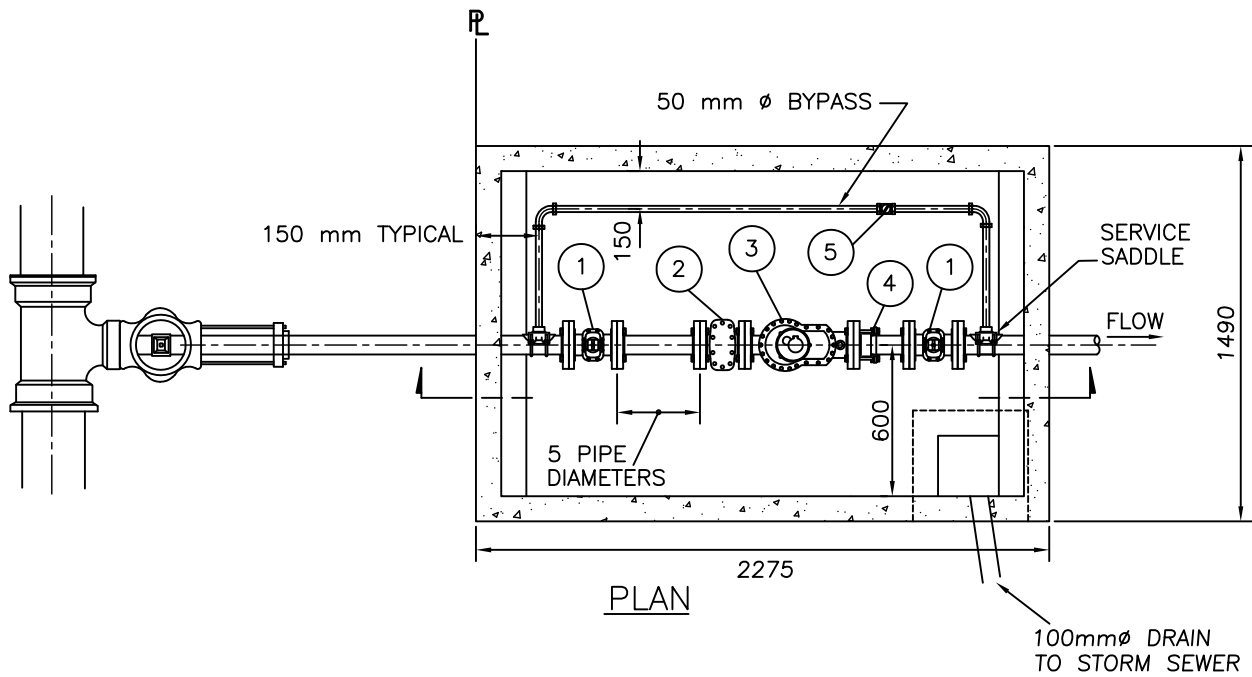
ALL FIELD JOINTS TO BE THREADED OR COMPRESSION.
ALL PIPE TO BE BRASS OR COPPER TUBE.
MANUFACTURED SETTERS MAY HAVE SOLDERED JOINTS.

| No. | DESCRIPTION |
|-----|---------------------------|
| 1 | STOP WITH LOCKWING |
| 2 | DOWNSTREAM STOP |
| 3 | METER, NEPTUNE OR SENSUS |
| 4 | BYPASS STOP WITH LOCKWING |

Coquitlam Water Utility

38 mm ϕ - 50 mm ϕ DISPLACEMENT METER INSTALLATION

| | | | | |
|---------------------|------------------|-------------|-------------------|------|
| minor text changes. | 5 | 07/15 | D.K.S. | |
| minor text changes. | 4 | 01/15 | D.K.S. | |
| REVISIONS | No. | DATE: | CKD. | APP. |
| DESIGNED BY: MC | DRAWN BY: A.S.K. | CHECKED BY: | APPROVED BY: | |
| SCALE: N.T.S. | DATE: 11/10/94 | | DRAWING NO.: WM-3 | |



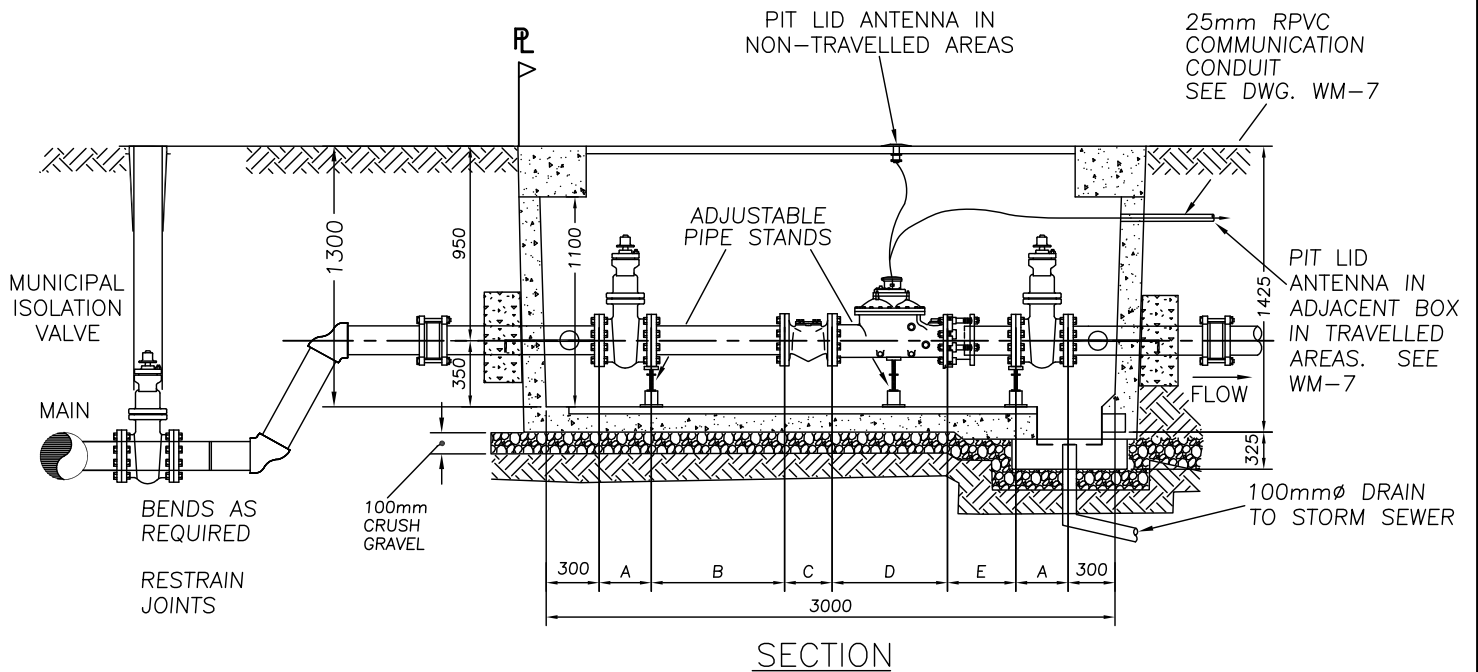
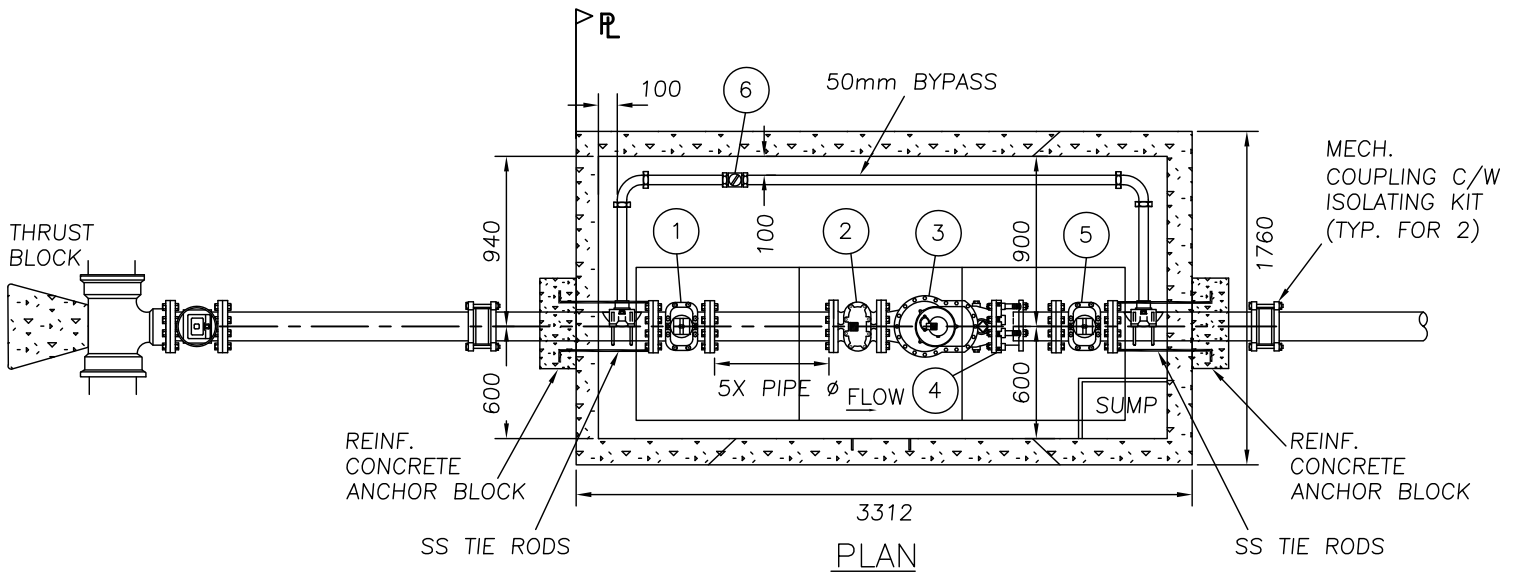
SECTION

| No. | DESCRIPTION |
|-----|---------------------------------|
| 1 | GATE VALVE (ISOLATION) |
| 2 | STRAINER |
| 3 | METER, NEPTUNE OR SENSUS |
| 4 | MECHANICAL FLANGE ADAPTOR |
| 5 | BYPASS BALL VALVE WITH LOCKWING |
| 6 | ADJUSTABLE PIPE STANDS |

NOTES:
 *PIPE: TO BE TYPE K COPPER, BRASS, EPOXY COATED WELDED STEEL OR SS.

CONNECTIONS:
 BRASS: IPT
 COPPER: COMPRESSION OR VICTAULIC. NO SOLDER PERMITTED
 STEEL: FLANGED, "UNIFLANGE", OR "EZ FLANGE" OR VICTAULIC

| | | | |
|--|------------------|-------------|---------------------|
| Coquitlam Water Utility | | | |
| 75 mm ϕ COMPOUND METER INSTALLATION | | | |
| minor text changes | 6 | 07/15 | D.K.S. |
| minor text changes | 5 | 01/15 | D.K.S. |
| REVISIONS | | | No. DATE: CKD. APP. |
| DESIGNED BY: MC | DRAWN BY: A.S.K. | CHECKED BY: | APPROVED BY: |
| SCALE: N.T.S. | DATE: 11/10/94 | | DRAWING NO.: WM-4 |



| No. | DESCRIPTION |
|-----|-------------------------------------|
| 1 | UPSTREAM RESILENT SEAT GATE VALVE |
| 2 | STRAINER |
| 3 | METER, NEPTUNE OR SENSUS |
| 4 | MECHANICAL FLANGE ADAPTOR |
| 5 | DOWNSTREAM RESILENT SEAT GATE VALVE |
| 6 | BYPASS BALL VALVE WITH LOCKWING |

NOTES:
 PIPE: TO BE TYPE K COPPER, BRASS, EPOXY COATED WELDED STEEL OR SS.

CONNECTIONS:
 BRASS: IPT
 COPPER: COMPRESSION OR VICTAULIC. NO SOLDER PERMITTED
 STEEL: FLANGED, "UNIFLANGE", "EZ FLANGE" OR VICTAULIC

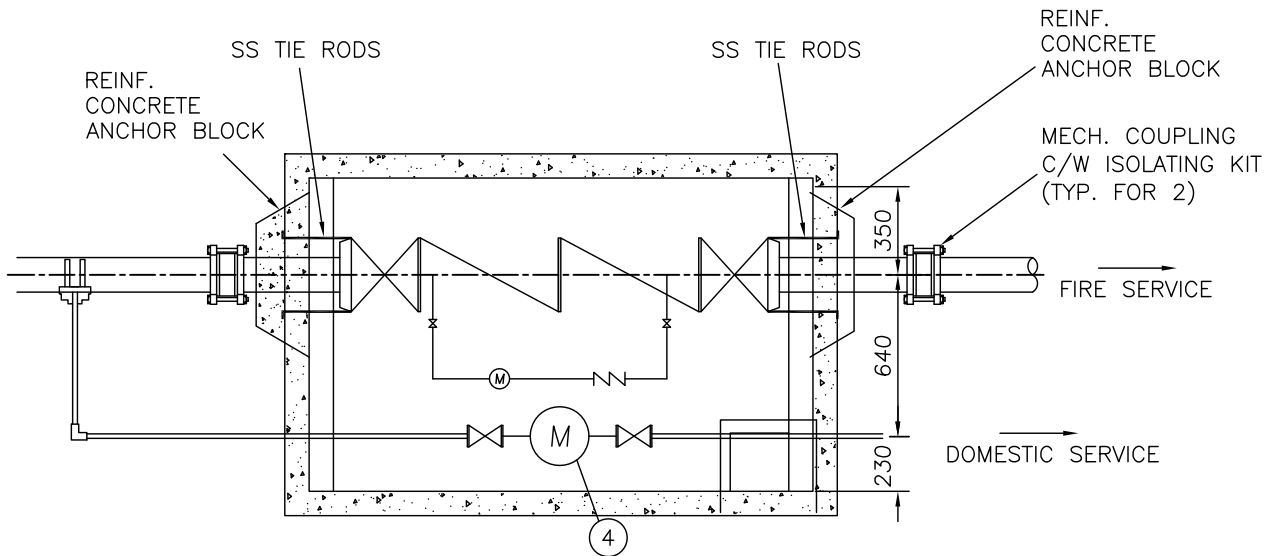
| DIMENSIONS | | |
|------------|------|------|
| METER | 100Ø | 150Ø |
| A | 229 | 267 |
| B | 508 | 762 |
| C* | 191 | 229 |
| D* | 508 | 610 |
| E* | 735 | 765 |

* VERIFY THESE DIMENSIONS WITH MANUFACTURER

Coquitlam Water Utility

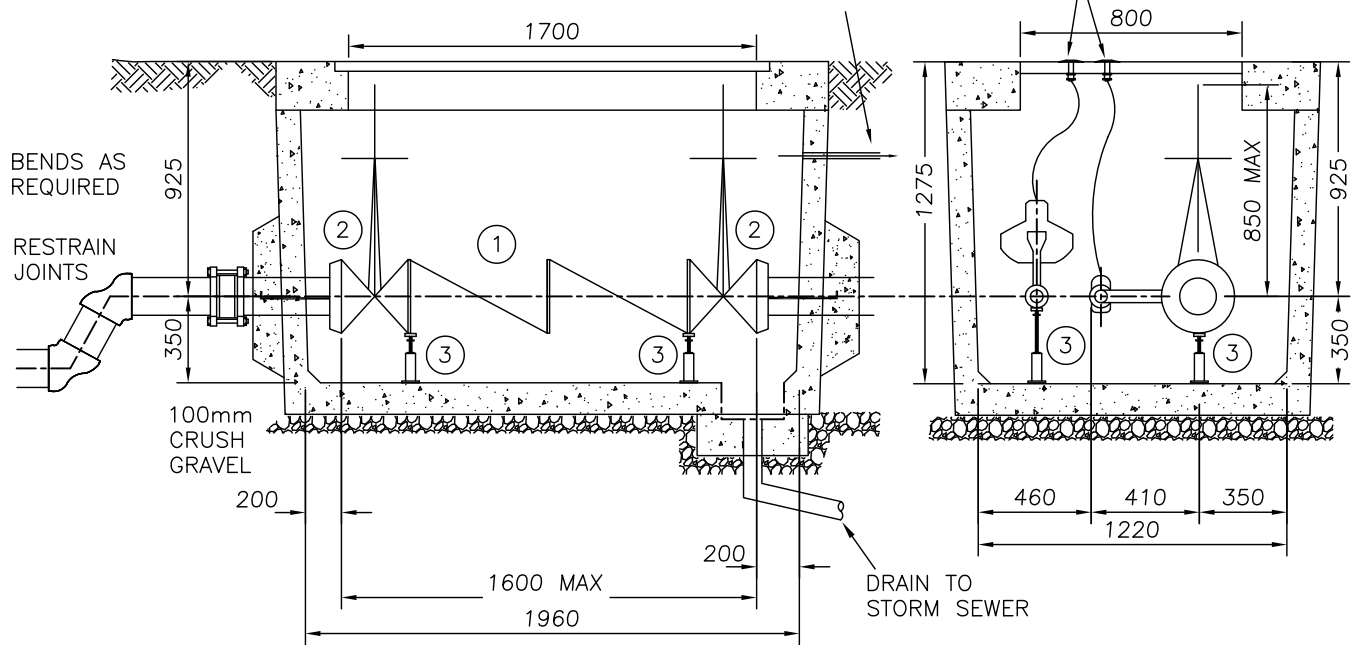
100 mm Ø - 150 mm Ø COMPOUND METER (AE CONCRETE MODEL 3151 VAULT)

| | | | | |
|--------------------|------------------|-------------|-------------------|------|
| minor text changes | 6 | 07/15 | D.K.S. | |
| minor text changes | 5 | 01/15 | D.K.S. | |
| REVISIONS | No. | DATE: | CKD. | APP. |
| DESIGNED BY: MC | DRAWN BY: A.S.K. | CHECKED BY: | APPROVED BY: | |
| SCALE: N.T.S. | DATE: 11/10/94 | | DRAWING NO.: WM-5 | |



PIT LID ANTENNA IN ADJACENT BOX IN TRAVELLED AREAS. SEE WM-7

PIT LID ANTENNA IN NON-TRAVELLED AREAS



NOTES
PIPE: TO BE TYPE K COPPER, BRASS, EPOXY COATED WELDED STEEL OR SS.

CONNECTIONS:
BRASS: IPT
COPPER: COMPRESSION OR VICTAULIC. NO SOLDER PERMITTED
STEEL: FLANGED, "UNIFLANGE", "EZ FLANGE" OR VICTAULIC

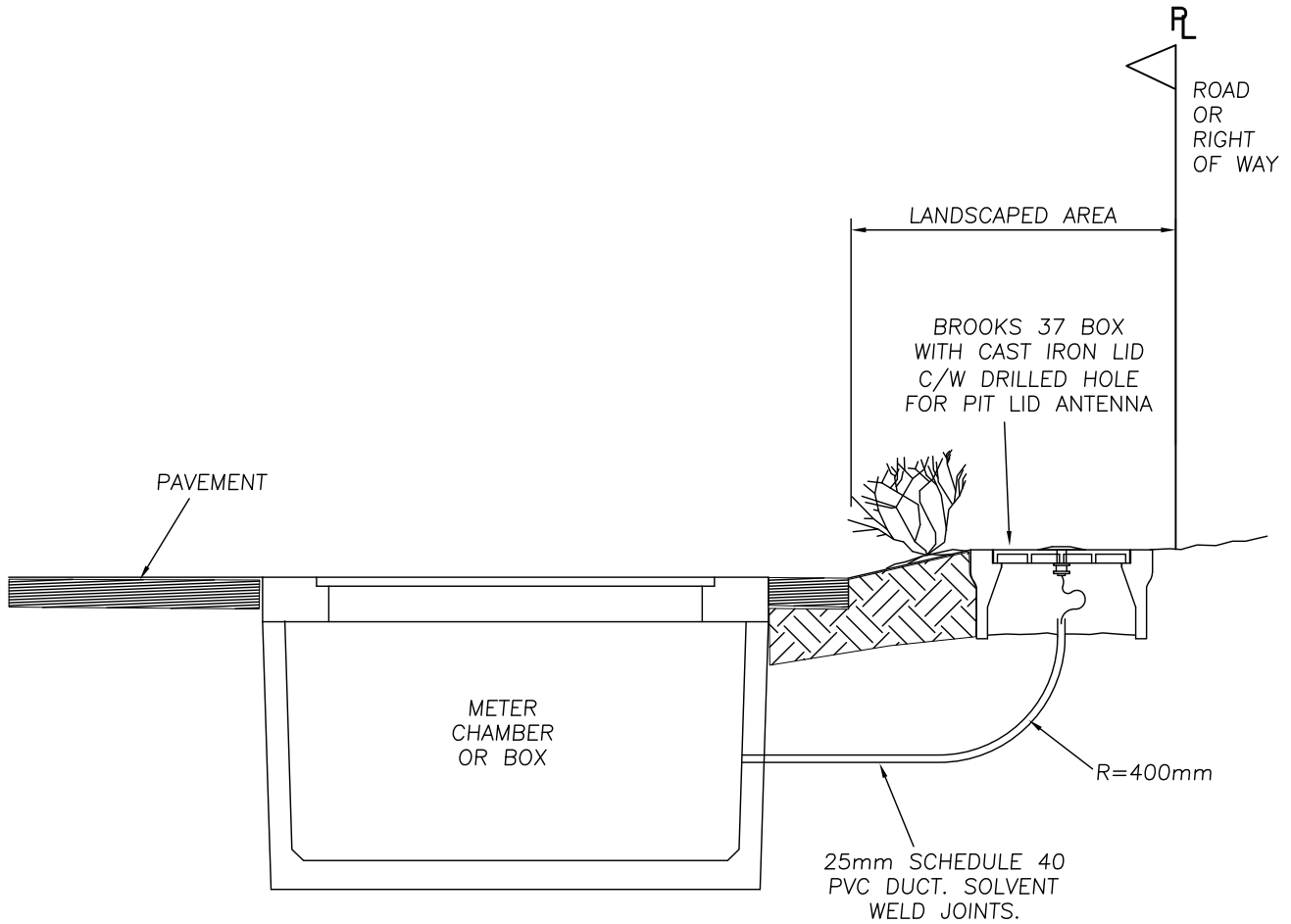
AS PER BC BUILDING CODE 3.2.4.9.1), 2) & 3), VALVE HANDWHEELS CONTROLLING THE FIRE WATER SERVICE SHALL BE ELECTRICALLY SUPERVISED AND MONITORED.

| No. | DESCRIPTION |
|-----|---|
| 1 | FM APPROVED ULC LISTED DOUBLE DETECTOR CHECK ASSEMBLY CW 2 OS & Y GATE VALVES, TEST COCKS, METER AND BY PASS. |
| 2 | "UNIFLANGE" OR "MEGA LUG" FLANGE ADAPTORS. |
| 3 | ADJUSTABLE PIPE STANDS. |
| 4 | 50mm DOMESTIC METER WITH LOW BYPASS SETTER. METERS > 50mm REQUIRE SEPARATE VAULT. |

Coquitlam Water Utility

VAULT FOR 100mm-150mm DOUBLE DETECTOR CHECK (AE CONCRETE MODEL 2121 VAULT)

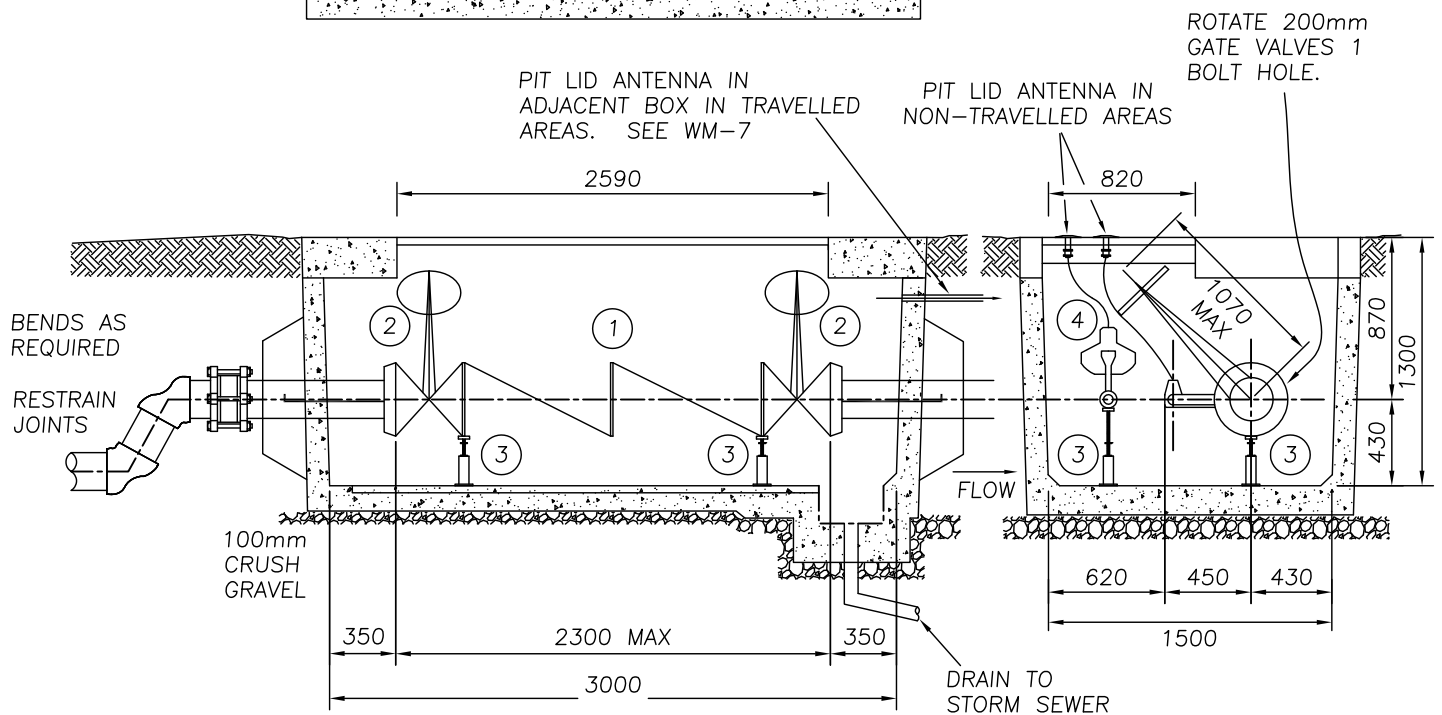
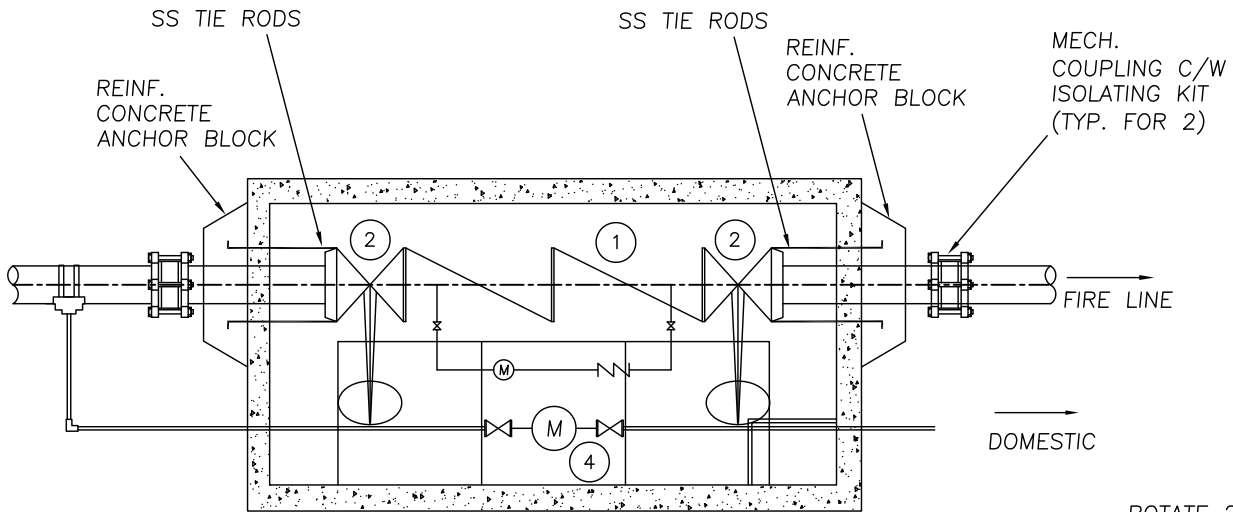
| | | | | |
|--------------------|-------------------|-------------|-------------------|------|
| minor text changes | 6 | 07/15 | D.K.S. | |
| minor text changes | 5 | 01/15 | D.K.S. | |
| REVISIONS | No. | DATE: | CKD. | APP. |
| DESIGNED BY: MC | DRAWN BY: A.S.K. | CHECKED BY: | APPROVED BY: | |
| SCALE: N.T.S. | DATE: NOV 5, 1996 | | DRAWING NO.: WM-6 | |



Coquitlam Water Utility

PIT PAD INSTALLATION Travelled Areas

| | | | | | | |
|--------------------|--------------------|-------------|-------------------|-------|--------|------|
| minor text changes | | | 3 | 07/15 | D.K.S. | |
| minor text changes | | | 2 | 01/15 | D.K.S. | |
| REVISIONS | | | No. | DATE: | CKD. | APP. |
| DESIGNED BY: MC | DRAWN BY: A.S.K. | CHECKED BY: | APPROVED BY: | | | |
| SCALE: N.T.S. | DATE: JUL 20, 2001 | | DRAWING NO.: WM-7 | | | |



NOTES
 PIPE: TO BE TYPE K COPPER, BRASS, EPOXY COATED WELDED STEEL OR SS.

CONNECTIONS:
 BRASS: IPT
 COPPER: COMPRESSION OR VICTAULIC. NO SOLDER PERMITTED
 STEEL: FLANGED, "UNIFLANGE", "EZ FLANGE" OR VICTAULIC

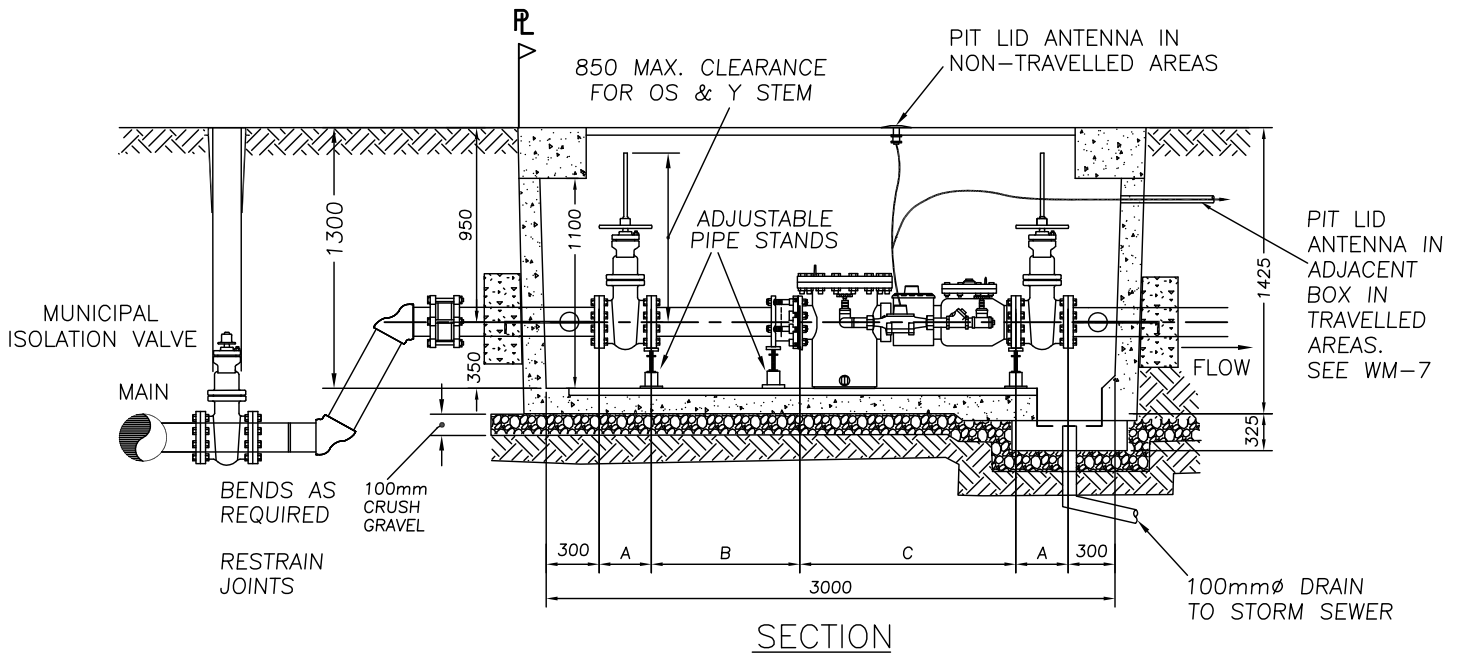
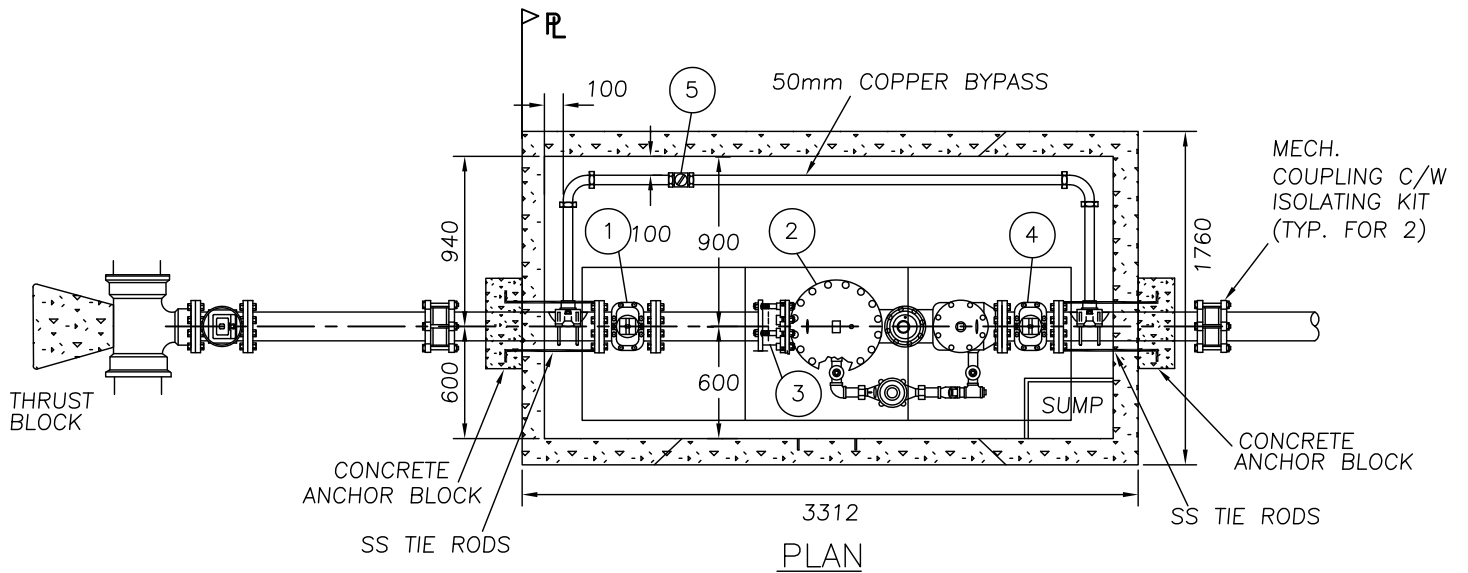
AS PER BC BUILDING CODE 3.2.4.9.1), 2) & 3), VALVE HANDWHEELS CONTROLLING THE FIRE WATER SERVICE SHALL BE ELECTRICALLY SUPERVISED AND MONITORED.

| No. | DESCRIPTION |
|-----|--|
| 1 | FM APPROVED ULC LISTED DOUBLE DETECTOR CHECK ASSEMBLY C/W 2 OS & Y GATE VALVES, TEST COCKS, METER AND BY PASS. |
| 2 | "UNIFLANGE" OR "MEGA LUG" FLANGE ADAPTORS. |
| 3 | ADJUSTABLE PIPE STANDS. |
| 4 | 50mm DOMESTIC METER WITH LOW BYPASS SETTER. METERS > 50mm REQUIRE SEPARATE VAULT. |

Coquitlam Water Utility

VAULT FOR 200mm DOUBLE DETECTOR CHECK (AE CONCRETE MODEL 3151 VAULT)

| | | | | |
|--------------------|-------------------|-------------|-------------------|------|
| minor text changes | 6 | 07/15 | D.K.S. | |
| minor text changes | 5 | 01/15 | D.K.S. | |
| REVISIONS | No. | DATE: | CKD. | APP. |
| DESIGNED BY: MC | DRAWN BY: A.S.K. | CHECKED BY: | APPROVED BY: | |
| SCALE: N.T.S. | DATE: NOV 5, 1996 | | DRAWING NO.: WM-8 | |



| No. | DESCRIPTION |
|-----|---|
| 1 | UPSTREAM RESILENT SEAT GATE VALVE (OS & Y) |
| 2 | METER, NEPTUNE PROTECTUS III OR SENSUS COMPACT FIRE LINE. |
| 3 | MECHANICAL FLANGE ADAPTOR |
| 4 | DOWNSTREAM RESILENT SEAT GATE VALVE (OS & Y) |
| 5 | BYPASS BALL VALVE WITH LOCKWING |

NOTES
 PIPE: TO BE TYPE K COPPER, BRASS, EPOXY COATED WELDED STEEL OR SS.

CONNECTIONS:
 BRASS: IPT
 COPPER: COMPRESSION OR VICTAULIC. NO SOLDER PERMITTED
 STEEL: FLANGED, "UNIFLANGE", "EZ FLANGE" OR VICTAULIC

AS PER BC BUILDING CODE 3.2.4.9.1), 2) & 3), VALVE HANDWHEELS CONTROLLING THE FIRE WATER SERVICE SHALL BE ELECTRICALLY SUPERVISED AND MONITORED.

| DIMENSIONS | |
|------------|------------|
| METER | 150 ϕ |
| A | 267 |
| B | 723 |
| C* | 1143 |

* VERIFY THIS DIMENSION WITH MANUFACTURER

| Coquitlam Water Utility | | | |
|---|------------------|-------------|-------------------|
| 150 mm ϕ FIRE/DOMESTIC METER (AE CONCRETE MODEL 3151 VAULT) | | | |
| minor text changes | 5 | 07/15 | D.K.S. |
| minor text changes | 4 | 01/15 | D.K.S. |
| REVISIONS | | No. | DATE: CKD. APP. |
| DESIGNED BY: MC | DRAWN BY: A.S.K. | CHECKED BY: | APPROVED BY: |
| SCALE: N.T.S. | DATE: 6/08/99 | | DRAWING NO.: WM-9 |



**City of Coquitlam
REQUEST FOR PROPOSALS
RFP No. 16-04-04**

Water Meters, Registers, and Parts

**Proposals will be received on or before 2:00 pm local time
Thursday, May 26, 2016
(Closing date and time)**

Proposal Submission Instructions

Proposal submissions are to be consolidated into one (1) .pdf file and uploaded electronically through Qfile, the City's file transfer service accessed at website: qfile.coquitlam.ca/bid

1. In the "Subject" field enter: RFP Number and Name
2. Add .pdf file and Send
(Ensure your web browser remains open until you receive 2 emails from Qfile to confirm upload is complete.)

Proponents are responsible to allow ample time to complete the submission process.

For assistance phone 604-927-3060 or Fax 604-927-3035.

Proposal Submission Form

**Complete and return this Proposal Submission Form with:
Appendix A – Product Information and Price Worksheet**

Submitted by: _____
(company name)

1. PRICE

1.1. Price

All products provided are to be in accordance with all governing regulatory authorities within the City of Coquitlam. The following Prices proposed are to be firm for the initial term and be F.O.B. destination to either the City’s Works Yard or various job sites within the City. In some cases, deliveries may need to be staged along a worksite.

Also refer to:

- Appendix A – Product Information and Price Worksheet
- Appendix B – Water Meter Specifications

Quantities provided are based on historical and forecasted annual usage and are provided as a guideline of the City’s requirements. Actual quantities will vary. Items with zero for a quantity are provided to establish pricing. The City may order these items as required.

1.2. Minimum Order Quantities

State any minimum order quantities the City should be aware of. Minimum order quantities could include a minimum order value, minimum weight of order, or minimum pieces per order.

2. DELIVERY LEAD TIME

State the lead time from the time of order to the time of delivery.

3. PRODUCT RETURNS

Specify any product return policies and indicate if a restocking fee would apply.

| Product Returns | |
|-----------------|---|
| Return Policy | Restocking Fee (yes/no) If yes, provide fee. |
| | |
| | |

4. WARRANTY

Indicate the warranty for the Water Meters, Registers, and Parts

5. PERSONNEL

Provide list of personnel that would be assigned to this contract.

The City may request verification at any time for any personnel listed.

| Personnel | | | |
|-----------|----------------------|--------------------|---------------------|
| Name | Position | Related Experience | Contact Information |
| | Sales Representative | | |
| | Technical Support | | |

6. NON-COMPLIANCE

Fully describe any deviations to the requirements outlined in this RFP that your company is unable to comply with.

7. SUSTAINABLE PRACTISES AND INITIATIVES

Describe all initiatives, policies or programs that illustrate your efforts towards sustainable practises and responsibility in providing the services.

(Social/Ethical, Environmental, Economic/Financial)

8. VALUE ADDED

Provide information on what makes your firm innovative, what is your competitive advantage, and what other services your firm provides that would assist or be of benefit to the City. For example, reviewing orders or drawings and proposing alternate solutions, cost saving measures, product use training, new product demos, etc.

| |
|--|
| |
|--|

9. CONFLICT OF INTEREST

Proponents must disclose information regarding any relationships that may be perceived to be a conflict of interest.

| |
|--|
| |
| |

10. ADDENDA

We acknowledge receipt of the following Addenda related to this Request for Proposals and have incorporated the information received in preparing this Proposal:

| Addendum No. | Date Issued |
|--------------|-------------|
| | |
| | |
| | |

11. EXPERIENCE AND REFERENCES

Proponents shall be competent and experienced in providing the goods and services in this RFP to other municipalities. Provide **municipal** references for contracts for the supply of similar goods. By submitting a proposal, Proponents agree the City may contact and verify the references provided:

| | |
|----------------------------|--|
| Year Started | |
| Year Completed | |
| Company | |
| Contact Person | |
| Telephone and Email | |
| Contract Value | |

| | |
|----------------------------|--|
| Year Started | |
| Year Completed | |
| Company | |
| Contact Person | |
| Telephone and Email | |
| Contract Value | |

12. ACCEPTANCE

The City requests that Proposals remain open for acceptance for a period of not less than sixty (60) days from the closing date.

We, the undersigned, confirm that this proposal is open for acceptance by the City for a period of: _____ days.

13. AUTHORIZATION

We hereby submit our Proposal for the supply of goods as specified and in strict accordance with all referenced Terms & Conditions, Regulations and Codes, Specifications, and information provided in this RFP.

| | |
|--|-------------------|
| Company Name: | |
| Address: | |
| Phone: | |
| GST Registration No.: | |
| Project Contact: Name and Title of Individual <i>for communication related to this RFP</i> (please print) | |
| Contact Email: | |
| Name & Title of Authorized Signatory: (please print) | |
| | Signature: |
| Date: | |

The signature is an authorized person of the organization and declares the statements made in their submission are true and accurate.

For the purpose of this RFP, electronic signatures will be accepted.