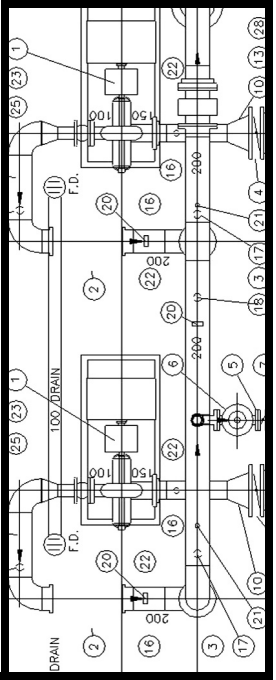

Tender Documents

Resort Municipality of Whistler

January 2025

2025 Sewer and Water Valve and Fitting Repairs
Contract No. E20508 – E32006

Owner: Resort Municipality of Whistler
(NAME OF OWNER)

Contract: 2025 Sewer and Water Valve and Fitting Repairs
(TITLE OF CONTRACT)

Reference No. E20508-E32006
(OWNER'S CONTRACT REFERENCE NO.)

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Appendix C: Environmental Management Plan ..... 24 Pages

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Owner: Resort Municipality of Whistler
(NAME OF OWNER)

Contract: 2025 Sewer and Water Valve and Fitting Repairs
(TITLE OF CONTRACT)

Reference No. E20508-E32006
(OWNER'S CONTRACT REFERENCE NO.)

The Owner invites tenders for: Project works described below:

Sewer:

- Replacement of 8 – fittings (bends and couplings) on sanitary sewer forcemain
- Investigation of 1 – coupling on sanitary sewer forcemain
- Bypass required for replacements.

Water:

- Replacement of 2 - hydrant assemblies
- Replacement of 9 - gate valves ranging from 150mmØ to 300mmØ
- Replacement of 8 – bends
- Replacement of 5 – tees

(BRIEF DESCRIPTION OF THE WORK)

Contract Documents **are available during normal business hours at:** This Tender is being issued electronically through the Bid Opportunity website (https://www.whistler.ca/business/doing-business/bid-opportunities/) and BC Bid (www.bcbid.gov.bc.ca) where any interested party may download the Tender documents directly from the aforementioned website. No registration, tracking or other recording of Tender document holders will be performed by the Resort Municipality of Whistler. All addenda, amendments or further information will be published on the RMOW Bid Opportunity website and BC Bid website. It is the sole responsibility of the Tenderer to monitor the website regularly to check for updates.
(LIST ADDRESSES FOR DOCUMENT PICKUP)

The *Contract Documents* are available for viewing at: Resort Municipality of Whistler
Municipal Hall
4325 Blackcomb Way
Whistler, BC V0N 1B4
(ADDRESS WHERE CONTRACT DOCUMENTS CAN BE VIEWED)

Tenders are scheduled to close:

Tender Closing Time: 2:00pm local time

Tender Closing Date: February 3, 2025

Address: Resort Municipality of Whistler
engineerbids@whistler.ca
(E-MAIL WHERE TENDERS MUST BE SUBMITTED ELECTRONICALLY)

Name of *Owner's* representative: Graham Schulz, P.Eng.
Contract Administrator
gschulz@islengineering.com
604-815-4646
(PHONE)

1.0 Introduction.....IT – 1

2.0 Tender Documents .....IT – 2

3.0 Submission of Tenders .....IT – 2

4.0 Supplemental Instructions to Tenderers..... IT – 3-8

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(FOR USE WHEN UNIT PRICES FORM THE BASIS OF PAYMENT TO BE USED ONLY WITH THE GENERAL CONDITIONS AND OTHER STANDARD DOCUMENTS OF THE UNIT PRICE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS.)

(TO BE READ WITH "INSTRUCTIONS TO TENDERERS - PART II" CONTAINED IN THE EDITION OF THE PUBLICATION "MASTER MUNICIPAL CONSTRUCTION DOCUMENTS" SPECIFIED IN ARTICLE 2.2 BELOW)

Owner: Resort Municipality of Whistler
(NAME OF OWNER)

Contract: 2025 Sewer and Water Valve and Fitting Repairs
(TITLE OF CONTRACT)

Reference No. E20508-E32006
(OWNER'S CONTRACT REFERENCE NO.)

1.0 Introduction

1.1 Project works described below:

Sewer:

- Replacement of 8 – fittings (bends and couplings) on sanitary sewer forcemain
- Investigation of 1 – coupling on sanitary sewer forcemain
- Bypass required for replacements.

Water:

- Replacement of 2 - hydrant assemblies
- Replacement of 9 - gate valves ranging from 150mmØ to 300mmØ
- Replacement of 8 – bends
- Replacement of 5 – tees

(BRIEF DESCRIPTION OF THE WORK)

1.2 Direct all technical inquiries regarding the *Contract*, to:
Graham Schulz, P.Eng.
Contract Administrator
(NAME AND POSITION OF INDIVIDUAL WHO WILL ANSWER INQUIRIES)

Address: ISL Engineering and Land Services Ltd.
2nd Floor, 39470 Queens Way
Squamish, BC V8B 0Z5
Phone: 604-815-4646
Fax: 604-815-4647
Email: gschulz@islengineering.com

Direct all general inquiries regarding the *Contract*, to:

Chelsey Roberts, AScT
Manager of Infrastructure Services
(NAME AND POSITION OF INDIVIDUAL WHO WILL ANSWER INQUIRIES)

Address: Resort Municipality of Whistler
4325 Blackcomb Way
Whistler, BC V0N 1B4
engineerbids@whistler.ca
(E-MAIL WHERE INQUIRIES MUST BE SUBMITTED ELECTRONICALLY)
Phone: 604-905-9462
Email: croberts@whistler.ca

2.0 Tender Documents

2.1 The tender documents which a tenderer should review to prepare a tender consist of all of the *Contract Documents* listed in Schedule 1 entitled "Schedule of Contract Documents". Schedule 1 is attached to the Agreement which is included as part of the tender package. The *Contract Documents* include the drawings listed in Schedule 2 to the Agreement, entitled "List of *Contract Drawings*".

2.2 A portion of the *Contract Documents* are included by reference. Copies of these documents have not been included with the tender package. These documents are the Instructions to Tenderers - Part II, General Conditions, Specifications and Standard Detail Drawings. They are those contained in the publication entitled "Master Municipal Construction Documents - General Conditions, Specifications and Standard Detail Drawings". Refer to Schedule 1 to the Agreement or, if not specified in Schedule 1, then the applicable edition shall be the most recent edition as of the date of the *Tender Closing Date.* All sections of this publication are by reference included in the *Contract Documents*.

2.3 Any additional information made available to tenderers prior to the *Tender Closing Time* by the *Owner* or representative of the *Owner,* such as geotechnical reports or as-built plans, which is not expressly included in Schedule 1 or Schedule 2 to the Agreement, is not included in the *Contract Documents*. Such additional information is made available only for the assistance of tenderers who must make their own judgment about its reliability, accuracy, completeness and relevance to the *Contract*, and neither the *Owner* nor any representative of the *Owner* gives any guarantee or representation that the additional information is reliable, accurate, complete or relevant.

3.0 Submission of Tenders

3.1 Tenders must be submitted electronically to the email address noted below. The email should indicate the Contract Title and Contract No. (See Tender Documents cover page) in the subject line and the proponents full legal name in the body of the email.
Tenderers should note that the maximum acceptable email size is 8MB. If greater than 8GB the Tenderer should email response in multiple emails with each email indicating the total number of emails being sent. All emails must be received prior to the Submission Deadline.

on or before
Tender Closing Time: 2:00pm local time
Tender Closing Date: February 3, 2025

at
Address: Resort Municipality of Whistler
engineerbids@whistler.ca

(ADDRESS WHERE TENDERS MUST BE SUBMITTED)

Fax: n/a

3.2 Late tenders will not be accepted or considered.

3.3 Depending on the available funds to complete the work program, the scope of the work may be decreased due to budget constraints. The *Owner* reserves the right to reduce or remove projects based on available funds.

4.0 Supplemental Instructions to Tenderers

4.1 Completing the Form of Tender

The submitted Form of Tender must be legible, written in ink, or by typewriter and ALL ITEMS MUST BE BID, unless the Form of Tender specifically permits
otherwise, with the price for every item and other extras clearly shown. Each page must be initialed by the Tenderer.

The Tenderer shall be deemed to have satisfied himself as to the sufficiency of their tender for the work and of the unit and lump sum prices stated in the Form of Tender. These unit prices shall cover all their costs including overhead, profit and tax, except for the Goods and Services Tax as explained in the following paragraphs of this section, for carrying out the works and their obligations under this Contract.

This document contains one extra separate set of the Form of Tender. The Contractor shall complete and submit the separate set of the Form of Tender, in accordance with the Instructions to Tenderers and keep the remaining documents for record purposes.

The "Amount" column shall be totaled in groups of items as shown and each total for a group of items shall be carried to the Summary Sheet for insertion in the appropriate place. The totals for all groups of items shall be added to give the Total Tender Price, Goods and Services Tax of 5% shall be calculated separately then added to arrive at the Total Tender Price including GST.

4.2 Right to Accept or Reject Tenders

The Owner reserves the right to reject any or all tenders or to accept any tender should it be deemed in the interest of Owner to do so. The lowest tender will not necessarily be accepted.

For each item listed in the Form of Tender, there shall be a reasonable unit price. Under no conditions will an unbalanced tender be considered. The Contract Administrator will be the sole judge of such matters. Any tender considered to be unbalanced shall be rejected by the Owner.

Without limiting the generality of the foregoing, any tender may be disqualified or rejected which is incomplete, obscure or irregular, which had erasures or corrections in the Form of Tender, in which prices are omitted or which has an insufficient or irregular Surety.

4.3 Award

The Owner will, following receipt of an acceptable tender, issue in writing a Notice of Award to the successful Tenderer. This notice will be given as soon as possible following the closing of tenders and, unless otherwise agreed to by the Tender, not later than sixty (60) days following the closing of tenders.

The following amendments reference Instructions to Tenderers - Part II:

12.1S	Amendment of Tenders	Change “hand, mail or fax” to “hand” and add “An amendment by email or fax will not be accepted.”
15.4S	Award	Insert the following clause: “The lowest or any tender will not necessarily be accepted. Without limiting the generality of the foregoing, any tender which is incomplete, obscure or irregular may be rejected, any tender having erasures or corrections in the Form of Tender: Appendix 1, Schedule of Quantities & Prices may be rejected, any tender in which unit prices are omitted or in which unit prices are obviously unbalanced may be rejected, any tender accompanied by an insufficient bond may be rejected, any tender that has any deletions, alterations, or changes in the *Contract Documents* as listed in Schedule 1 and 2 of the Agreement may be rejected.”
15.5S		Insert the following clause: In exercising its discretion, the *Owner* will have regard to the information provided by the tenderer in the Appendices to the Form of Tender as described under IT 5.3, and may also have regard to any information obtained by the *Owner* in evaluation of such tender information, any information obtained by the Owner from any other person, firm or corporation relating to their previous experience with the tenderer, as well as the *Owner’s* previous relevant experience, if any, with the tenderer. In exercising this discretion the *Owner* may consider, but is not limited to, the following criteria in addition to the *Tender Price.* a) the proven experience of the tenderer, and any listed subcontractors to do the *Work;*

b) the tenderer's ability to complete the *Work* within the *Preliminary Construction Schedule* including timeliness in completing deficiency works;

c) the tenderer's ability to work effectively with the *Owner*, its consultants and representatives, and the public;

d) the tenderer's ability to manage and do the work effectively using the named superintendent and submitted contractors and subcontractors;

e) the tenderer's history on other projects including with respect to quality of work, changes in the work, force account work, cooperation with the Owner, and the contract administration costs of the *Owner;*

f) the nature of any legal proceedings undertaken by the tenderer, or any officer or director of the tenderer directly (or indirectly through another corporation) against the *Owner* within the last five years of the Invitation to Tender.

In no event shall the Owner be liable for the tenderer's costs of preparing a tender.

The award of this Contract is subject to the availability of sufficient funds to complete the work.

Basis of Contract Award & Acceptance

In reviewing tenders and awarding the *Contract* for this project the *Owner* may consider not only the tendered prices but the overall value that the tender represents to the *Owner* based on quality, service and price, and the tenderer's experience and qualifications considered essential by the *Owner* for the satisfactory completion of this type and size of project, including:

a) Bonding capability.

b) Financial capability.

c) Previous completed projects of this type and/or size.

d) Major projects now being undertaken by the tenderer.

e) Key office and site personnel to be assigned by the tenderer to this project.

f) Time for completion of the *Work*.

g) The past experience of the *Owner* and/or other project owners with respect to the tenderer's performance in completing projects in a timely, efficient and satisfactory manner, the tenderer's methods of doing business and the tenderer's ability to establish and maintain a good working relationship with a project owner.

The *Owner* reserves the right to award the *Contract* based on the above pre-requisites and to reject without further consideration, any tender which in its opinion, does not meet the criteria it considers essential for this project.

The tenderer, by submitting a tender, agrees that it will not make a claim against the *Owner*, for whatever reason, relating to the tender, the tender documents, or the competitive tender process. The tenderer, by submitting a tender, waives any claim or recovery for loss of profits or any prospective damages whatsoever if no *Contract* is entered into with the tenderer.

4.4 Contract Time

The Tenderer may alter the contract time noted in the Form of Tender; however, they shall be responsible for inspection costs incurred for each working day beyond the noted time subject to the Provisions of the General Conditions. The applicable cost will be $1,500.00 per working day.

4.5 Hours of Work

The hours of work for all project sections must not extend beyond 0700h and 2000h, inclusive, daily. The Contractor shall schedule their work within these hours and will not be permitted to commence work earlier than 0700h and/or work later than 2000h, except as authorized by the Contract Administrator.

No work on Saturdays, Sundays, or Statutory Holidays will be permitted except in case of emergency and then only with written permission of the Contract Administrator and to such extent as they deem necessary.

The Owner reserves the right not to allow any work to be undertaken on Weekends or Statutory Holidays.

4.6 Budget Constraints

Depending on the available funds to complete the capital works program, the scope of work may be decreased due to budget constraints. The Owner reserves the right to reduce or remove projects based on available funds.

4.7 Note that the MMCD (this Contract is based on the **2009 Platinum Edition**) must be purchased separately from:

MMCD
102, 211 Columbia Street
Vancouver, BC V6A 2R5

Phone: 604-681-0295
Fax: 604-681-4545
Email: admin@mmcd.net

4.8 **Contractor is to familiarize himself/herself with IT Part II – Section 10.0**

Add IT Part II – Section 10.3
"It shall be the responsibility of the Tenderer to include in their tender sufficient amounts to cover the cost of the work and materials not listed in the Schedule of Quantities and Unit Prices and specifications by either direct mention or implication. All such amounts shall be included in the items to which they pertain most closely in the Schedule of Quantities and Unit Prices.

FOR USE WHEN UNIT PRICES FORM THE BASIS OF PAYMENT - TO BE USED ONLY WITH THE GENERAL CONDITIONS AND OTHER STANDARD DOCUMENTS OF THE UNIT PRICE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS.

Owner: Resort Municipality of Whistler
(NAME OF OWNER)

Contract: 2025 Sewer and Water Valve and Fitting Repairs
(TITLE OF CONTRACT)

Reference No. E20508-E32006
(OWNER'S CONTRACT REFERENCE NO.)

To *Owner:*

WE, THE UNDERSIGNED:

1.1 have received and carefully reviewed all of the *Contract Documents*, including the Instructions to Tenderers, the specified edition of the "Master Municipal Construction Documents - General Conditions, Specifications and Standard Detail Drawings" and the following Addenda:

_____

_____

_____
(ADDENDA, IF ANY)

1.2 have full knowledge of the *Place of the Work*, and the *Work* required; and

1.3 have complied with the Instructions to Tenderers; and

ACCORDINGLY WE HEREBY OFFER:

2.1 to perform and complete all of the *Work* and to provide all the labour, equipment and material all as set out in the *Contract Documents*, in strict compliance with the *Contract Documents*; and

2.2 to achieve Substantial Performance of the Work on or before September 5, 2025; and
(WORK DURATION OR DATE)

2.3 to do the *Work* for the price, which is the sum of the products of the actual quantities incorporated into the *Work* and the appropriate unit prices set out in Appendix 1, the *"Schedule of Quantities and Prices"*, plus any lump sums or specific prices and adjustment amounts as provided by the *Contract Documents*. For the purposes of tender comparison, our offer is to complete the *Work* for the *"Tender Price"* as set out on Appendix 1 of this Form of Tender. Our *Tender Price* is based on the estimated quantities listed in the *Schedule of Quantities and Prices*, and excludes GST.

WE CONFIRM:

3.1 that we understand and agree that the quantities as listed in the *Schedule of Quantities and Prices* are estimated, and that the actual quantities will vary.

3.2 that we understand and agree that the *Owner* is in no way obligated to accept this Tender.

WE CONFIRM:

4.1 that the following appendices are attached to and form a part of this tender:

4.1.1 the appendices as required by paragraph 5.3 of the Instructions to Tenderers – Part II; and

4.1.2 the *Bid Security* as required by paragraph 5.2 of the Instructions to Tenderers – Part II.

4.1.3 the *Consent of Security* - Performance, Labour and Materials Payment filled and signed.

WE AGREE:

5.1 that this tender will be irrevocable and open for acceptance by the *Owner* for a period of 60 calendar days from the day following the *Tender Closing Date and Time*, even if the tender of another tenderer is accepted by the *Owner*. If within this period the *Owner* delivers a written notice ("*Notice of Award*") by which the *Owner* accepts our tender we will:

5.1.1 within 10 *Days* of receipt of the written *Notice of Award* deliver to the *Owner*:

1. a Performance Bond and a Labour and Material Payment Bond, each in the amount of 50% of the Contract Price, covering the performance of the Work including the Contractor's obligations during the Maintenance Period, issued by a surety licensed to carry on the business of suretyship in the province of British Columbia, and in a form acceptable to the Owner;

2. a Baseline Construction Schedule, as provided by GC 4.6.1;

3. a "clearance letter" indicating that the tenderer is in Worksafe BC compliance; and

4. a copy of the insurance policies as specified in GC 24 indicating that all such insurance coverage is in place and;

5.1.2 within 2 *Days* of receipt of written "*Notice to Proceed*", or such longer time as may be otherwise specified in the *Notice to Proceed*, commence the *Work*; and

5.1.3 sign the Contract Documents as required by GC 2.1.2.

WE AGREE:

6.1 that, if we receive written *Notice of Award* of this *Contract* and, contrary to paragraph 5 of this Form of Tender, we:

6.1.1 fail or refuse to deliver the documents as specified by paragraph 5.1.1 of this Form of Tender; or

6.1.2 fail or refuse to commence the *Work* as required by the *Notice to Proceed*, then such failure or refusal will be deemed to be a refusal by us to enter into the *Contract* and the *Owner* may, on written notice to us, award the *Contract* to another party. We further agree that, as full compensation on account of damages suffered by the *Owner* because of such failure or refusal, the *Bid Security* shall be forfeited to the *Owner*, in an amount equal to the lesser of:

6.1.3 the face value of the *Bid Security*; and

6.1.4 the amount by which our *Tender Price* is less than the amount for which the *Owner* contracts with another party to perform the *Work*.

OUR ADDRESS IS AS FOLLOWS:

_____

_____

_____

_____

Phone: _____

Fax: _____

Email: _____

Attention: _____

This Tender is executed this
_____day of _____, 20 _____.

Contractor:

_____

(FULL LEGAL NAME OF CORPORATION, PARTNERSHIP OR INDIVIDUAL)

_____

(AUTHORIZED SIGNATORY)

_____

(AUTHORIZED SIGNATORY)

Form of Tender - Appendix 1

2025 Sewer and Water Valve and Fitting Repairs

SCHEDULE OF QUANTITIES AND PRICES - TENDER

(See paragraph 5.3.1 of the Instructions to Tender - Part II)

(All prices and *Quotations* including the *Contract Price* shall include all *Taxes)*

TENDER SUMMARY SHEET

ITEM NO.	DESCRIPTION	AMOUNT
1.0	SEWER VALVE & FITTINGS	
2.0	WATER VALVE & FITTINGS	
	TENDER PRICE	
	GST @ 5%	
	TENDER PRICE plus GST	

ITEM NO.	MMCD REF.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1.0	**SEWER VALVE & FITTINGS**					
		MMCD 01 55 00 - TRAFFIC CONTROL, VEHICLE ACCESS AND PARKING				
1.01	1.5.2S	Traffic Control	L.S.	1		
		MMCD 31 23 01 - EXCAVATING, TRENCHING, AND BACKFILLING				
1.02	1.10.9S	Overexcavation with Offsite Disposal - Includes Backfilling ***(Optional)***	Cu.M.	30		
		MMCD 32 12 16 - HOT-MIX ASPHALT CONCRETE PAVING				
1.03	1.5.9S	100mm Hot-Mix Asphalt (two lifts) c/w 150mm 19mm Minus Sub-base (Roads)	Sq.m	320		
1.04	1.5.9S	75mm Hot-Mix Asphalt (one lift) c/w 150mm 19mm Minus Sub-base (Sidewalks & Valley Trail)	Sq.m	45		
		MMCD 33 34 01 - SEWAGE FORCEMAINS				
1.05	1.8.2S	Replacement of 400mmØ 21.0° Bend with 22.5° Bend **(S2-1)** as per Contract Drawings	L.S.	1		
1.06	1.8.2S	Replacement of 400mmØ 12.0° Bend with 11.25° Bend **(S2-2)** as per Contract Drawings	L.S.	1		
1.07	1.8.2S	Replacement of 400mmØ 20.5° Bend with 22.5° Bend **(S2-3)** as per Contract Drawings	L.S.	1		
1.08	1.8.2S	Replacement of 400mmØ 40.5° Bend with 45.0° Bend **(S2-4)** as per Contract Drawings	L.S.	1		
1.09	1.8.2S	Replacement of 400mmØ 16.5° Bend with 11.25° Bend **(S2-5)** as per Contract Drawings	L.S.	1		
1.10	1.8.2S	Daylight of 400mmØ Coupling **(S2-5A)** as per Contract Drawings	L.S.	1		
1.11	1.8.2S	Replacement of 400mmØ Coupling **(S2-5A)** as per Contract Drawings ***(Optional)***	L.S.	1		
1.08	1.8.2S	Replacement of 400mmØ 22.0° Bend with 22.5° Bend **(S2-6)** as per Contract Drawings	L.S.	1		
1.10	1.8.2S	Replacement of 400mmØ 26.0° Bend with 22.5° Bend **(S2-7)** as per Contract Drawings	L.S.	1		
1.11	1.8.10S	Bypass of Ex. 400mmØ FM to Facilate **S2-1 to S2-7** Fitting Replacements	L.S.	1		
				Subtotal Carry Forward to Schedule of Quantities Summary Item 1.0		

ITEM NO.	MMCD REF.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
2.0	**WATER VALVE & FITTINGS**					
		MMCD 01 55 00 - TRAFFIC CONTROL, VEHICLE ACCESS AND PARKING				
2.01	1.5.2S	Traffic Control	L.S.	1		
		MMCD 31 23 01 - EXCAVATING, TRENCHING, AND BACKFILLING				
2.02	1.10.9S	Overexcavation with Offsite Disposal - Includes Backfilling **(Optional)**	Cu.M.	30		
		MMCD 32 12 16 - HOT-MIX ASPHALT CONCRETE PAVING				
2.03	1.5.9S	100mm Hot-Mix Asphalt (two lifts) c/w 150mm 19mm Minus Sub-base (Roads)	Sq.m	225		
		MMCD 33 11 01 - WATERWORKS				
2.04	1.8.2S/1.8.3S/1.8.13S	2 - 250mmØ 22.5° Veritical Bends **(W4-5 & W4-6)** as per Contract Drawings	L.S.	1		
2.05	1.8.2S/1.8.3S/1.8.13S/1.8.14S	250mm x 250mm x 150mmØ Tee,150mmØ Gate Valve, Hydrant Assembly **(W4-4)** as per RMOW Standards and Contract Drawings	L.S.	1		
2.06	1.8.2S/1.8.3S//1.8.13S	250mmØ 45° Horizontal Bend **(W4-3)** as per Contract Drawings	L.S.	1		
2.07	1.8.2S/1.8.3S/1.8.13S	250mmØ 45° Horizontal Bend **(W4-2)** as per Contract Drawings	L.S.	1		
2.07	1.8.2S/1.8.3S/1.8.13S	300mm x 300mm x 250mmØ Tee, 2 x 300mmØ Gate Valves, 1 x 250mmØ Gate Valve **(W4-1)** as per Contract Drawings	L.S.	1		
2.08	1.8.2S/1.8.3S//1.8.13S/1.8.14S	300mm x 300mm x 150mmØ Tee,150mmØ Gate Valve, Hydrant Assembly **(W5-1)** as per RMOW Standards and Contract Drawings	L.S.	1		
2.09	1.8.2S/1.8.3S//1.8.13S	300mm x 300mm x 150mmØ Tee,150mmØ Gate Valve **(W5-2)** as per Contract Drawings	L.S.	1		
2.10	1.8.2S/1.8.3S//1.8.13S	300mmØ 11.25° Horizontal Bend **(W5-3)** as per Contract Drawings	L.S.	1		
2.11	1.8.2S/1.8.3S/1.8.13S	300mmØ 45° Horizontal Bend **(W5-4)** as per Contract Drawings	L.S.	1		
2.12	1.8.2S/1.8.3S//1.8.13S	300mmØ 45° Horizontal Bend **(W5-5)** as per Contract Drawings	L.S.	1		
2.13	1.8.2S/1.8.3S//1.8.13S	300mm x 300mm x 200mmØ Tee, 2 x 300mmØ Gate Valves, 200mmØ Gate Valve, **(W5-5A)** as per Contract Drawings	L.S.	1		
2.14	1.8.2S/1.8.3S//1.8.13S	300mmØ 45° Horizontal Bend **(W5-7)** as per Contract Drawings	L.S.	1		
				Subtotal Carry Forward to Schedule of Quantities Summary Item 2.0		

APPENDIX 2
PRELIMINARY CONSTRUCTION SCHEDULE

See paragraph 5.3.2 of the Instructions to Tenderers – Part II.

Owner: Resort Municipality of Whistler
(NAME OF OWNER)

Contract: 2025 Sewer and Water Valve and Fitting Repairs
(TITLE OF CONTRACT)

Reference No. E20508-E32006
(OWNER'S CONTRACT REFERENCE NO.)

Indicate Schedule with bar chart with major item descriptions and time.

MILESTONE DATE: Substantial Performance on or before September 5, 2025

ACTIVITY	CONSTRUCTION SCHEDULE								
	1	2	3	4	5	6	7	8	9
	10	11	12	13	14	15	16	17	18

Tenderer's Initials_____

APPENDIX 3
EXPERIENCE OF SUPERINTENDENT

See paragraph 5.3.3 of the Instructions to Tenderers – Part II.

Owner: Resort Municipality of Whistler
(NAME OF OWNER)

Contract: 2025 Sewer and Water Valve and Fitting Repairs
(TITLE OF CONTRACT)

Reference No. E20508-E32006
(OWNER'S CONTRACT REFERENCE NO.)

Name: _____
Experience:

Dates: _____
Project Name: _____
Responsibility: _____

References: _____

Dates: _____
Project Name: _____
Responsibility: _____

References: _____

Dates: _____
Project Name: _____
Responsibility: _____

References: _____

Dates: _____
Project Name: _____
Responsibility: _____

References: _____

APPENDIX 4
COMPARABLE WORK EXPERIENCE

See paragraph 5.3.4 of the Instructions to Tenderers – Part II.

Owner: Resort Municipality of Whistler
(NAME OF OWNER)

Contract: 2025 Sewer and Water Valve and Fitting Repairs
(TITLE OF CONTRACT)

Reference No. E20508-E32006
(OWNER'S CONTRACT REFERENCE NO.)

PROJECT	OWNER / CONTACT NAME PHONE and FAX	WORK DESCRIPTION	VALUE ($)
	Owner / Contract ____________ Email ____________ Phone ( ) ________ Fax ( ) ________		
	Owner / Contract ____________ Email ____________ Phone ( ) ________ Fax ( ) ________		
	Owner / Contract ____________ Email ____________ Phone ( ) ________ Fax ( ) ________		
	Owner / Contract ____________ Email ____________ Phone ( ) ________ Fax ( ) ________		
	Owner / Contract ____________ Email ____________ Phone ( ) ________ Fax ( ) ________		
	Owner / Contract ____________ Email ____________ Phone ( ) ________ Fax ( ) ________		
	Owner / Contract ____________ Email ____________ Phone ( ) ________ Fax ( ) ________		
	Owner / Contract ____________ Email ____________ Phone ( ) ________ Fax ( ) ________		
	Owner / Contract ____________ Email ____________ Phone ( ) ________ Fax ( ) ________		

APPENDIX 5
SUBCONTRACTORS

See paragraph 5.3.5 of the Instructions to Tenderers – Part II.

Owner: Resort Municipality of Whistler
(NAME OF OWNER)

Contract: 2025 Sewer and Water Valve and Fitting Repairs
(TITLE OF CONTRACT)

Reference No. E20508-E32006
(OWNER'S CONTRACT REFERENCE NO.)

TENDER ITEM	TRADE	SUBCONTRACTOR NAME	PHONE NUMBER

(FOR USE WHEN UNIT PRICES FORM THE BASIS OF PAYMENT TO BE USED ONLY WITH THE GENERAL CONDITIONS AND OTHER STANDARD DOCUMENTS OF THE UNIT PRICE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS.)

BETWEEN *OWNER* AND *CONTRACTOR*

This agreement made in duplicate this
_____ day of _____, 20___

Owner: Resort Municipality of Whistler
(NAME OF OWNER)

Contract: 2025 Sewer and Water Valve and Fitting Repairs
(TITLE OF CONTRACT)

Reference No. E20508-E32006
(OWNER'S CONTRACT REFERENCE NO.)

BETWEEN:
The Resort Municipality of Whistler
(NAME OF OWNER)
(the *"Owner")*

AND: _____
_____
_____
_____
(NAME AND OFFICE ADDRESS OF CONTRACTOR)
(the *"Contractor"*)

The *Owner* and the *Contractor* agree as follows:

Article 1 The Work Start / Completion Dates

1.1 The *Contractor* will perform all *Work* and provide all labour, equipment and material and do all things strictly as required by the *Contract Documents*.

1.2 The *Contractor* will commence the *Work* in accordance with the *Notice to Proceed*. The *Contractor* will proceed with the *Work* diligently, will perform the *Work* generally in accordance with the construction schedules as required by the *Contract Documents* and will achieve *Substantial Performance* of the *Work* on or before September 5, 2025 subject to
(INSERT DATE OF SUBSTANTIAL PERFORMANCE)
the provisions of the *Contract Documents* for adjustments to the *Contract Time*

1.3 Time shall be of the essence of the *Contract.*

Article 2 Contract Documents

2.1 The "*Contract Documents*" consist of the documents listed or referred to in Schedule 1, entitled "Schedule of Contract Documents", which is attached and forms a part of this Agreement, and includes any and all additional and amending documents issued in accordance with the provisions of the *Contract Documents*. All of the *Contract Documents* shall constitute the entire *Contract* between the *Owner* and the *Contractor*.

2.2 The *Contract* supersedes all prior negotiations, representations or agreements, whether written or oral, and the *Contract* may be amended only in strict accordance with the provisions of the *Contract Documents.*

Article 3 Contract Price

3.1 The price for the *Work* ("*Contract Price*") shall be the sum in Canadian dollars of the following:

1.1.1 the product of the actual quantities of the items of *Work* listed in the *Schedule of Quantities and Prices* which are incorporated into or made necessary by the *Work* and the unit prices listed in the *Schedule of Quantities and Prices*; plus

1.1.2 all lump sums, if any, as listed in the *Schedule of Quantities and Prices*, for items relating to or incorporated into the *Work*; plus

1.1.3 any adjustments, including any payments owing on account of *Changes* and agreed to *Extra Work*, approved in accordance with the provisions of the *Contract Documents.*

3.2 The *Contract Price* shall be the entire compensation owing to the *Contractor* for the *Work* and this compensation shall cover and include all profit and all costs of supervision, labour, material, equipment, overhead, financing, and all other costs and expenses whatsoever incurred in performing the *Work*.

Article 4 Payment

4.1 Subject to applicable legislation and the provisions of the *Contract Documents*, the *Owner* shall make payments to the *Contractor*.

4.2 If the *Owner* fails to make payments to the *Contractor* as they become due in accordance with the terms of the *Contract Documents* then interest calculated at 2% per annum over the prime commercial lending rate of the Royal Bank of Canada on such unpaid amounts shall also become due and payable until payment. Such interest shall be calculated and added to any unpaid amounts monthly.

Article 5 Rights and Remedies

5.1 The duties and obligations imposed by the *Contract Documents* and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

5.2 Except as specifically set out in the *Contract Documents*, no action or failure to act by the *Owner*, *Contract Administrator* or *Contractor* shall constitute a waiver of any of the parties' rights or duties afforded under the *Contract*, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach under the *Contract*.

Article 6 Notices

6.1 Communications among the *Owner*, the *Contract Administrator* and the *Contractor*, including all written notices required by the *Contract Documents*, may be delivered by hand, or by email, or by fax, or by pre-paid registered mail to the addresses as set out below:

The *Owner:*
Resort Municipality of Whistler
Municipal Hall
4325 Blackcomb Way
Whistler BC, V0N 1B4
Fax: n/a
Email: croberts@whistler.ca
Attention: Chelsey Roberts

The *Contractor:*

Fax:
Email:
Attention:

The Contract Administrator:
ISL Engineering and Land Services Ltd.
2nd Floor, 39470 Queens Way
Squamish BC, V8B 0Z5

Email: gschulz@islengineering.com
Attention: Graham Schulz, P.Eng., Contract Administrator

6.2 A communication or notice that is addressed as above shall be considered to have been received

1.1.4 immediately upon delivery, if delivered by hand; or

1.1.5 at the date and time as shown in the recipients inbox, if sent by email; or

1.1.6 immediately upon transmission if sent by fax and received in hard copy; or

1.1.7 after 5 *Days* from date of posting if sent by registered mail.

6.3 The *Owner* or the *Contractor* may, at any time, change its address for notice by giving written notice to the other at the address then applicable. Similarly if the *Contract Administrator* changes its address for notice then the *Owner* will give or cause to be given written notice to the *Contractor.*

6.4 The sender of a notice by fax or email assumes all risk that the fax or email is received.

Article 7 General

7.1 This *Contract* shall be construed according to the laws of British Columbia.

7.2 The *Contractor* shall not, without the express written consent of the *Owner*, assign this *Contract*, or any portion of this *Contract*.

7.3 The headings included in the *Contract Documents* are for convenience only and do not form part of this *Contract* and will not be used to interpret, define or limit the scope or intent of this *Contract* or any of the provisions of the *Contract Documents*.

7.4 A word in the *Contract Documents* in the singular includes the plural and, in each case, vice versa.

7.5 This agreement shall ensure to the benefit of and be binding upon the parties and their successors, executors, administrators and assigns.

IN WITNESS WHEREOF the parties hereto have executed this Agreement the day and year first written above.

Contractor:

(FULL LEGAL NAME OF CORPORATION, PARTNERSHIP OR INDIVIDUAL)

(AUTHORIZED SIGNATORY)

(AUTHORIZED SIGNATORY)

Owner:

(FULL LEGAL NAME OF CORPORATION, PARTNERSHIP OR INDIVIDUAL)

(AUTHORIZED SIGNATORY)

(AUTHORIZED SIGNATORY)

(INCLUDE IN LIST ALL DOCUMENTS INCLUDING, IF ANY, SUPPLEMENTARY GENERAL CONDITIONS, SUPPLEMENTARY SPECIFICATIONS,SUPPLEMENTARY STANDARD DETAIL DRAWINGS.)

Schedule 1 Schedule of Contract Documents

The following is an exact and complete list of the *Contract Documents*, as referred to in Article 2.1 of the Agreement.

***NOTE*:** The documents noted with "*" are contained in the "Master Municipal Construction Documents - General Conditions, Specifications and Standard Detail Drawings", edition dated Platinum Edition, 2009. All sections of this publication are included in the *Contract Documents.*

8.1 Agreement, including all Schedules;

8.2 Supplementary General Conditions (for MMCD Volume II, Platinum Edition, 2009);

8.3 General Conditions*;

8.4 Supplementary Specifications (for MMCD Volume II, Platinum Edition, 2009);

8.5 Specifications*;

8.6 Supplementary Standard Detail Drawings (if any, insert title and edition date);

8.7 Standard Detail Drawings*;

8.8 Executed Form of Tender, including all Appendices;

8.9 *Contract Drawings* listed in Schedule 2 to the Agreement –"List of *Contract Drawings*";

8.10 Instructions to Tenderers - Part I;

8.11 Instructions to Tenderers - Part II*;

8.12 The following Addenda:

_____

_____

_____

_____

(ADDENDA, IF ANY)

8.13 MMCD Supplementary Updates:

2022-04-07	2012-08-07
2021-04-23	2012-06-08
2020-08-04	2012-05-30
2016-11-18	2011-08-08
2015-11-02	2011-08-04
2014-09-19	PVC C900 Pipe Specification Clarification
2014-07-15	2010-05-18
2014-02-28	2010-03-25
2013-06-13	2009-11-19

As provided on website of tender closing date:www.mmcd.net

(COMPLETE LISTING OF ALL DRAWINGS, PLANS AND SKETCHES WHICH ARE TO FORM A PART OF THE CONTRACT, OTHER THAN STANDARD DETAIL DRAWINGS AND SUPPLEMENTARY STANDARD DETAIL DRAWINGS.)

Schedule 2 List of Contract Drawings

TITLE	DRAWING NO.	DATE	REVISION NO.	REVISION DATE
2025 SEWER AND WATER VALVE & FITTING REPAIRS	34048-2025-DET-001	09-Jan-25	1	09-Jan-25
2025 SEWER AND WATER VALVE & FITTING REPAIRS	34048-2025-SAN-001	26-Nov-24	1	26-Nov 24
2025 SEWER AND WATER VALVE & FITTING REPAIRS	34048-2025-SAN-002	26-Nov-24	1	26-Nov 24
2025 SEWER AND WATER VALVE & FITTING REPAIRS	34048-2025-WAT-001	26-Nov-24	1	26-Nov 24
2025 SEWER AND WATER VALVE & FITTING REPAIRS	34048-2025-WAT-002	26-Nov-24	1	26-Nov 24
2025 SEWER AND WATER VALVE & FITTING REPAIRS	34048-2025-WAT-003	26-Nov-24	1	26-Nov 24

Supplementary Specifications

These Supplementary Specifications must be read in conjunction with the Master Municipal Specifications contained in the Master Municipal Construction Documents, Volume II, Platinum Edition 2009.

SUPPLEMENTARY SPECIFICATIONS INDEX

DIVISION 01 – GENERAL REQUIREMENT
01 33 01S Project Record Documents
01 54 00S General Requirements
01 55 00S Traffic Control, Vehicle Access and Parking
01 57 01S Environmental Protection

DIVISION 31 – EARTHWORKS
31 05 17S Aggregate and Granular Materials
31 15 60S Dust Control
31 23 01S Excavating, Trenching, and Backfilling

DIVISION 32 – PAVING
32 12 16S Hot Mix Asphalt Concrete Paving

DIVISION 33 – UTILITIES
33 11 01S Waterworks
33 34 01S Sewage Forcemains

1.3 Submissions

.2 ***(replace clause 1.3.2 as follows)***

Submit one copy of project record documents in final form prior to applying for Substantial Performance. Substantial Performance will not be used until record documents (field mark-ups) have been submitted and accepted by the Contract Administrator.

1.7 Recording Actual Site Conditions

.2S .1 After “appurtenances” insert:

“including exact location of wyes along sanitary sewers and elevations of service connections at property lines”

.5S ***(add clause 1.7.5 as follows)***

The Contractor will keep one set of drawings on-site that will be marked up in red ink identifying all work completed and any changes made during the construction. This copy will be turned over to the Contract Administrator within 5 days of completion of all works.

The Contractor shall be responsible for the detailed setting out of the work and recording all data required to compile record drawings.

Payment for recording data for record drawings shall be considered incidental to the work performed and no additional payment will be made to the contractor.

END OF SECTION

1.0 Master Municipal Construction Documents

.1S The Supplementary Specifications contained herein must be read in conjunction with the Master Municipal Specifications contained in the Master Municipal Construction Documents, Volume II (**Platinum Edition 2009**) as identified in the Instructions to Tender article 2.2.

2.0 Format and Numbering System

.1S The Supplementary Contract Specifications follow the same format and numbering system as the Master Municipal Specifications, but is differentiated from it by having the letter "S" placed after the section number.

3.0 Construction Survey Layout

.1S The Contractor shall be responsible for the detailed setting out of the work.

.2S Payment for survey layout shall be considered incidental to the work performed and no additional payment will be made to the contractor.

.3S All monuments, including but not limited to brass caps, iron pins, lead plugs, rock posts and wooden witness posts, disturbed by the Contractor shall be re-established by Registered British Columbia Land Surveyors, at the Contractor's cost, and the appropriate authorities advised of the revised elevation and coordinates. Contractors are advised that the Contract Administrator will monitor construction to ensure that disturbed monuments are replaced at the Contractor's expense prior to completion of the Contract.

4.0 Description of Work

.1S Project works described below:

Sewer:

- Replacement of 8 – fittings (bends and couplings) on sanitary sewer forcemain
- Investigation of 1 – coupling on sanitary sewer forcemain
- Bypass required for replacements.

Water:

- Replacement of 2 - hydrant assemblies
- Replacement of 9 - gate valves ranging from 150mmØ to 300mmØ
- Replacement of 8 – bends
- Replacement of 5 – tees

5.0 Safety - Work Near Overhead and Underground Power Lines or Other Utilities

.1S All works shall be in strict compliance with WorkSafe BC Industrial and Safety Regulations Section 24 when working near or under any overhead power lines.

The Contractor must be fully aware of the danger to workers and shall take all necessary safety precautions when working near to existing utilities, such as high pressure gas, water line and BC Hydro lines.

6.0 Dust and Mud Control .1S

The Contractor shall make every reasonable effort to minimize the creation of dust or mud by their operations. Special measures may include, but shall not be limited to, frequent sweeping of existing roads used as haul routes; control of traffic speeds; frequent watering of dirt access and egress routes; watering of the construction areas; re-routing of traffic; and modification of construction procedures; and cleaning of off-site haul routes on a regular basis as required by the Municipality. Refer to MMCD Section 31 15 60, Dust Control, for General, Products and Execution.

Payment for the above items will be considered to be incidental to the work performed and no additional payment will be made to the Contractor.

7.0 Materials Testing .1S

Materials and density Quality Assurance (QA) testing will be carried out as directed by the Contract Administrator. Initial QA testing carried out at the Contract Administrator's direction will be paid for by the Municipality. Where initial tests fail and subsequent QA testing is deemed necessary by the Contract Administrator, the cost of the subsequent testing shall be the responsibility of the Contractor.

If the Contractor requests QA testing and upon arrival of the Municipality appointed testing agency, the contractor is not ready to conduct testing, any cost associated with the delay of testing i.e. standby or return trips will revert back to the contractor.

The Contractor will perform Quality Control inspections at the Contractors discretion to ensure that the requirements of the Contract are being met.

8.0 Grassed Areas Disturbed to be Hydro-seeded .1S

All areas disturbed by the construction shall be reinstated with 150mm compacted depth topsoil and hydro-seeded.

No additional payment will be made to the Contractor for this work.

9.0 Curb, Sidewalk and Driveway Restoration .1S

Existing curbs, sidewalks and driveways shall be reconstructed and reinstated to ensure proper drainage and appearance, to match existing finish, and in accordance with the Standard Drawings. All concrete curbs, pavers, sidewalks and driveways shall be 32 MPa

strength concrete. Concrete curb and gutter to be reinstated between control joints. Concrete sidewalk and driveways to be reinstated to nearest panel joint for one complete panel.

No additional payment will be made to the Contractor for this work.

10.0 Interfering Services

.1 .1S The Contractor shall, at their own expense, provide for the uninterrupted flow of all watercourses, sewers, drains, and any other utility encountered during the work.

.2S When other utility structures are encountered, the Contractor shall support them to the satisfaction of the Contract Administrator so as to protect them from damage. The Contractor shall, at their own expense, at once repair and make good any damage which may occur to any watermains, service or utility pipes, or facilities, or to any electrical conductor or telephone facility or to any sidewalk, crosswalk as a result of this operation. The Contractor is also wholly responsible for all existing above ground structures (including any supporting sub-grade structures such as concrete bases or pads) within the area of construction including supporting those structures as necessary to permit the completion of the Works.

.3S It is the Contractor's responsibility wherever necessary to determine location of existing pipes, valves, or other underground structures. Wherever it is necessary to explore and excavate to determine the location of the existing underground structures, the Contractor at their own expense shall make explorations and excavations for such purposes.

.4S Where gas mains and/or service lines exist in the vicinity of the proposed work, the Contractor shall consult the officers of the gas company prior to commencing operations and arrange for a mutually agreeable procedure for their protection.

.5S When existing poles conflict with the proposed works, the Contractor shall consult MOTI, B.C. Hydro and Telus prior to commencing operations and advise the Contract Administrator with the works to be undertaken.

Costs associated with pole holding / support are incidental to the work.

.6S The Contractor shall respond and determine the cause of all service interruption and/or quality issues within the area of work. No additional payment will be made to the Contractor for this work.

.7S The Contractor shall pre-locate and expose all utilities prior to construction to confirm location, top and bottom elevations of the utility through whatever means are necessary. Pre-location efforts include temporary asphalt if located are within travelled surfaces.

11.0 Coordination with Other Contractors

.1S The Contractor will be responsible for all coordination with all utility providers including but not limited to MOTI, BC Hydro, TELUS, Fortis, and BC Transit. The Contractor shall inform any utility/service provider of any planned disruption/adjustment to usual service in writing and receive written agreement of such disruption or adjustment prior to these disruptions or adjustments.

The Contractor is to coordinate with any other ongoing construction activities that may be proceeding at the same time and in the same general vicinity of this project. No additional payment will be made for any expenses or delays incurred as a result of these concurrent construction activities.

12.0 Environmental Protection

.1S The Contractor is advised that they are responsible for all necessary measures required to prevent the transportation of any silt or other deleterious material from the site into any fish bearing watercourses or their tributaries. All requirements of the Ministry of Environment, Lands and Parks, Fish and Wildlife Branch and Fisheries & Oceans Canada, with respect to air, earth and water pollution, must be strictly adhered to.

Refer to Section 01 57 01S Environmental Protection and Appendix C – Environmental Management Plan for further information. If there are any discrepancies between this section, Section 01 57 01S, and Appendix C – Environmental Management Plan, then the following governing hierarchy will be used:

- **Appendix C – Environmental Management Plan**
- **Section 01 57 01S**
- **Section 01 54 00S, Item 12.0**

13.0 Metric Units of Measurement .1S

All the units of measurement for payment in this Contract are metric units as modified by the internationally agreed S.I. Units (System International).

However, as the construction industry is not entirely converted to S.I. Units, some conversions will need to be made for purpose of month end and Final Progress Estimates.

The following conversion factors will be used in this Contract:

1 ton	=	0.907 tonnes
1 cubic yard	=	0.765 cubic metres
1 foot	=	0.3048 metres

14.0 Disposal Site .1S

The Contractor is responsible for the provision of all off-site disposal sites for materials that are to be removed from the construction sites in this Contract. The Contractor is responsible for all fees, permits and costs associated with the off-site disposal of materials.

The Resort Municipality of Whistler will not accept any material at municipal lands or facilities for this project.

15.0 Permits from Outside Agencies .1S

The Contractor is responsible to obtain and pay for all permits required from outside agencies including but not limited to MOTI, Ministry of Forests, BC Hydro, and DFO.

16.0 Temporary Drainage Facilities .1S

All required temporary drainage facilities, measures for control of ground water during construction and restoration of temporary drainage ditches after construction shall be considered as incidental to work being performed under this Contract and no separate payment will be made for this work.

A trench dewatering plan shall be submitted to the Contract Administrator for review and approval prior to any excavation works. The dewatering plan must conform to the EMP in Appendix C and shall be considered as incidental to work being performed under this Contract and no separate payment will be made for this work.

17.0 Notice to Residents .1S

Prepare and deliver a letter to all properties which may be affected by construction not less than one week (5 days) and not more than two weeks (10 days) prior to construction.

Notify residents directly affected by the work 72 hours in advance of commencement of construction.

			Cost of notifying residents of ensuing construction and delivery of letters is incidental to the Contract.
18.0	**Weight Restriction**	.1S	None unless otherwise required by agency permits.
19.0	**Foreign Utility Adjustments**	.1S	The Contractor will be responsible for adjusting all foreign utilities, unless noted otherwise on the drawings. All adjustments to foreign utilities must be completed to the satisfaction of the Utility Owner. The Contractor should note that certain Utility Owners may decide, after tender closing, to complete their own adjustments if personnel are available. If the Utility Owner decides to complete their own adjustments, the Contractor will not be compensated for these utility adjustments.
20.0	**Material Supply**	.1S	The Municipality will not supply materials.
21.0	**Site offices**	.1S	***(amend clause 1.12.1 as follows)*** A Contract Administrator's temporary office will not be required for this project.
22.0	**Construction Signage**	.1S	***(amend clause 1.13.1 as follows)*** Construction project signs will be required for this project at a minimum at either end of each site. No additional payment will be made to the contractor to supply, erect and remove these signs.
23.0	**Optional Work**	.1S	All items included in the Schedule of Quantities and Prices which shall be stated to be Optional Work shall be used only as directed and at the sole discretion of the Contract Administrator. All or any unused portion of these sums shall revert to the Municipality and shall be deducted from the Contract Price before final payment is made.
24.0	**Construction Sequencing**	.1S	The Contractor is required to submit a written detailed construction sequencing and tie-in plan and submit it to the Contract Administrator for review a minimum of two weeks prior to any anticipated construction works affecting stakeholders for approval. At a minimum the construction sequencing and tie-in procedure plan is to include the following: *Overall Construction Sequencing* • Diagram of overall construction sequencing to the match the detailed Construction Schedule • Expected dates of each portion of the works • Expected dates and areas of impact for

significant construction tasks such as hot taps and line stop installation, bypass construction and implementation, removal and reinstatement of manhole and piping etc.
- Breakdown of all tasks in order to perform the work
- List of materials to perform the installation
- Timeline showing each task and expected start/completion time
- Number of crew and equipment working on the tie in and which crew member and piece of equipment is assigned to each task.
- "point of no return" tie-in abandonment time at which point the tie-in works will be abandoned and the contingency plan will begin
- Sketch including staging areas and traffic management through the various phases of the Works including pedestrian/cyclist routing.

No tie-in is to take place until the Contract Administrator and Resort Municipality of Whistler representative approve the tie in plans. Hand sketches may only be accepted if they are clearly legible, to scale and reproducible.

25.0 Hours of Work .1S The hours of work for all project sections must not extend beyond 0700h and 2000h, inclusive, daily. The Contractor shall schedule their work within these hours and will not be permitted to commence work earlier than 0700h and/or work later than 2000h, except as authorized by the Contract Administrator.

No work on Saturdays, Sundays, or Statutory Holidays will be permitted except in case of emergency and then only with written permission of the Contract Administrator and to such extent as they deem necessary.

The Owner reserves the right not to allow any work to be undertaken on Weekends or Statutory Holidays.

26.0 Business License .1S The Contractor shall have or otherwise obtain a current business license in the Resort Municipality of Whistler prior to commencement of the Works.

27.0 Location of Valves & Fittings .1S The Contractor shall locate all buried valves and fittings to be replaced in the Schedule of Quantities and Prices up to 1.5 meters in either direction of the location specified in the Contract Drawings. If the valve and/or fitting is not found within these limits the Contractor shall stop and notify the Contract Administrator.

28.0	**Environmental Management Plan**	.1S	A supplementary environmental management plan has been prepared for this project and included in Appendix C. The Contractor is responsible for ensuring they are familiar with the plan and that the work done by the Contractor will be consistent with the procedures stated in the plan.
29.0	**Monthly Fuel Consumption Reporting**	.1S	The Contractor shall report fuel consumption for all construction equipment with each monthly progress invoice to the Resort Municipality of Whistler for carbon credits compliance reporting. This shall be considered as incidental to work being performed under this Contract and no separate payment will be made for this work.

END OF SECTION

1.0 General .3S ***(delete 1.0.3 and replace with)***

"Unless alternative arrangements satisfactory to those adversely affected have been made by the Contractor, pedestrian and vehicular access to affected properties shall be maintained at all times.

1.2 Temporary Access Roads .1S ***(delete 1.2.1 and replace with)***

"Do not close any lanes of road or highway without approval of the Owner. Before re-routing traffic erect suitable signs and devices as approved by the Contract Administrator. Provide sufficient cold mix to ensure a smooth riding surface during work."

1.5 Payment .2S ***(add new clause 1.5.2)***

The Contractor is responsible for all temporary traffic control on the streets within this contract. The Contractor will meet all the standards and conditions of the Resort Municipality of Whistler, and the Ministry of Transportation and Highways Traffic Control Manual for Work on Roadways.

At a minimum for all roadways single lane alternating traffic shall be maintained at all times unless otherwise directed by the Contract Administrator.

The Municipality will not control or direct the traffic control or direct the traffic control activities of the Contractor, but may require an immediate stop to any work where, in the Contract Administrator's opinion, the provided traffic control does not meet the requirements of the Agreement.

The Contractor will prepare and submit a written Traffic Management Plan to the Resort Municipality of Whistler a minimum of ten (10) working days prior to commencement of any work affecting traffic. The Contractor will update and resubmit that plan for review as necessary for acceptance by the Municipality.

Measurement of payment will be on a lump sum basis as shown in the schedule of quantities and prices.

END OF SECTION

1.2 Temporary Erosion and Sediment Controls

.1S ***(delete 1.2.1.1 and replace with)***

Drainage, Erosion and Sediment Control
"Properly drain all portions of the site. Protect the site and the watercourses to which it drains, directly or indirectly, against erosion and siltation in accordance with the Sediment Control Plan approved by the Owner during construction and until the maintenance period is completed. Ensure no silt, gravel, debris or other deleterious substance resulting from construction activity discharges into existing drainage systems or watercourses or onto highways or adjacent property. The Contractor is responsible for all damage that may be caused by water backing up or flowing over, through, from or along any part of the work or otherwise resulting from their operations.

"Keep existing culverts, drains, ditches and watercourses affected by the work clear of excavated material at all times. When it is necessary to remove or alter an existing drainage structure, provide suitable alternative measures for handling the drainage. Adequately support culverts and drainpipes across trenches to prevent displacement and interference with the proper flow of water due to trench settlement.

"Sweep streets, and clean catch basins, manhole sumps, detention tanks, and maintain siltation controls as often as the Contract Administrator deems necessary.

"Follow all Federal and Provincial regulations and guidelines respecting protection of fish, fish habitat, and watercourses.

"The Contract Administrator is responsible for monitoring ongoing compliance with this section."

1.4 Environmental Protection

.3 ***(add clause 1.4.3.5S as follows)***

Immediately contain and clean up any leaks and spills of prohibited materials on the job site.

(add clause 1.4.3.6S as follows)

Ensure that a well-stocked spill kit is on-site at all times and that the Contractor's employees are familiar with appropriate spill response techniques.

(add clause 1.4.3.7S as follows)

Immediately notify the Contract Administrator and the Director of any leaks or spills of prohibited materials that occur on the job site.

(add clause 1.4.3.8S as follows)

Ensure that any fuel stored on-site is located at least 15 metres from the nearest stream, and is placed within a bermed and lined area, in order to prevent leaks or spills into the environment

(add clause 1.4.3.9S as follows)

Ensure that no equipment fueling or servicing is conducted within 15 metres of a stream."

1.9S Archaeological / Historical Resources

(add)

Immediately cease work and inform the Contract Administrator if any archaeological or historical resources are encountered during construction. Leave these resources in-place and do not disturb them in any way."

END OF SECTION

2.7 Granular Pipe Bedding and Surround Material

.1S ***(delete 2.7.1 and replace with)***

“Crushed or graded gravels to conform to the following gradations”

and replace with:

"Crushed or graded gravel to conform to Type 1 gradation as specified on chart in clause 2.7.1."

END OF SECTION

2.1 Materials .7S ***(add)***

"Resin and Water: to Contract Administrator's approval."

.8S ***(add)***

"All Dust Control materials to be environmentally friendly."

END OF SECTION

1.10 Measurement of Payment

.9S ***(add new clause 1.10.9)***

Payment for over-excavation including backfilling with 19mm base gravel and compaction to 95% modified proctor density will only be made for over excavation authorized by the Contract Administrator. Payment will be based on volume (Lx D x Max Width)

3.6 Surface Restoration

.6 ***(replace clause 3.6.6.2)***

.2S At a minimum, patch all other roads on the Friday of each week to provide asphalt surface for weekend traffic. At all other times, the Contractor is to maintain a smooth granular running surface free of rutting, potholes or other irregularities. All asphalt patches shall be to finished surface.

.11S ***(add new clause 3.6.11)***

Grassed Areas Disturbed to be Hydro-Seeded
All areas disturbed by the construction shall be reinstated with 150mm compacted depth topsoil and hydro-seeded. No additional payment will be made to the contractor for this work.

.12S ***(add new clause 3.6.12)***

Existing curbs, sidewalks and driveways including pavers shall be reconstructed and reinstated to ensure proper drainage and appearance, to match existing finish, and in accordance with the Standard drawings. All concrete curbs, sidewalks and driveways shall be 32 MPa strength concrete. Concrete sidewalk to be reinstated to nearest panel joint for one complete panel. No additional payment will be made to the Contractor for this work.

END OF SECTION

1.5 Measurement and Payment

.9S ***(add new clause 1.5.9)***

Reinstatement of the existing roads, trails and asphalt sidewalks shall include the supply and placement of all granular materials as noted in 32 11 16.1 and 32 11 23 and asphalt materials in 32 12 16 to RMOW standards details and as shown in the Contract Drawings. The Works under this item also include reinstatement of the existing paint lines per 32 17 23 and reinstatement of existing signage and garbage receptacles. Payment for this item is per square meter after all reinstatement works are complete.

END OF SECTION

1.8 Measurement and Payment

.2S ***(replace clause 1.8.2 with the following)***

Payment for watermain and service connection to include saw cutting pavement, concrete, trench excavation, disposal of surplus excavated material**,** bedding, supply and installation of all pipe, bolts, gaskets and tie rods, restraints, rigid insulation if specified, imported or native backfill as shown on the Drawings, cleaning, pressure and leakage testing, flushing, disinfection, all surface restoration as specified under Section 31 23 01 – Excavating Trenching and Backfilling – 3.6, and all other work and materials necessary to complete the installation as shown on the Contract Drawings and specified under this section.

Removal of vegetation, trees, stumps, and roots, if required as part the of the works shall be considered incidental to the Contract.

Payment will be made on a lump sum basis as specified in the Schedule of Quantities.

.3S ***(replace clause 1.8.3 with the following)***

Payment for inline gate valves or butterfly valves including valve boxes; and for fittings (crosses, tees, bends, reducers, couplings, blind flanges, caps etc.) will be made for items identified on Contract Drawings and installed as part of watermain as described under section 1.8.2S of this section. All valves to include 1.0m asphalt or concrete (50mm) surround. Thrust restraints and thrust blocks required for valves and fittings are included in the price of the valve or fitting. No separate payment will be made for reverse acting thrust blocks and tie-rods, the cost of which is included in the valve and fitting items.

All buried bolted connections or other iron works forming part of the water distribution system shall be protected from corrosion by wrapping the components with Denso (paste, mastic and tape) in accordance with manufacturer's specifications.

Removal of vegetation, trees, stumps, and roots, if required as part the of the works shall be considered incidental to the Contract.

Payment will be made on a lump sum basis as specified in the Schedule of Quantities.

.13S ***(add to 33 11 01-1.8.13)***

Tie to include all works associated with completing and commissioning a connection to the existing Municipal water system.

Payment for Abandoning existing watermains including valves, and caps as shown on the contract drawings is to be considered incidental to the contract price. No additional payment will be made to the Contractor for this work.

2.5 Service Connections, Pipe, Joints and Fittings

.1S ***(replace clause 2.5.1 with the following)***

Pipe diameter of 19 mm to 50 mm to be Gold Stripe Polyethylene service tubing Series 160, CSA 137.3.

3.6 Pipe Installation

.15S ***(add new clause 3.6.15)***

Where watermain is shown for installation shallower than 1.8m, the Contractor shall supply and install insulation as per Resort Municipality of Whistler specifications.

Minimum Insulation thickness to be 100mm.

Measurement and payment for this item will be incidental to payment for work described in in other sections.

3.23 Connections to Existing Mains

.2S ***(add new clause 3.23.2)***

The Contractor is required to submit a written detailed construction sequencing and tie in plan and submit it to the Contract Administrator for review a minimum of two weeks prior to any anticipated construction works affecting any users of the municipal water system for approval. At a minimum the construction sequencing and tie in procedure plan is to include the following for each roadway and/or segment of pipe that will affect existing users of the municipal water system. It is expected that the plan will provide details of each stage of construction. For each stage of construction, the plan shall address each of the following items:

Overall Construction Sequencing

- Diagram of overall construction sequencing to the match the detailed Construction Schedule

Tie In Procedure

- Expected tie in dates
- Explanation and diagrammatic illustration of specific watermains to be shut down and specifically identify valves to be exercised.
- Expected duration of shut down
- Breakdown of all tasks in order to perform the work

- List of materials to perform the installation
- Timeline showing each task and expected start/completion time
- Number of crew and equipment working on the tie in and which crew member and piece of equipment is assigned to each task.
- “point of no return” tie-in abandonment time at which point the tie in works will be abandoned and the contingency plan will begin
- Specific contingency plan to provide water to shut down areas should the initial tie in not be completed by the point of no return time.
- Sketch including staging areas and traffic management through the various phases of the tie in.

No tie in is to take place until the Contract Administrator and Resort Municipality of Whistler representative approve the tie in plans. Hand sketches may only be accepted if they are clearly legible, to scale and reproducible.

For clarity, the above description applies to the entirety of the Water Valve and Fitting Repairs – 2025.

.3S ***(add new clause 3.23.3)***

Contractor shall be responsible for the costs for the Owner to flush and purge all air from the existing mains and service in the area affected by the service interruption.

END OF SECTION

1.8 Measurement and Payment

.2S ***(replace clause 1.8.2 with the following)***

Payment for sanitary sewage forcemains includes saw cutting pavement & concrete, trench excavation, dewatering, disposal of surplus excavated materials, cutting existing pipe, draining pipe, disposal of sewage and supply/installation of all pipe, couplings, fittings, related materials, HDPE fusion welding if required, related materials, bolts, gaskets, tie rods, Denso wrap (paste, mastic and tape), thrust blocks including lock-block thrust blocks, restrainers, cleaning and pressure and leakage testing (if applicable), bedding and imported or native backfill as shown on the Contract Drawings, all surface restoration as specified under Section 31 23 01 – Excavating Trenching and Backfilling – 3.6 and all other work and materials necessary to complete the works as shown on the Contract Drawings and specified under this section.

All fittings, bolts, rods and any other metallic items used for this pay item shall be wrapped in Denso (paste, mastic and tape) in accordance with manufacturers' specifications and as specified in Contract Drawings.

Removal of vegetation, trees, stumps, and roots, if required as part the of the works, shall be considered incidental to the Contract.

Payment will be made on a lump sum basis as specified in the Schedule of Quantities.

.10S ***(replace clause 1.8.10 with the following)***

The intent of this line item is to establish a pay item for supply, installation, and removal of a temporary forcemain bypass system which involves tie-in at an existing buried tapping saddle and discharge into a new tapping saddle down stream. This bypass is to facilitate the replacement of sanitary forcemain fittings as shown on Contract Drawings.

This pay item shall include but not be limited to pre-location of the existing forcemain, saw cutting pavement, trench excavation, dewatering, disposal of surplus excavated materials, supply and installation of all required hot taps, line stops, temporary bypass piping **(no flexible lay flat piping permitted – hard pipe only)**, bends, fittings, HDPE fusion welding, **trenching for road and driveway crossings**, cleaning and pressure and leakage testing (if applicable), bedding and imported or native backfill, all surface restoration as specified under Section 31 23 01 – Excavating Trenching and Backfilling – 3.6 and any other related materials/efforts required to tie-in and bypass the forcemains as shown on the Contract Drawings.

Removal of vegetation, trees, stumps, and roots, if required as part the of the works, shall be considered incidental to the Contract.

Also included is submission of a schematic showing forcemain pre-location details. The Contractor shall pre-locate the existing forcemain at proposed hot tap locations as part of this item and in advance of preparing the bypass plan. The schematic will be reviewed and approved by the Contract Administrator prior to any bypass works taking place.

3.17 Sewer Flow Management .1S ***(add clause 3.17.1)***

Contractor to prepare and submit bypass plan to Contract Administrator for review and approval prior to works proceeding. This plan must be specific and complete, including such items as schedules, locations, equipment, materials and all other incidental items necessary and/or required to insure proper protection of the facilities. At a minimum, the plan shall include but not be limited to details of the following:

- Schematic of bypass pipe routing including but not limited to all bends, reducers, couplings, and any other fittings required
- Trench detail for road/driveway/sidewalk crossings
- Specification on bypass pipe, bends, reducers, couplings, and fittings
- Location/staging areas for bypass suction and discharge
- Detailed schematic of existing saddles, new hot-taps and line-stop including but not limited to valves, couplings, reducers, fittings, and piping. The schematic should include forcemain pre-location details.
- Anticipated duration of bypass.

END OF SECTION

Owner: Resort Municipality of Whistler
(NAME OF OWNER)

Contract: 2025 Sewer and Water Valve and Fitting Repairs
(TITLE OF CONTRACT)

Reference No. E20508-E32006
(OWNER'S CONTRACT REFERENCE NO.)

General Conditions #	Paragraph #	Title	Action
3	.2	Authority	Delete GC3.2.2 and replace with: "Nothing contained in the *Contract Documents* shall create any contractual relationship or other relationship recognized by law between the *Contract Administrator* and the *Contractor*, subcontractors, suppliers, or their agents, employees or other persons performing any of the *Work*.
3	3	Contract Administration	Delete GC3.3.5 and replace with: "The Owner shall provide the Contractor with three survey control points at the Place of the Work, and relative coordinates of the major portions of the Work. The Contract Administrator may conduct survey checks of the Work at their discretion. The Contractor shall provide a survey assistant, at the Contract Administrators request, for such survey checks. The Contractor shall protect and preserve such survey control points for so long as they are required for the Work and if any of them must be replaced because they are disturbed or destroyed by the Contractor, then the Contractor shall pay the costs of such replacement."
4.3	.1	Protection of *Work*, Property and the Public	Add: Within the terms of this clause, the *Contractor* is responsible for the protection of existing power and telephone poles during the term of the *Contract*.
	.4		Delete GC 4.3.4 and replace with: Before commencing any *Work* at the *Place of the Work*, the *Contractor* shall be responsible to locate in three dimensions all underground utilities and structures indicated on the *Contract Documents* as being at the *Place of the Work*. The *Contractor* shall also be responsible to consult with all utility corporations that provide electricity, communication, gas or other utility services in the area of the *Place of the Work*, to locate in three dimensions all underground utilities for which they have records. The *Contractor* shall also locate in three dimensions any other utilities or underground structures that are reasonably apparent in an inspection of the *Place of the Work*.

			The *Contractor* shall contact BC One Call at least 48 hours prior to excavating to advise of the Work.
4.5	.1	Errors, Inconsistencies or Omissions in the *Contract Documents*	GC4.5.1 are amended: (i) by deleting "or omission" wherever it appears and substituting "omission or any incorrect, inaccurate or misrepresented fact", and (ii) by deleting "or omissions" wherever it appears and substituting "omissions or incorrect, inaccurate or misrepresented facts".
	.4		Add GC4.5.4: "If Additional Instructions are required to address any error, inconsistency, omission or incorrect, inaccurate or misrepresented facts, the Contractor's inefficiencies or mismanagement, if any, shall not be taken into account when determining any impact of those Additional Instructions on the Contract Price or the Contract Time."
4.6	.2	Construction Schedule	GC4.6.2 is amended by deleting "monthly" and substituting "monthly or within a shorter time period specified in the *Contract Documents*".
4.12	.5	Tests and Inspections	GC4.l2.2.5 (1) and (2) are amended by deleting "timely notice" and substituting "not less than two days".
6.2	.1	Coordination and Connection	Add: The *Owner* or *Contract Administrator* will not be liable for claims for delay caused by applicable third parties, including, but not limited to BC Hydro, TELUS, Fortis BC, Shaw Cable, BC Transit, or Municipal Forces for work required to be undertaken on this *Contract*.
7.4	.2	Optional Work	Add GC 7.4.2: All items included in the *Schedule of Quantities and Prices* which stated to be Optional Work shall be used only as directed and at the sole discretion of the *Contract Administrator*.
	.3		Add GC 7.4.3 All or any unused portion of these sums shall revert to the RMOW and shall be deducted from the Contract Price before final payment is made. No claim for lost profit shall be made by the *Contractor* for the deletion of any or all of these optional items.
9.2	.4	Valuation Method	GC9.2.4 is amended by deleting "unless at the time of the agreement the *Contractor* expressly reserved in writing the right to claim for additional payment or Contract Time adjustments."
11.1	.1	Concealed or Unknown Conditions Definition	GC 11.1.1(3) is deleted and the following substituted: "(3) differs materially and substantially from: i. the conditions of the Place of the Work that would have been evident to or reasonably foreseeable by a

			Contractor who was qualified to undertake the Work, and ii. any information in the Tender Documents or otherwise made available by the Owner with respect to any conditions of the Place of the Work that would not have been evident to or reasonably foreseeable by a contractor who was qualified to undertake the Work".
13.1	.1	Delay by *Owner* or *Contract Administrator*	Add: The *Owner* or *Contract Administrator* will not be liable for claims for delay caused by applicable third parties, including, but not limited to BC Hydro, TELUS, Fortis BC, Shaw Cable, BC Transit, or Municipal forces for work required to be undertaken on this *Contract*.
13.9	.1	Liquidated Damages for Late Completion	GC 13.9.1.1 is amended by deleting "$1000 per day" and substituting "$1,500 per day".
15.3	.1	Termination	GC 15.3.1 (1) is deleted and the following substituted: "(1) be entitled to: (i) take possession of the *Place of the Work* and the materials to be incorporated into the *Work* wherever they are located including materials ordered for the *Work* but not yet delivered, (ii) utilize the construction machinery and equipment, subject to the right of third parties, and (iii) complete the *Work* by whatever method the *Owner* may consider expedient, and
17	5	Referee	GCI7.5.2(2) is deleted and the following substituted: 2) "if the parties have not agreed upon a Referee within 15 Days after the delivery of the Dispute Notice, then either party may make a written request to the Master Municipal Document Association to appoint the Referee within 10 Days of the written request. If after consultation with the parties, the Association is unable to appoint a Referee who is acceptable to both parties, the Association shall appoint as the Referee an individual who is qualified to act in that capacity under the Contract and who is independent and impartial." GC17.5.3 is deleted and the following substituted: "If a Referee is selected for appointment as provided by this GC then the parties shall enter into an agreement with the Referee by signing a letter in the form as set out in Schedule 17.5.3 to these GC's. If one party and the Referee sign the agreement and, after presentation, the other party fails or refuses to sign the agreement, the defaulting party shall be deemed to be a party to that agreement." GC 17.5.8 is amended by adding after "The Referee" the following:

			"shall make decisions in a fair and impartial manner and". GC17.5.ll is amended: a) by renumbering it GC 17.5. 11.1 and by adding the following at the end "unless the parties agree otherwise." and b) by adding the following: 17.5.11.2 Despite 17.5.1 1.1, on written application of a party, the Master Municipal Documents Association may revoke the appointment of the Referee if the Association is satisfied that the Referee is biased, unqualified to discharge the Referee's duties, or has failed to diligently and conscientiously perform the Referee's duties. A replacement Referee shall be selected for appointment as provided by this GC. GC17.5.l3 is amended by deleting "by either party, or both parties," and substituting the following: "by both parties but not by one party."
18.2	.1	Supporting Documentation	Add: The *Contractor* shall not work on the *Site* or deliver materials for which delivery slips submitted to the *Owner* are the basis of payment unless the *Site Inspector* is present. However, if the *Contract Administrator* deems these requirements inappropriate then this requirement may be waived.
18.9	.1	Waiver of Claims	GC18.9.1 is amended by deleting the last sentence and substituting the following: This waiver of claims shall include without limitation those claims that might arise from: 1) the negligence or breach of contract by the *Owner*, its employees, agents or officials, or 2) the negligence or wrongful acts of the *Owner*'s consultants or the *Contract Administrator,* but does not include claims made by *the Contractor* in writing prior to such application in accordance with the provisions of the *Contract* Documents and delivered to the *Contract Administrator* prior to date of Substantial Performance and still unsettled.
	.2		GC 18.9.2 is amended by deleting the last sentence and substituting the following: This waiver of claims shall include without limitation those claims that might arise from: 1) the negligence or breach of *Contract* by the *Owner*, its employees, agents', or officials, or 2) the negligence or wrongful acts of the *Owner*'s consultants or *Contract Administrator*, but does not include claims made by the. *Contractor* in writing prior

			to such application in accordance with the provisions of the *Contract Documents* and delivered to the *Contract Administrator* and still unsettled.
20.4	.2	Environmental Laws	GC20.4 is amended by adding the following: 20.4.2 The *Contractor* shall indemnify the *Owner* for any costs, fines, expenses and penalties that the *Owner* is required to pay on account of the *Contractor* performing the *Work* in breach of any applicable Federal or Provincial or municipal environmental laws, regulations, or orders.
21	.2		Delete GC 2 1.2.1 and replace with the following: As part of the Work the Contractor shall, to the extent reasonably possible, perform on behalf of the Owner the obligations which the Owner must undertake as "Prime Contractor" by virtue of the Workers' Compensation Act and Regulations, or other statutes. The Contractor shall have a safety program acceptable to the Workers' Compensation Board and shall ensure that all Workers' Compensation Board safety rules and regulations are observed during performance of this contract, not only by the Contractor but by all sub-contractors, workers, material personnel and others engaged in the performance of this contract. The Contractor shall indemnify the RMOW and hold harmless the RMOW from all manner of claims, demand, costs, losses, penalties and proceedings arising out of or in any way related to unpaid Workers' Compensation Board assessments owing from any person or corporation engaged in the performance of this contract, or arising out of or in any way related to the failure to observe safety rules, regulations and practices of the Workers' Compensation Board, including penalties levied by the Workers' Compensation Board."
24	.1	Required Insurance	In addition to the MMCD insurance requirements, the *Contractor* shall also comply with the following requirements of the RMOW, which will take precedence: "The *Contractor* shall insure and keep insured while this contract is in force, with such companies and on such forms as are acceptable to the RMOW, at the *Contractor*'s expense, Comprehensive General Liability Insurance covering premises and operations liability; *Contractor*'s Contingency Liability with respect to the operations of Subcontractor's Completed Operations Liability, Contractual Liability and Non-Owned Automobile Liability Insurance. The limits of liability for Personal Injury and Property Damage combined shall be for not less than $5,000,000 each occurrence. The RMOW and ISL Engineering and Land Services

			shall be added as additional named insured under the Comprehensive General Liability. A Cross Liability Clause shall be made part of the Comprehensive General Liability Insurance. All policies shall provide that they cannot be cancelled, lapsed, or materially changed without at least thirty (30) days notice to the RMOW by Registered Mail. Prior to the commencement of any work hereunder, the *Contractor* shall file with the RMOW a certificate of insurance for each policy required. All such insurance shall be maintained until final completion of the work, including the making good of faulty work or materials, except that coverage for completed operations liability shall in any event be maintained for twelve (12) months from date of final acceptance. Should the *Contractor* neglect to obtain and/or maintain insurance as aforesaid, or deliver such policy or policies to the RMOW, then it shall be lawful for the RMOW to obtain and/or maintain such insurance and the *Contractor* hereby appoints the RMOW their true and lawful attorney to do all things necessary for this purpose. All monies expended by the RMOW for insurance premiums under the provisions of this clause shall be charged to the *Contractor*."
25.1	.2	Correction of Defects	Add to Clause: "Where in the opinion of the *Owner,* delay would cause serious loss or damage, repairs may be made without notice being sent to the *Contractor* and all expenses incurred will be charged to the *Contractor*."
	.3		GC25. 1.3 is deleted and the following substituted: 25.1.3 The Owner shall provide the *Contractor* with access, at all reasonable times, to the location of any defect or deficiency described in this GC to enable the *Contractor* to correct the defect or deficiency but the *Contractor* shall be responsible for: 1) exposure of the defect or deficiency in order to correct or repair the defect, deficiency, 2) the restoration of the *Work* or other property that is disturbed or damaged in the course of (i) exposing the defect or deficiency, or (ii) correcting or repairing the defect or deficiency, and 3) all risks associated with any activity described in paragraphs (1) and (2).
26.1	.1	Partial Use	GC26. 1. 1 is amended by deleting "on written approval of the *Contract Administrator*" and substituting "with prior written notice to the *Contract Administrator*".

Appendix A
Contract Drawings

RESORT MUNICIPALITY OF WHISTLER

SEWER AND WATER VALVE & FITTING REPAIRS

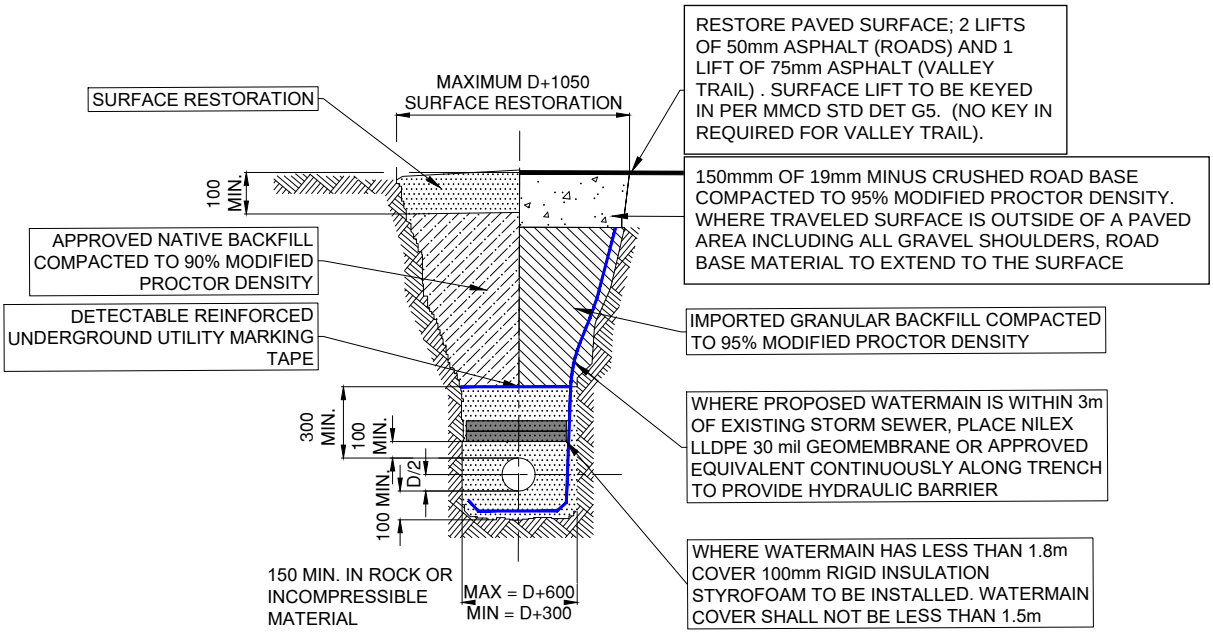
CONTRACT# E32006-E20508

ISSUED FOR TENDER

WHISTLER, BRITISH COLUMBIA

JANUARY 2025

34048 REV 1



NOTES:

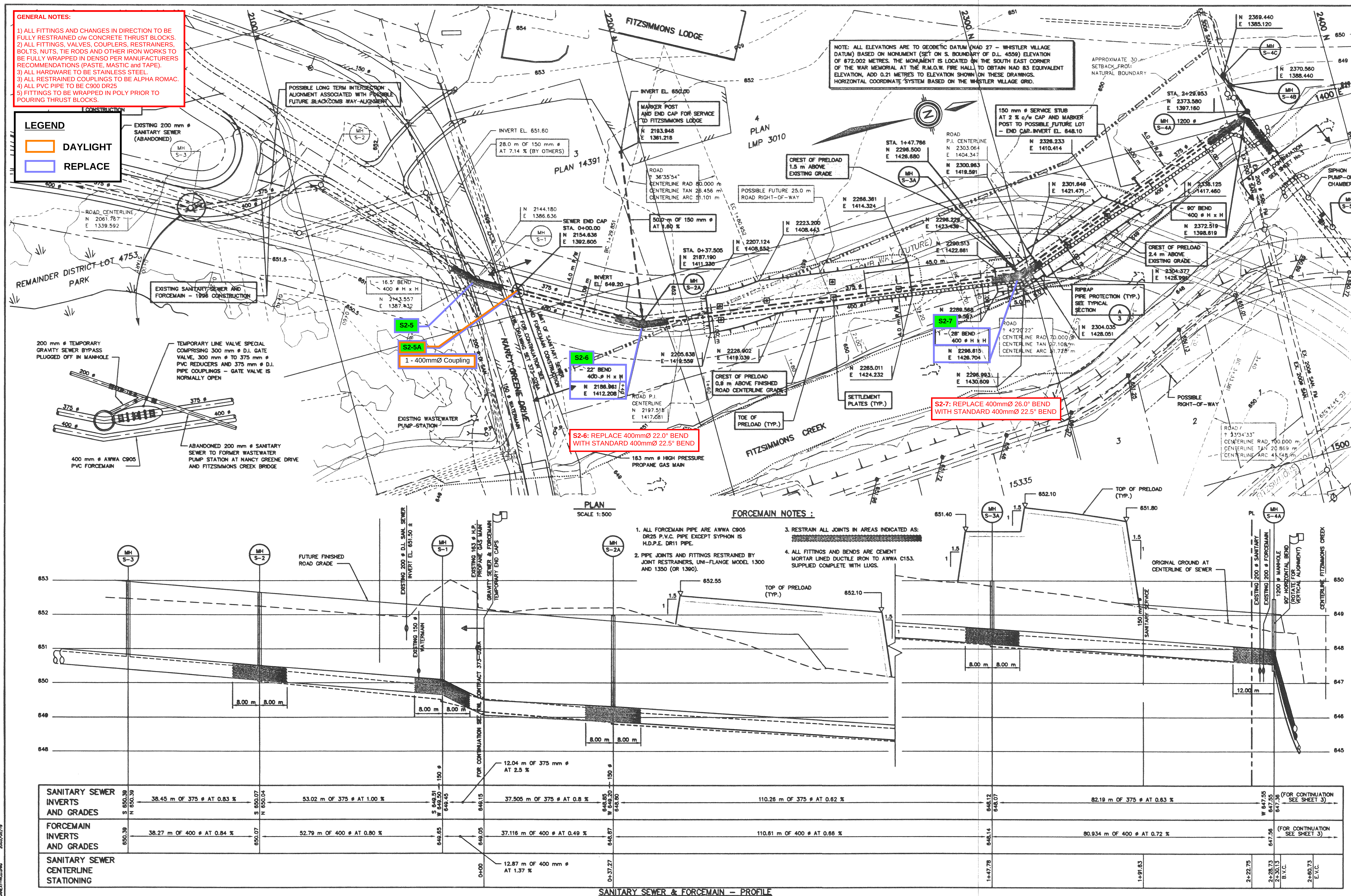
1. UNDER THE TRAVELED PORTION OF ROADS, VALLEY TRAIL AND DRIVEWAYS OR WITHIN 1.5M FROM THE EDGE OF TRAVELED ROADWAY/VALLEY TRAIL, THE TRENCH SHALL BE BACKFILLED WITH COMPACTED.IMPORTED BACKFILL UP TO 30mm BELOW ROAD SURFACE. THE REMAINING TRENCH TO BE BACKFILLED WITH 19mm MINUS CRUSHED ROAD GRAVEL.
2. CONTROLLED DENSITY BACKFILL MAY BE USED IN LIEU OF IMPORTED OR SELECT BACKFILL AND GRANULAR BASE.
3. D = OUTSIDE PIPE DIAMETER.

BEDDING	19mm MINUS CRUSHED ROAD BASE
IMPORTED OR SELECTED BACKFILL	75mm MINUS CRUSHED ROAD BASE COMPACTED TO 95% MODIFIED PROCTOR DENSITY
APPROVED NATIVE BACKFILL	NO ROOTS, STUMPS OR OTHER ORGANIC MATERIAL. ANY MATERIAL FREE OF STONES LARGER THAN 150mm
ROAD BASE	

UTILITIES TRENCH WITH HYDRAULIC BARRIER

NTS

ISL	DWG. NO.	34048-2025-DET-001
	DATE	2025-01-09
	REVISION	1


GENERAL NOTES:
1) ALL FITTINGS AND CHANGES IN DIRECTION TO BE FULLY RESTRAINED c/w CONCRETE THRUST BLOCKS.
2) ALL FITTINGS, VALVES, COUPLERS, RESTRAINERS, BOLTS, NUTS, TIE RODS AND OTHER IRON WORKS TO BE FULLY WRAPPED IN DENSO PER MANUFACTURERS RECOMMENDATIONS (PASTE, MASTIC and TAPE).
3) ALL HARDWARE TO BE STAINLESS STEEL.
3) ALL RESTRAINED COUPLINGS TO BE ALPHA ROMAC.
4) ALL PVC PIPE TO BE C900 DR25
5) FITTINGS TO BE WRAPPED IN POLY PRIOR TO POURING THRUST BLOCKS.
LEGEND
DAYLIGHT
REPLACE
S2-5
S2-5A
1 - 400mmØ Coupling
S2-6
S2-6: REPLACE 400mmØ 22.0° BEND WITH STANDARD 400mmØ 22.5° BEND
S2-7
S2-7: REPLACE 400mmØ 26.0° BEND WITH STANDARD 400mmØ 22.5° BEND
FITZSIMMONS LODGE
NANCY GREENE DRIVE
FITZSIMMONS CREEK
REMAINDER DISTRICT LOT 4753 PARK
PLAN 14391
PLAN LMP 3010
NOTE: ALL ELEVATIONS ARE TO GEODETIC DATUM (NAD 27 - WHISTLER VILLAGE DATUM) BASED ON MONUMENT (SET ON S. BOUNDARY OF D.L. 4559) ELEVATION OF 672.002 METRES. THE MONUMENT IS LOCATED ON THE SOUTH EAST CORNER OF THE WAR MEMORIAL AT THE R.M.O.W. FIRE HALL. TO OBTAIN NAD 83 EQUIVALENT ELEVATION, ADD 0.21 METRES TO ELEVATION SHOWN ON THESE DRAWINGS. HORIZONTAL COORDINATE SYSTEM BASED ON THE WHISTLER VILLAGE GRID.
PLAN
SCALE 1:500
FORCEMAIN NOTES :
1. ALL FORCEMAIN PIPE ARE AWWA C905 DR25 P.V.C. PIPE EXCEPT SYPHON IS H.D.P.E. DR11 PIPE.
2. PIPE JOINTS AND FITTINGS RESTRAINED BY JOINT RESTRAINERS, UNI-FLANGE MODEL 1300 AND 1350 (OR 1390).
3. RESTRAIN ALL JOINTS IN AREAS INDICATED AS:
4. ALL FITTINGS AND BENDS ARE CEMENT MORTAR LINED DUCTILE IRON TO AWWA C153. SUPPLIED COMPLETE WITH LUGS.
SANITARY SEWER INVERTS AND GRADES
FORCEMAIN INVERTS AND GRADES
SANITARY SEWER CENTERLINE STATIONING
SANITARY SEWER & FORCEMAIN - PROFILE
SCALE HORIZ. 1:500 VERTICAL 1:50

REVISIONS ISSUE	DATE	DR'N	CH'D	APP'D	DESCRIPTION	ISSUE	DATE	DR'N	CH'D	APP'D	DESCRIPTION
B	97/04/29	SPB			ISSUED FOR CONSTRUCTION	E	03/05/20	PL/SPB	SPB	IF	RECORD DRAWING
C	97/05/20	SPB			REVISED MANHOLES (S-4A, S-4B, S-4C AND S-5A)						
D	97/05/30	RSP			ADDED PRELOAD						

DESIGNED KF
DRAWN SPB
CHECKED

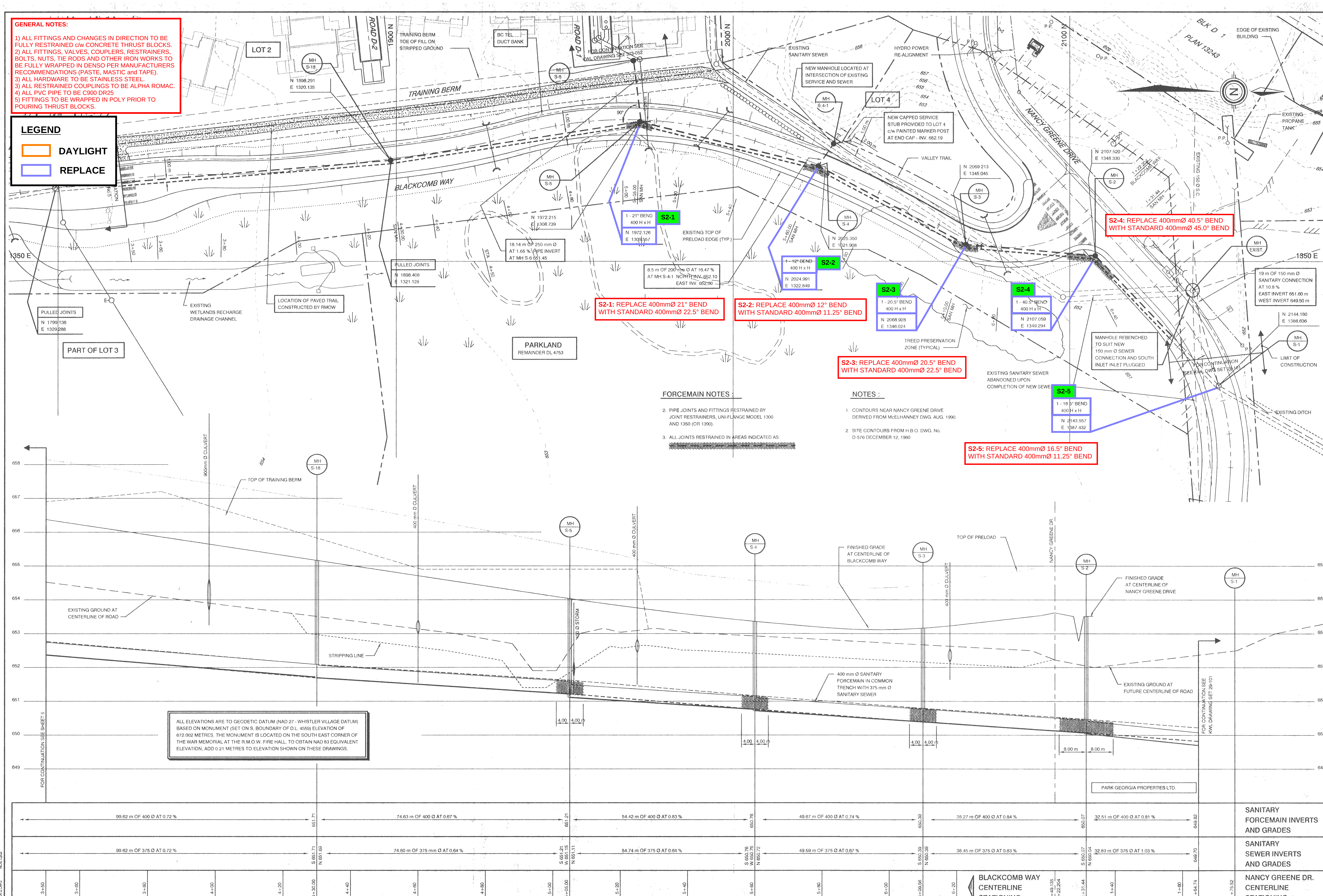
KERR WOOD LEIDAL ASSOCIATES LTD.
CONSULTING ENGINEERS

RESORT MUNICIPALITY OF WHISTLER
CONSTRUCTION OF SANITARY SEWER AND FORCEMAIN
NANCY GREENE DRIVE TO FITZSIMMONS CREEK
PLAN AND PROFILE

SCALE AS SHOWN
DRAWING No. 29-100
SHEET 2 OF 5 ISSUE E

ISL

DWG. NO.	34048-2025-SAN-001
DATE	2024-11-26
REVISION	1



ISSUE	DATE	DR'N	CH'D	APP'D	DESCRIPTION
C	96/02/16	SPB	RK	KF	REVISED SANITARY SEWER AND FORCEMAIN ALIGNMENT
D	96/05/29	SPB	RK	KF	ISSUE CHANGE
E	96/05/29	SPB	RK	KF	ISSUE CHANGE
F	96/05/29	SPB	RK	KF	ENLARGED FORCEMAIN TO 400 mm Ø / ADDED NOTES
G	96/08/13	SPB	RK	KF	REVISED SANITARY AND FORCEMAIN INVERTS
H	11/13/02	PL/BR	DK	KF	RECORD DRAWING

DESIGNED KF
DRAWN SPB
CHECKED KF

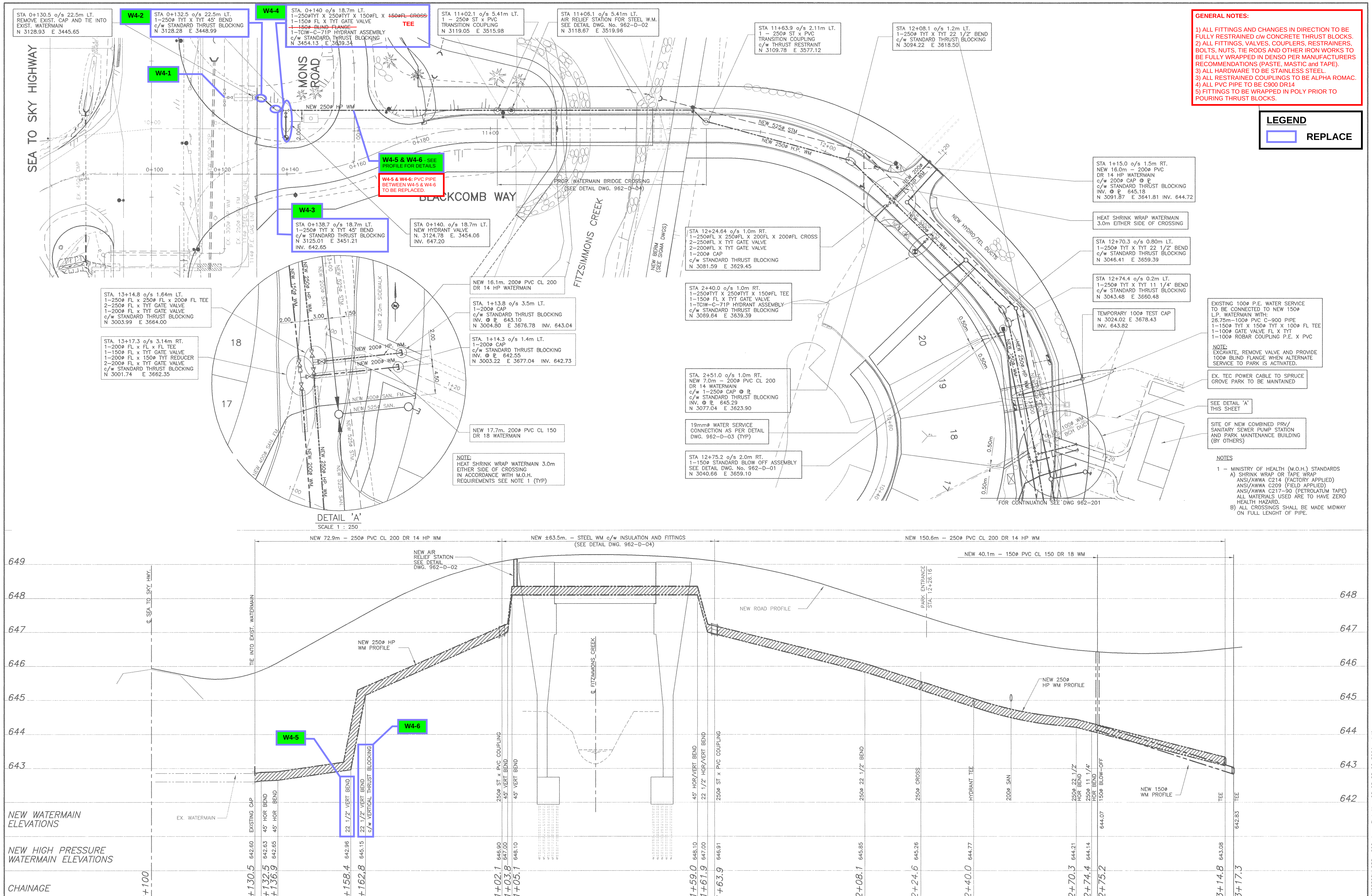
KERR WOOD LEIDAL ASSOCIATES LTD.
CONSULTING ENGINEERS
December 10/01

RESORT MUNICIPALITY OF WHISTLER
WHISTLER RACQUET AND GOLF RESORT
BLACKCOMB WAY - SANITARY SEWER AND FORCEMAIN
STATION 3+50 TO STATION 6+50

SCALE HORIZONTAL 1:500 VERTICAL 1:50
DRAWING No. 373-029A
SHEET 6 OF 9 ISSUE H

S40 41-2

DWG. NO.	34048-2025-SAN-002
DATE	2024-11-26
REVISION	1



NO.	REVISIONS	BY	DATE
5	GENERAL REVISIONS	RjW	06/97
4	AS PER R.M.O.W. COMMENTS	R.R.	12/96
3	GENERAL REVISIONS	H.R.	10/96
7	CONSTRUCTION RECORD DRAWING	J.M.	03/98
6	APPROVED PER R.M.O.W.	RjW	07/97

THE LOCATIONS OF EXIST. UNDERGROUND UTILITIES ARE SHOWN IN AN APPROX. WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXIST. UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTES :
BENCH MARK: WATER RESOURCES MONUMENT No. 1685 ON THE NORTHERLY FACE OF MONS OVERPASS APPROXIMATELY 525.0m. SOUTH OF LOT 'A', D.L. 1756 AND D.L. 1757 PLAN LMP 24298 CP 1 N.W.D. ELEV. 640.702 NAD 83.

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA D. W. MESSAM 10/20/01
APPR–SEAL

DRWN. : H.R./R.R.
DSGN. : J.G.
CHKD. : D.M.
DATE : MARCH 1994

WEB ENGINEERING LTD
consulting civil engineers
4173 DAWSON STREET, BURNABY, B.C. tel. 294–8588
495 F. DUNSMUIR STREET, NANAIMO, B.C. tel. 754–4669
204–6846 KING GEORGE HWY, SURREY, B.C. tel. 590–8566
211–5710 TEREDO STREET, SECHELT, B.C. tel. 885–4299

CLIENT : GREENSIDE PROPERTIES LTD.

GREENSIDE VILLAGE DEVELOPMENT
BLACKCOMB WAY
WATERWORKS

SCALE : HOR. 1:500 VER. 1:50
SHEET 17 OF 51
WEB DRAWING NO.: 962–200 REV. 7
MUNICIPAL NO. :

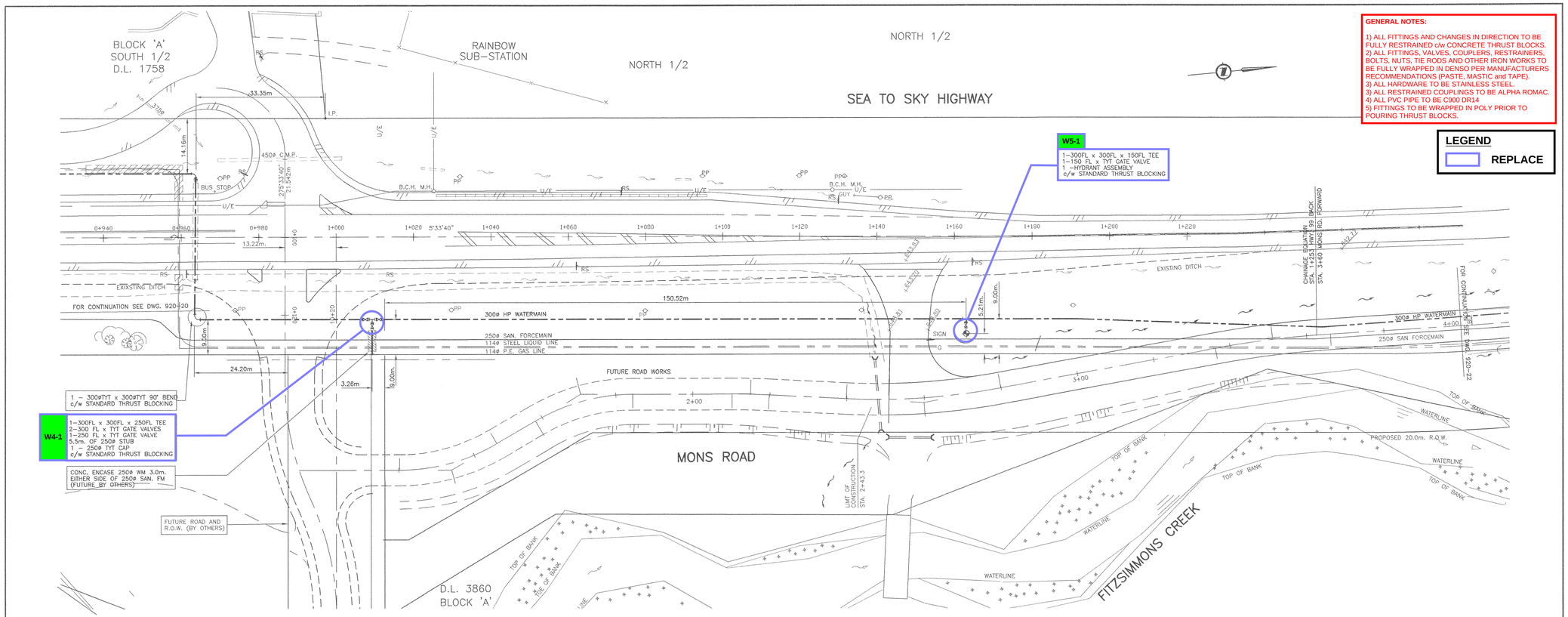
ISL	
DWG. NO.	34048-2025-WAT-001
DATE	2024-11-26
REVISION	1

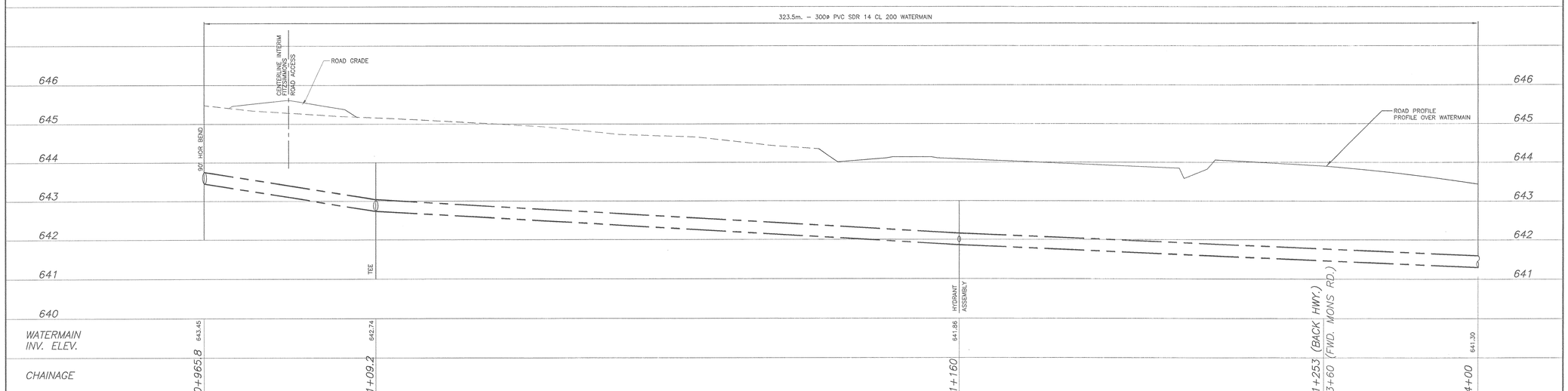
GENERAL NOTES:

1) ALL FITTINGS AND CHANGES IN DIRECTION TO BE FULLY RESTRAINED c/w CONCRETE THRUST BLOCKS.
2) ALL FITTINGS, VALVES, COUPLERS, RESTRAINERS, BOLTS, NUTS, TIE RODS AND OTHER IRON WORKS TO BE FULLY WRAPPED IN DENSO PER MANUFACTURERS RECOMMENDATIONS (PASTE, MASTIC and TAPE).
3) ALL HARDWARE TO BE STAINLESS STEEL.
3) ALL RESTRAINED COUPLINGS TO BE ALPHA ROMAC.
4) ALL PVC PIPE TO BE C900 DR14
5) FITTINGS TO BE WRAPPED IN POLY PRIOR TO POURING THRUST BLOCKS.

LEGEND

REPLACE





NO.	REVISIONS	BY	DATE
1	CONSTRUCTION RECORD DRAWING	H.R.	10/95

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ELEV. 640.702 NAD 83.

APPR–SEAL

DRWN. : H.R.
DSGN. :
CHKD. : R.P.
DATE : FEB. 1995

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consulting civil engineers
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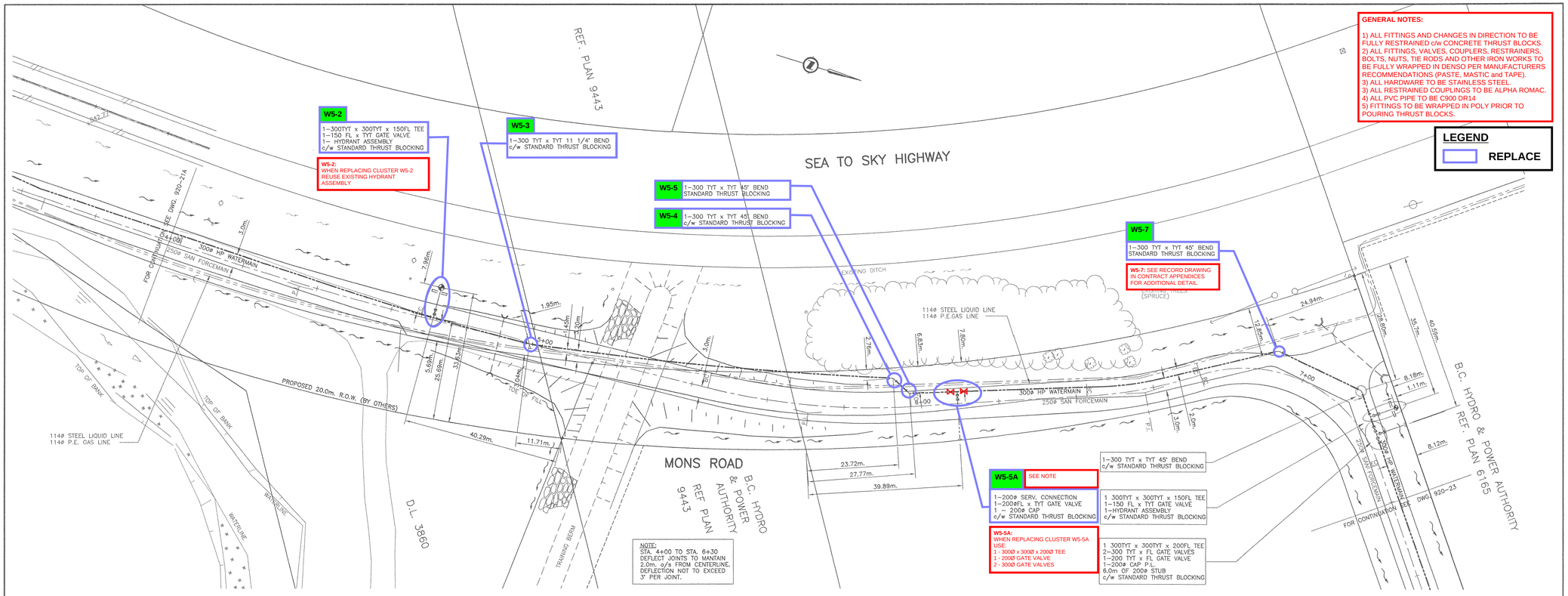
204–6848 KING GEORGE HWY, SURREY, B.C. tel. 590–8568
211–5710 TERDEO STREET, SECHELT, B.C. tel. 885–4299

CLIENT : GREEN LAKE ESTATES
AT
NICKLAUS NORTH GOLF AND COUNTRY CLUB

WATERWORKS
MONS ROAD – HIGHWAY 99
STA. 0+960 HWY. 99 TO STA. 4+00 MONS RD.

SCALE : HOR. 1:500 VER 1:50
SHEET OF
WEB DRAWING NO.: 920–21A REV. 1
MUNICIPAL NO. :

DWG. NO.	34048-2025-WAT-002
DATE	2024-11-26
REVISION	1



NO.	REVISIONS	BY	DATE
8	CONSTRUCTION RECORD DRAWING	H.R.	10/95
7	ROAD ALIGNMENT REVISED	H.R.	08/95
6	NEW ROAD PROFILE	H.R.	03/95
5	AS PER R.M.O.W. COMMENTS	H.R.	11/94

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NOTES :

BENCH MARK: WATER RESOURCES MONUMENT No. 1685 ON THE NORTHERLY FACE OF MONS OVERPASS APPROXIMATELY 525.0m. SOUTH OF LOT 'A', D.L. 1756 AND D.L. 1757 PLAN LMP 24298 CP 1 N.W.D. ELEV. 640.702 NAD 83.

APPR–SEAL

DRWN. : R.J.W.
DSGN. : R.P./W.C.
CHKD. : R.P.
DATE : OCT. 1993

WEB ENGINEERING LTD
consulting civil engineers
4173 DAWSON STREET, BURNABY, B.C. tel. 294–8588
495 F DUNSMUIR STREET, NANAIMO, B.C. tel. 754–4669
204–6946 KING GEORGE HWY, SURREY, B.C. tel. 590–8566
211–5710 TERIDO STREET, SECHELT, B.C. tel. 885–4299

CLIENT : GREEN LAKE ESTATES AT NICKLAUS NORTH GOLF AND COUNTRY CLUB

WATERWORKS
MONS ROAD
STA. 4+00 TO STA. 7+40

SCALE : HOR 1:500 VER 1:50
SHEET OF
WEB DRAWING NO.: 920–22
REV. 8
MUNICIPAL NO. :

DWG. NO.	34048-2025-WAT-003
DATE	2024-11-26
REVISION	1

Appendix B
Bypass Concept

ISL Whistler's Sanitary Infrastructure

300mm HDPE DR17 OR APPROVED EQUIVALENT RIGID BYPASS PIPE.

NEW HOT TAP/LINE STOP ON 400mmØ SEWER FORCEMAIN.

0 5 10m

FORCEMAIN BYPASS

BYPASS FOR ILLUSTRATIVE PURPOSES ONLY. CONTRACTOR TO PREPARE BYPASS PLAN FOR REVIEW AND APPROVAL BY ISL/RMOW.

ISL Whistler's Sanitary Infrastructure

300mm HDPE DR17 OR APPROVED EQUIVALENT RIGID BYPASS PIPE.

TRENCH ACROSS NANCY GREEN DRIVE FOR BYPASS PIPE CROSSING

300mm HDPE DR17 OR APPROVED EQUIVALENT RIGID BYPASS PIPE.

5 0 10 m

FORCEMAIN BYPASS

BYPASS FOR ILLUSTRATIVE PURPOSES ONLY. CONTRACTOR TO PREPARE BYPASS PLAN FOR REVIEW AND APPROVAL BY ISL/RMOW.

ISL Whistler's Sanitary Infrastructure

300mm HDPE DR17 OR APPROVED EQUIVALENT RIGID BYPASS PIPE.

0 10m

FORCEMAIN BYPASS

BYPASS FOR ILLUSTRATIVE PURPOSES ONLY. CONTRACTOR TO PREPARE BYPASS PLAN FOR REVIEW AND APPROVAL BY ISL/RMOW.

ISL Whistler's Sanitary Infrastructure

BURIED EXISTING TAPPING SADDLES ON 400mmØ SEWER FORCEMAIN FOR LINESTOP AND BYPASS.

400mmØ Saddle Port

350mmØ Saddle Port

300mm HDPE DR17 OR APPROVED EQUIVALENT RIGID BYPASS PIPE.

0 5 10

FORCEMAIN BYPASS

BYPASS FOR ILLUSTRATIVE PURPOSES ONLY. CONTRACTOR TO PREPARE BYPASS PLAN FOR REVIEW AND APPROVAL BY ISL/RMOW.

Appendix C Environmental Management Plan

CASCADE ENVIRONMENTAL
RESOURCE GROUP LTD

Environmental Management Plan

Sewer Fitting Replacement – Blackcomb Way to Valley Trail north of Nancy Greene Drive, Whistler, BC

Water Valve and Fitting Replacement – Spruce Grove Way and Mons Road, Whistler, BC

Prepared by:
Cascade Environmental Resource Group Ltd.
Unit 3 – 1005 Alpha Lake Road
Whistler, BC
V8E 0H5

Prepared for:
Resort Municipality of Whistler
4325 Blackcomb Way
Whistler, BC
V8E 0X5

File No.: 013-64-06-02
Date: December 16, 2024

Emergency Contact List

NAME	COMPANY	POSITION	CONTACT
Cascade Contact Numbers	Office		604-938-1949
Candace Rose-Taylor	Cascade Environmental	QEP	604-902-4009
Vicki Legris	Cascade Environmental	QEP	604-905-9391
RMOW Contact Numbers			
Chelsey Roberts	RMOW	Manager of Infrastructure Projects	778-997-9425
Scott Morphet	RMOW	Capital Projects Supervisor	604-905-8944
Engineer Contact Numbers			
Grant Wilburn	ISL Engineering	Project Engineer	604-849-5543
Spill Contact Personnel			
Emergency Management BC (EMBC)	24 Hour Spill Reporting		1-800-663-3456
DFO Spill Reporting Line			1-800-465-4336
Emergency Medical Services		**EMERGENCY**	**911**
Emergency – Whistler			**911**
Fire – Whistler			911 or 604-935-8260
Ambulance – Whistler			911 or 604-932-5894
Whistler RCMP			604-932-3044
BC Poison Control Centre	BC Drug & Poison Info Center		1-800-567-8911 or 604-682-5050
Whistler Health Care Centre	Vancouver Coastal Health		604-932-4911
Environmental/ Conservation			
Environment and Climate Change Canada			1-800-668-6767
Bear Conservation Officer			604-905-2327
BC Natural Resource Officer			1-877-952-7277

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1 Introduction

1.1 Location of Site

The project consists of sanitary sewer and water main repairs in Whistler, BC. Proposed sanitary sewer repairs are located along Blackcomb Way and Nancy Green Drive. Repairs are also proposed on a section of sewer pipeline along the paved Valley Trail north of Nancy Green Drive. Proposed water main repairs are located along Spruce Grove Way and Mons Road.

1.2 Project Description

Cascade Environmental Resource Group Ltd. (Cascade) was retained by the Resort Municipality of Whistler (RMOW) to provide an Environmental Management Plan (EMP) in support of proposed sanitary sewer and water main repairs. Proposed sanitary sewer works consist of installing a bypass of the sewer force main on Blackcomb Way to the Valley Trail north of Nancy Greene Drive, excavation, and replacement of sewer pipeline fittings in this area. Proposed water main works consist of excavation and investigation of pipeline valves and fittings along Spruce Grove Way, and excavation and replacement of valves and fittings on Mons Road north of Spruce Grove Way.

1.3 Goals and Objectives

This EMP provides measures to avoid and mitigate potential adverse environmental impacts associated with the proposed works. Adherence to the protocols described in the EMP should ensure that all environmental issues including, but not limited to, air and water quality, wildlife and wildlife habitats, aquatic ecosystems and riparian vegetation are protected and maintained.

1.4 Environmental Permitting

The EMP is designed to meet all applicable municipal, provincial and federal legislation, regulations, orders, standards and guidelines. The EMP assumes that all necessary permits, permissions, allowances and licenses issued by governing bodies are obtained and their provisions complied with. As the subject site is located within 30 m of Fitzsimmons Creek and associated wetland area, proposed works are located within the Riparian Assessment Area (RAA) designated by the provincial Riparian Areas Protection Regulation (RAPR) and the Riparian Ecosystems Protection Area (REPA) designated by the Whistler Official Community Plan (OCP).

The RAPR applies to all residential, commercial and industrial development activities proposed within 30m of a watercourse that is fish-bearing or connected by surface flow to a fish-bearing watercourse (BC Gov, 2019). As proposed sewer and water main repairs are considered institutional use and do not constitute residential, commercial or industrial development, the RAPR does not apply to the proposed works. However, the Whistler OCP may apply to the proposed works, and it is the responsibility of RMOW to determine the application of the OCP.

The provincial *Water Sustainability Act* (WSA) protects all watercourses from top of bank to top of bank, and regulates diversion and use of surface or groundwater. However, local governments are exempt from requiring WSA authorization to divert groundwater using drainage works under Section 32 of the Water Sustainability Regulation, and any dewatering of the worksite excavation pits should comply with this exemption to avoid the requirement for a WSA approval or water licence application (BC Gov, 2016). Additionally, Section 36 of the federal *Fisheries Act* prohibits the deposit of deleterious substances in a watercourse, or in any place where the deleterious substance may enter a watercourse (Government of Canada, 2019). The Contractor must ensure that dewatering works do not result in sediment-laden water entering a watercourse.

1.5 First Nation's Interests

The project area lies within the vicinity of the Lil'wat First Nation and the Squamish First Nation traditional territories. Land Use Planning Agreements between the Province of BC and the Squamish Nation and the Lil'wat Nation were signed in 2007 and 2008 respectively. The intent of these agreements is to recognise First Nations land use plans and interests, and to encourage engagement on land and resource issues.

An archeological investigation was not conducted as part of this study. The proposed work areas are located within the footprint of existing road and trail alignments and an archaeological site is unlikely to be located within the development area. However, if an archaeological site is encountered during works, the following steps must be taken activities must be halted, and the appropriate authorities consulted as per Table 1 below as archaeological sites are protected under the *Heritage Conservation Act*.

Table 1: Archaeological Site Discovery Response Plan

Archaeological site or artifact encountered on site by contractor*

↓

Halt works, secure and isolate the site

↓

Advise lead Contractor of the find immediately

Contractor

↓

Contact ISL Project Engineer and RMOW Project Manager

↓

Supervise isolation of worksite

RMOW Project Manager

↓

Contact the Archaeology Branch immediately at 250-953-3334 (archaeology@gov.bc.ca)

↓

Contact a professional consulting archaeologist or other specialist as directed by the Archaeology Branch

↓

An archaeological permit may be required before works can resume

*Evidence of possible archaeology sites includes:

- Rock art (including pictographs and petroglyphs).
- Surface features such as depressions created by former habitations, earthen fortifications, rock cairns, fish traps and clam gardens.
- Stone, bone, antler, wood or shell artifacts that have become visible on the land surface owing to erosion or recent land altering activity.
- Buried cultural or human remains that may be sighted in a cutbank, excavation, eroded shoreline, or other exposed deposit (BC Arch Branch, 2021).

1.6 Recreation and Public Use of the Project Area

The subject site is located within and adjacent to municipal roads and trails. The Contractor will communicate with the RMOW to manage traffic within the project area to protect public and worker safety. The Contractor will use signage, barriers and flagging to control or prevent public access to the project area during works.

2 Sediment and Erosion Control Plan

The objective of the Sediment and Erosion Control Plan is to minimize site erosion and protect water quality and fish habitat during the project. The following describes the measures that will be used to minimize site erosion and the transport of sediments into Fitzsimmons Creek and associated wetland (locally known as the Montebello wetland).

2.1 Sediment and Erosion Control Procedures

The Sediment and Erosion Plan includes the following mitigation measures to minimize soil erosion and impacts to water quality, fish and fish habitat around the project area. These measures are standard erosion control practices in British Columbia and are based on guidelines and recommendations from the Land Development Guidelines for the Protection of Aquatic Habitat (Chilibeck *et al.*, 1992) and Section 3 of Develop with Care: Environmental Guidelines for Urban and Rural Land Development in British Columbia (MOE, 2014a).

Soil exposed or stockpiled during land clearing activities is subject to erosion and transportation by water and wind. The amount of erosion can be controlled by proper planning of project activities, covering disturbed soils, revegetating slopes and by minimizing the amount of exposed soil available on site. Exposed, erodable soils and/or stockpile materials shall be protected from erosion by one or more of the following methods:

- Installation of perimeter silt fence.
- Grading to achieve low angle and less susceptible slopes.
- Surface roughening with machine tracks or woody debris.
- Covering with a suitable material such as polyethylene plastic liner, or geotextile.
- Establishment of a temporary cover of vegetation.
- Application of a soil binding spray or mulch.
- Establishment of permanent vegetation or temporary graminoid cover.

The proposed worksite is located within 30 m of Fitzsimmons Creek and the Montebello wetland. Excavation works may result in exposure of sediment, and sediment fencing should be installed were required (as determined by the Contractor, RMOW Project Manager or ISL Project Engineer) to prevent sediment-laden stormwater entering a watercourse during inclement weather conditions. Sediment fencing should be installed in accordance with Appendix 1 (Sediment Fence Installation) and should tie into areas of higher ground to prevent sediment-laden water from flowing around the sediment fencing. Sediment fence should be inspected regularly by the Contractor and Project Engineer, and before and after a significant rainfall event (see Section 2.3 below). Energy dissipaters, straw mats, geotextiles, and interception ditches may also be used as needed on a site-specific basis to control erosion.

2.2 Stockpiles and Material Disposal Areas

Temporary stockpiles of excavated material or backfill may be kept on-site. Any piles of earth or erodible construction materials stockpiled on site must be placed in a location where erosion into Fitzsimmons Creek or the Montebello wetland cannot occur, and the stockpile will not impede any drainage. Stockpiles and material disposal areas should be covered with tarpaulins or plastic sheeting as required.

2.3 Wet Weather Contingency Planning

Rainfall events can result in significant erosion due to the impact of the water and the runoff generated. It will be the responsibility of both the Contractor and the ISL Project Engineer to monitor current weather predictions. In the event of heavy run-off, sediment fencing, diversion berms, check dams made of sand bags or straw bales may be used. Materials required to handle excess runoff during a rainfall event should be on-site at all times. A storm event is defined as the forecast or actual exceedance of 25 mm of rainfall in a 24-hour period.

3 Water Quality Protection Plan

Protection of water quality is an essential component to healthy ecosystems. In addition, Section 36 of the Federal *Fisheries Act* prohibits the discharge of deleterious substances in a watercourse, or in any place where those substances might enter a watercourse (Government of Canada, 2019). To avoid water quality problems, best management practices (BMPs) outlined for protecting water quality in the Environmental Guidelines for Urban and Rural Land Development in BC (MOE, 2014a) as well as the Requirements and Best Management Practices for Making Changes In and About a Stream in BC (BC Gov, 2022) will be implemented, which includes the following aspects:

- Protecting water sources, through the maintenance of buffers and healthy riparian areas.
- Minimizing the release of sediment and silt into the water column (see Sediment and Erosion Control Plan, Section 2).
- Encouraging groundwater recharge.

Further to the application of BMPs, specific water quality protection measures will be implemented during project activities. Water quality protection measures include:

- Work will be completed as soon as possible once initiated.
- Sediment fencing should be installed where required (as determined by the Contractor, RMOW Project Manager or ISL Project Engineer) to prevent sediment, sediment-laded stormwater, or construction debris from entering Fitzsimmons Creek or the Montebello wetland during works.
- Any waters leaving the work site that contain oil and grease, or any other material, should be detained, treated or otherwise processed to remove these materials before release into the environment.
- All equipment and machinery involved in the works will be in good operating condition, free of leaks; machinery will be power washed prior to works to eliminate excessive oil or grease. All refuelling and servicing will take place at least 30 meters from watercourses.

Preliminary site investigations and previous works determined that groundwater is likely to be encountered during excavation works along Blackcomb Way, and may be encountered at other project locations (Grant Wilburn, ISL Project Engineer, pers. comm.). Groundwater pumped from excavation pits during works is expected to be highly sediment-laden, and should be released to a vegetated area to infiltrate the ground prior to entering a watercourse.

Excavation works along Blackcomb Way are expected to be approximately 3m deep, with the excavation pit located within the road right of way adjacent to the Montebello wetland. It is not recommended that sediment-laden water from the excavation pit is released into the Montebello wetland, or anywhere it may flow into a watercourse without first infiltrating the ground. As no suitable vegetated areas for groundwater disposal were observed in the vicinity of the Blackcomb Way excavation works, it is recommended that water from the excavation pit is pumped into a holding tank or the sanitary sewer for disposal (if permitted by RMOW).

Sanitary sewer repairs along the Valley Trail north of Blackcomb Way are located adjacent to Fitzsimmons Creek, and no water from the works excavation pit may be pumped east of the Valley Trail where it may enter the creek. Potentially suitable vegetated areas for disposal of groundwater from an

excavation pit occur west of the Valley Trail and in the Highway 99 right of way north of this section of the worksite. The capacity of a vegetated area to receive sediment-laden groundwater pumped from an excavation pit is dependent on many factors, including the volume and rate of water discharged to the area, permeability of the ground, and recent weather conditions. Potential groundwater disposal areas should be reviewed by the Contractor and Project Engineer prior to works commencing to determine suitability, and disposal areas should be reviewed regularly during works to ensure capacity is not overwhelmed and no overland flow of sediment-laden water into a watercourse occurs.

Water main repairs along Spruce Grove Way and Mons Road also include excavation works that may require disposal of sediment-laden groundwater from the excavation pit. Surrounding vegetated areas, such as the area between Highway 99 and Mons Road, may be potentially suitable for groundwater disposal, and should be reviewed by the Contractor and Project Engineer prior to works commencing.

The following recommendations should be adhered to during all dewatering works:

- The Contractor is responsible for ensuring that turbid groundwater pumped into a vegetated receiving area infiltrates the ground prior to entry into any watercourse.
- The Project Engineer shall be onsite for most project activities, and will also conduct regular inspections of the groundwater receiving areas during dewatering activities.
- During the inspections conducted by the Contractor and Project Engineer, the groundwater receiving areas should be reviewed to ensure no overland flow of sediment-laden water into a watercourse occurs. Regular inspections will be required (hourly inspections are recommended).
- Dewatering activities should be halted during heavy rain, or if a rainfall event (defined as more than 25mm of rain within 24 hours) is forecast.
- If the receiving area capacity is overwhelmed and turbid water from dewatering activities flows to within 20m of a watercourse, dewatering activities should be halted and an alternative dewatering location established.
- If no alternative dewatering location can be established, it is recommended that turbid groundwater from the excavation pit is pumped into a containment tank, or into the municipal sanitary sewer if permitted by RMOW.
- If turbid water from dewatering activities enters a watercourse at any time during project activities, dewatering must be halted, and a Qualified Environmental Professional (QEP) should be contacted to provide water quality sampling services and recommendations.

4 Air Quality and Dust Control Plan

Proposed project activities may reduce air quality at a local scale during excavation works. Impacts are generally of short-term duration but may still cause adverse air quality impacts. Typical activities for the project include earthmoving (cut and fill operations, trenching, soil compaction and grading) and paving. Emissions generated from these activities could include:

- Combustion emissions from heavy-duty diesel and gasoline powered vehicles and equipment.
- Combustion emissions from worker commute trips.
- Fugitive dust from soil disturbance and land clearing.

No land clearing works are proposed for the project; however, excavation works may result in exposed soil and dust. To minimize potentially significant emissions, the following measures will be implemented.

4.1 Mitigation Measures

Sources of pollution from project activities include heavy construction vehicles and equipment, emissions from worker commuter trips and fugitive dust.

4.1.1 Heavy Construction Vehicles and Equipment

The contractor will implement the following mitigation measure to minimize the release of air pollutants from construction related heavy-duty vehicle and equipment.

- All equipment shall be fitted with standard emission control devices appropriate to the equipment and in compliance with Federal and Provincial regulations and standards.

4.1.2 Dust and Silt Control

Dust emissions during works are typically associated with excavation, earth moving, material storage and handling, and vehicle movement. The extent of these impacts would depend on the existing air quality, the size of the affected area and the level of construction. Section 3 outlines sediment control measures to be implemented in the vicinity of watercourses.

To minimize the potential impacts from fugitive dust, the contractor will implement to following:

- Minimize hauling of construction materials, including "one trip" handling procedures during cut and fill activities.
- Control of dust through the duration of construction works using environmentally acceptable dust suppressants or water. Water will be preferred, with consideration for water conservation, drainage and sediment control where appropriate.
- Covering of dry soil piles during periods of extended exposure.
- Conduct regular visual inspections of site perimeter to check for dust deposition on vegetation, cars and other objects to gauge effectiveness of dust control activities.

5 Vegetation Management Plan

The area of proposed development is located within existing road and trail alignments. No vegetation removal is proposed for works; however, if vegetation removal is determined to be required during the songbird nesting season of April 1 to September 1, a QEP should conduct a nest survey prior to vegetation removal to ensure compliance with the provincial *Wildlife Act* and the federal *Migratory Birds Convention Act.*

6 Solid Waste Management Plan

Project related sources of waste include tools and parts packaging, food scraps and packaging, fuel containers and construction waste and garbage (e.g. wooden pallets, plastics). Waste and litter have a negative impact on the environment and may injure wildlife if not handled properly.

Contractors will adhere to the requirements of the RMOW Solid Waste Bylaw (RMOW, 2017) and the following solid waste best management protocols:

- Provide clearly labeled receptacles, describing types of materials that can and cannot be deposited into the receptacle. By organizing the waste, materials to be reused will remain stockpiled on site, and recyclable materials will be picked up by designated recycling companies.
- Ensure that packing materials such as crates / palates, or materials that can be reused by materials suppliers, are returned rather than disposed of.
- Ensure that potentially hazardous waste materials such as oily rags or used spill pads are separated from regular waste.

- Ensure that hazardous waste, such as lubricants, fuels, chemical, and their receptacles are properly disposed of.
- Separate food waste from regular construction waste. Food waste will only be stored in designated bear proof receptacles and emptied regularly.
- Conduct regular visual inspections of the waste receptacles to ensure that recyclable materials are not being deposited into waste receptacles, and waste is not being deposited into the recycling receptacles.
- All waste that cannot be re-used on site will be shipped off site for disposal.
- All contractors and sub-contractor staff will be advised to properly dispose of personal garbage.
- Portable toilets will be provided where necessary and will be emptied regularly.
- Vegetation debris that cannot be used on site will be shipped off site for disposal.

Through the implementation of the Solid Waste Management Plan, waste will be organized to the effect that recycling and reusing of construction materials will be maximized while waste requiring disposal will be minimized. Upon completion of work in a particular part of the site, the site will be cleaned up to the satisfaction of the ISL Project Engineer and RMOW Project Manager.

7 Hazardous Waste Management Plan

Disposal of all hazardous wastes generated during project activities will be conducted by a qualified contractor in compliance with appropriate regulations and documentation requirements. Hazardous wastes are defined as any substance that poses a significant human safety, or any substance toxic to aquatic or terrestrial life, and include fuel and petroleum products, contaminated soil or water, batteries, solvents, anti-freeze, explosives, concrete wash water/leachate or other wastes containing pesticides, corrosives, poisons or dioxins. Hazardous wastes will be stored in appropriate containment areas, properly labelled and stored with secondary containment, located away from watercourses.

7.1 Fuel Storage and Handling

- Petroleum storage, including propane storage, fuel storage, lubricant storage and storage of other petroleum products shall be designed to meet or exceed the existing safety regulations of the Provincial Petroleum Association, the National Fire Code and the Workers' Compensation Board. All storage tanks associated with the project will be installed and operated in compliance with the CCME Environmental Code of Practice for Aboveground Storage Tank Systems Containing Petroleum Products (2003) and the BC Field Guide to Fuel Handling, Transportation and Storage (MWLAP, 2002b).
- Underground storage of petroleum products shall not be permitted.
- The refuelling of equipment will be conducted in the designated areas, isolated from creeks and surface water drainages. Refuelling will take place a minimum distance of 30 m from the top of bank of all watercourses or surface drainages.
- Where possible fuelling and lubricating of equipment should only be conducted after the equipment to be serviced is moved to a constructed service pad with a separate drainage collection system, as far as possible from detention or sedimentation facilities and leave strips.
- Equipment is to be in good operating condition and free of any leaks, excessive oil and grease.
- All equipment must be checked daily to ensure there are no leaks of any fluids.
- Petroleum storage facilities shall be located away from watercourses. Storage facilities shall be located at a minimum distance of 30 m from any watercourse.
- Any fuel or lubricants stored on site must have secondary containment capable of holding 110% of the contents of the container. This may be achieved through use of double-walled storage tanks or by constructing a polyethylene-lined containment berm beneath fuel containers.
- Fuel storage areas must be covered with polyethylene tarps to prevent the accumulation of rainwater.

- Gravity fed storage tanks shall not be permitted. Construction personnel shall be instructed to hand hold the fuel nozzle rather than lock the nozzle open, to minimize the potential for fuel spillage.
- Care will be taken not to overfill any vehicle or equipment fuel tanks.
- Waste fuel, oil, solvents, and other petroleum products shall be disposed of off-site at a location that is approved by the regulatory authorities.
- Any spill of petroleum products shall be reported immediately to the ISL Project Engineer and RMOW Project Manager. Clean up of such spills shall commence immediately. Reporting of petroleum spills to authorities shall be as set out in the appropriate legislation and regulations. Such reporting is the responsibility of the contractor. The contractor is also responsible for reporting all spills larger than 100 litres of flammable liquids to Emergency Management BC (EMBC) of the Ministry of the Solicitor General. Where it is not practical to report to EMBC within a reasonable time, the spill shall be reported to the nearest detachment of the Royal Canadian Mounted Police.

8 Spill Prevention and Emergency Response Plan (SPERP)

There is the potential for environmental damage from the accidental spillage of petroleum products and chemicals during project activities. Additionally, as the sewer force main will be bypassed during works, there is the potential for the accidental leak of sewage. To minimize the possible adverse effects on the environment of such a spill, this Spill Prevention and Emergency Response Plan (SPERP) outlines mitigative action to be taken to deal with a possible emergency situation. The SPERP includes guidelines for the reporting of a spill, training procedures, resource allocations and the supervision of containment and restoration procedures.

The SPERP should be presented to all workers and contractors working on the project. In addition, a detailed site map should be provided to all contractors identifying all water courses and other potentially environmentally sensitive areas.

In accordance with the *Spill Reporting Regulation* of the *BC Environmental Management Act* (MOE, 2017) the following spills will be reported immediately to and EMBC as per the protocol outlined below in Table 3:

- A spill or release of any amount of materials which impacts water ways
- Hydrocarbons; 100 litres where the hydrocarbon contains no toxic materials and does not impact water ways
- Produced/salt water; 200 litres where the fluid contains no toxic materials
- Fresh water; 10,000 litres
- Drilling or invert mud; 100 litres
- Sour Natural gas; 10kg or 15 m^3 by volume where operating pressure is >100 PSI
- Condensate; 100 litres
- Any fluid including hydrocarbons, drilling fluids, invert mud, effluent, emulsions, etc. which contain toxic substances; 25 litres

8.1 Sewage-specific Response Plan

Untreated sewage can contain parasites, bacteria, viruses and toxins that may adversely affect aquatic life should a sewage leak into a watercourse occur. Additionally, nutrients and organic matter in sewage can cause rapid bacterial reproduction and respiration, reducing the dissolved oxygen in a watercourse (MOECCS, n.d.). Low levels of dissolved oxygen can harm fish and other aquatic life.

The sanitary sewer along Blackcomb Way will be bypassed during proposed works, using a high density polyethylene (HDPE) pipe of appropriate thickness (to be determined by the Project Engineer). No pumping is required during the sewage bypass; however, as a sewage leak would have potentially

significant adverse impacts on ecologically sensitive areas, and the worksite is adjacent to Fitzsimmons Creek and the Montebello wetland, the following recommendations should be implemented to prevent a sewage leak:

- A visual test of the bypass system will be conducted prior to works; testing shall be conducted to the satisfaction of the ISL Project Engineer and the RMOW Project Manager.
- The Contractor shall prepare a response plan clearly detailing the names of appropriately qualified personnel that will respond to a sewage leak, along with required actions and acceptable response times.
- Mitigation resources should be kept onsite in case of a sewage leak, including sandbags, sediment fencing and other barriers to prevent the spread of sewage to a watercourse.
- Sediment fencing should be installed if required by the Project Engineer or RMOW Project Manager. Sediment fencing should tie into areas of higher ground to prevent sewage from flowing around the sediment fencing in case of a leak. Sediment fence should be inspected regularly by the Contractor and ISL Project Engineer.
- The Contractor should prepare a list of potential vacuum excavation truck providers that could be contacted in case of a spill, and keep the list available and accessible onsite.

In the event of a sewage leak, the general spill response plan outlined in Section 8.2 should be implemented, along with the following additional recommendations:

- Identify the source of the leak and, if possible and safe, stop or reduce the spill.
- Immediately alert the ISL Project Engineer and RMOW Project Manager.
- Utilize all possible resources, including sandbags, sediment fencing, vacuum excavation trucks and excavators to divert the spill to a low-risk area where possible, e.g. a downgradient manhole, or within a sump or sediment-fence contained area unconnected to downgradient watercourses.
- Transport all collected waste to an appropriate wastewater treatment facility.
- Inform the public, as the leak could contaminate private property and/or drinking water.
- Assess the amount of sewage spilled, the amount (if any) that entered a watercourse, and the size of the area impacted.
- Retain an appropriately-qualified clean-up company with experience mitigating spills to the aquatic environment.
- Retain a QEP to monitoring mitigation and clean-up works and conduct water sampling for contaminants and dissolved oxygen levels in any watercourses impacted.
- Excavate and replace contaminated soil, particularly if it could contaminate groundwater flowing subsurface to a watercourse.
- Use disinfectants where appropriate to reduce contaminants in the soil.
- Aeration systems may be used to restore oxygen levels in affected watercourses if aquatic life is impacted.
- Restoration of fish habitat may be required, including planting of aquatic or riparian vegetation, or removal of solid waste from a watercourse.

8.2 General Spill Response Plan

8.2.1 Pre-Emergency Planning

Hazardous Identification: The contractor will identify the potential hazards on the project site. A Safety Data Sheet will identify all hazardous compounds coming on site and this information will be available to all personnel. Hazardous compounds will be stored in secure locked containers on site in secured enclosures.

Resources Available: The contractor will use its own resources to clean up a spill. If required, emergency response for larger spills will be available. First responders such as fire departments have the

capability to clean up a variety of spills. Other resources such as local environment spill clean-up companies can also be called upon on an emergency basis.

Internal Alerting: Because timely and accurate reporting of an accidental spill can help to ensure quick and efficient response, this plan includes detailed information regarding notification and emergency response procedures.

8.2.2 Emergency Response Plan

Any environmental emergency observed on the project site must be reported and responded to appropriately as per Table 2 below. A list of emergency contacts is provided at the beginning of this Environmental Management Plan. Examples of environmental emergencies include the following:

- Fuel spills
- Sewage leaks
- Encounters with aggressive wildlife, or collisions with wildlife
- Large sediment release into watercourses
- Wildfires
- Accidents involving large machinery

Table 2: Environmental Emergency Response Plan

1st Responder

Ensure personal safety and safety in the emergency area

Stop the flow of any hazardous material if safe to do so

Advise lead Contractor of the situation as soon as possible

Secure and isolate the emergency area

Assess the situation; identify product, equipment involved, affected area and emergency status

Contractor

Contact ISL Project Engineer and RMOW Project Manager

Supervise action to prevent additional spillage, utilize on-site resources

Assess severity of environmental emergency

Minor Spill

On-site resources sufficient to clean up the contaminant and restore the location to the pre-spill conditions

Major Spill (>100L to land or any amount to water)

RMOW to notify EMBC immediately

Employ private clean-up company if deemed necessary

Spills on Land

The first action for clean-up of land-based spills is to prevent the spread to watercourses or drainage ditches through containment and damming. Second, limit the saturation of the material deep into the soils by removal of the liquid by absorbents or pumping. When the free liquid is contained, steps can then be taken to collect all contaminated soil for later disposal.

Spills into Drainage Ditches or Water Bodies

These spills have the potential for causing environmental damage. All spills near or into water require immediate attention and reporting to the EM and the RMOW for external reporting. The first response should be to immediately stop the spread of the spilled material downstream. This can be accomplished with the use of absorbent booms and absorbent material designed to pick up oil. These spills will be immediately reported to EMBC by the RMOW.

8.2.3 Internal and Other Spill Response Resources

Spill kits must be available in every vehicle and piece of equipment operating on the right of way or project site. All spill kits must be fully stocked and restocked as soon as possible if used. Example contents of a spill kit may include but are not limited to:

- 2 each - 10' Oil Only Socks
- 15 each - Polypropylene Sorbent Pads (oil only) 18" x 18" x 3/8"
- 2 each - 10 Quart Cellulose Sorbent Material, Oil Only
- 1 each - Barrier Ribbon, Yellow "Caution Do Not Enter"
- 1 each - Poly Disposal Bags (45 gallon drum size, minimum 6 mil)
- 1 each - Blank Labels for Plastic Bags
- 1 each - Plastic Bag Tie
- 1 each - Epoxy Plug Compound (hydrocarbon compatible)
- 1 each Spill Kit Container Marked "Spill Response Kit"

In the case of a very large spill, Spill Kit inventory and off-site materials can be called upon. Other materials available for spill response from outside and on-site contractors include:

- Shovels
- Vacuum trucks
- Booms
- Excavators
- Bags of absorbent
- Loaders

Emergency Back-up

It is assumed that in the case of large spills, the RMOW Project Manager will call on the resources of commercial spill clean-up companies, EMBC, and local fire response teams.

8.2.4 Plan Communication

The Plan will be made available to all employees and sub-contractors on site. It will also be discussed at the initial site meeting and safety training sessions.

8.2.5 Monitoring of Clean up and Restoration

The clean up and restoration of every spill will be monitored by the ISL Project Engineer. The Project Engineer and RMOW Project Manager will be in contact with the appropriate government agencies, as required. The Contractor will be responsible for restoring the contaminated site to its previous state.

8.2.6 Report Filing

At the end of the clean-up, a detailed environmental report will be filed with the government regulatory agencies, if required.

9 Wildlife Management Plan

9.1 Overview

As project activities occur within developed residential areas, the potential for wildlife to be encountered in the project area is low. However, birds and small mammals may utilize the existing tree and shrub vegetation around the project site. Additionally, black bear are known to frequent residential areas in Whistler.

Proposed sanitary sewer and water main repairs are located within existing road and trail alignments and no vegetation removal is required for the proposed works. Detrimental effects to local wildlife populations and their habitat can be avoided, minimized and/or managed through implementation of the recommendations outlined below. Particular attention is paid to species during vulnerable periods of the life cycle (e.g. denning bears and breeding birds), and to species at risk.

9.2 Mammals

Large mammal species that are known to visit the general area are limited to black bear (*Ursus americanus*). Mid-size mammal species that may utilize the general area include the snowshoe hare (*Lepus americanus*), coyote (*Canis latrans*), and raccoon (*Procyon lotor*). Smaller species include Douglas squirrels (*Tamiasciurus douglasii*), little brown myotis and the yellow-pine chipmunk (*Tamias amoenus*).

Impacts to mammals potentially occurring in the project area will be mitigated by the following methods:

- Managing attractants to bears and other mammals during project activities (see Sections 6 and 9.2.1).
- Implementing the Wildlife Avoidance Response Protocol (WARP) for large mammals and all species of concern as outlined above in Section 9.2.1 below.

9.2.1 Potentially Dangerous Wildlife

The wildlife management plan for potentially dangerous wildlife is intended to ensure public and worker safety as well as to protect wildlife that may be dangerous to humans from activities associated with the project. Black bears may access the project area if they are attracted to human food/garbage left at the lookout location. Potentially dangerous wildlife management objectives related to project activities include:

- Provide guidelines for eliminating attractants
- Provide guidelines for responding to wildlife encounters

When human food attractants are secured away from wildlife, potential human-wildlife conflicts and unnecessary deaths of wildlife can be avoided. Wildlife that learn to associate humans and human developments with food (food-conditioning) tend to react more boldly with humans and are more likely to cause human injury and property damage than wildlife that are not food-conditioned. Some wildlife, particularly bears, may only need to access human food attractants once or twice to change their behavior toward humans. It is therefore imperative that all potentially attractive sources of food for wildlife are secured using tested and approved wildlife-resistant containers, as per the RMOW Solid Waste Bylaw (RMOW, 2017).

Potential wildlife attractants on site may include human food, garbage, recycling, compost, and petroleum products. Bears in particular will tip over garbage cans, break into sheds, and hang around garbage compactor sites. Common bear proofing procedures include using tested and approved wildlife-resistant containers and ensuring that the receptacles are emptied at the end of the work day.

Any worker that observes potentially "dangerous wildlife" should immediately notify their supervisor. All workers should avoid that location for at least 30 minutes. If it is safe to do so (i.e. from a vehicle or inside a building), making noise may scare the animal off the site. The person in charge of safety should record all wildlife sightings and their corresponding location.

Wildlife Avoidance Response Protocol (WARP)

Wildlife avoidance strategies are employed as appropriate to ensure minimal disturbance to wildlife. A policy of avoidance/withdrawal will be in effect for all wildlife encounters with all large mammals and species of concern in order to minimize the effects of project activities.

A Wildlife Avoidance Response Protocol (WARP) will be initiated by contractors on sighting a bear or other large mammal on or near the project area. This initiative corresponds to guidelines put forth by the Ministry of Environment in *Wildlife Guidelines for Backcountry Tourism/Commercial Recreation in British Columbia, May 2006* and the *Human-Bear Conflicts Reduction Guidelines for River Rafting, March 31, 1998.*

A WARP is initiated at first sighting of a large mammal, within a 50 m buffer (as recommended by the BC Bear Viewing Association). When a bear, or other large mammal, is observed within 50 m of the worksite, contractors will halt what they are doing and not approach the bear. Contractors will make a wide detour or leave the area immediately. If in close proximity to the animal, contractors will be trained to remain calm, keep the animal in view, avoid direct eye contacts and move away without running. Contractors will cease work (if safe to do so) in the 50 m buffer until the animal retreats out of sight. Contractors should be aware that a single animal may be accompanied by young.

In addition, all contractors will adhere to the following BC MOE Safety Guide to Bears in the Wild:

- Avoid conflict by practicing prevention.
- Be alert.
- Look for signs of recent bear activity. These include droppings, tracks, evidence of digging, and claw or bite marks on trees.
- Make your presence known by talking loudly, clapping, or occasionally calling out. Whatever you do, be heard! It doesn't pay to surprise a bear.
- There is no guaranteed minimum safe distance from a bear - the further, the better.
- Stay away from dead animals. Bears may attack to defend such food.

9.3 Amphibians and Reptiles

Amphibians and reptiles may occur in the riparian and rocky habitats adjacent to the subject site. The best management practices listed below will protect any amphibians or reptiles that may occur in or around the project area:

- Work will be completed as soon as possible once it is initiated.
- Silt fencing will be installed around the project area to prevent any sediment run-off into the creek.
- The project areas will be restored to their pre-works condition upon completion of the works.
- All equipment and machinery involved in the works will be in good operating condition, free of leaks, excessive oil or grease, and power washed. All refuelling and servicing will take place at least 30 meters from the creek.

9.4 Birds

No vegetation removal is expected to be required for the proposed works. If vegetation removal is determined to be required, to ensure compliance the Migratory Birds Regulations of the federal *Migratory Birds Convention Act* (Government of Canada, 1994) and the provincial *Wildlife Act* (BC Gov, 1996), any vegetation removal should occur prior to or after the breeding bird season of April 1 to September 1. If vegetation removal is necessary during this period, a songbird nest survey should be conducted by a QEP prior to clearing.

Active nests of all song birds legally protected, and active or inactive nests of great blue heron, bald eagle, golden eagle, peregrine falcon, gyrfalcon, osprey and burrowing owl are similarly protected (BC Gov, 1996). Additionally, pileated woodpecker nesting cavities are protected when active, and for a period of 36 months after reported unoccupied (Government of Canada, 2024). If active or the above specified inactive nests are identified, they must be protected by species-specific vegetation buffers depending on the species of bird that occupies or created the nest.

10 Wildfire Prevention and Response Plan

As project activities are located adjacent to a creek, the potential for works to cause a wildfire is considered to be low. However, should works take place during a moderate, high or extreme fire danger rating, or should the RMOW require it, the contractor will ensure that all project staff and sub-contractors are trained in fire prevention and preparedness. Firefighting and fire suppression equipment on site will comply with the *BC Forest Fire and Suppression Regulation*, and the local Fire Danger Rating and associated restrictions will be monitored by the Project Manager.

The BC Parks Fire Response Plan details fire prevention measures and actions to be taken in the event of a fire outbreak resulting from project activities. The purpose of this plan is to:

- Identify fire prevention measures and train staff accordingly, thus reducing the risk of accidental wildfire starts.
- Clearly define the course of action in the event of a fire.
- Ensure contractors are aware of the correct fire response action.

Fire Prevention Measures:

- Smoking shall be limited to designated smoking areas only.
- Smokers must ensure that cigarettes and matches are fully extinguished before discarding, and are disposed of in appropriate containers.
- Ensure that garbage, and oily rags are properly disposed of and that refuse does not accumulate on site.
- Spills of oil and other combustible material is promptly cleaned up using absorbent materials and properly disposed of.
- Storage of flammable liquids such as lubricants or gasoline shall only occur in government approved receptacles.
- Fire extinguishers must be cached in visible and accessible locations around the site, especially around area of potential concern (e.g. flammable materials storage areas).
- The Project Manager will monitor the Canadian Fire Weather Index to identify daily hazard class listings.

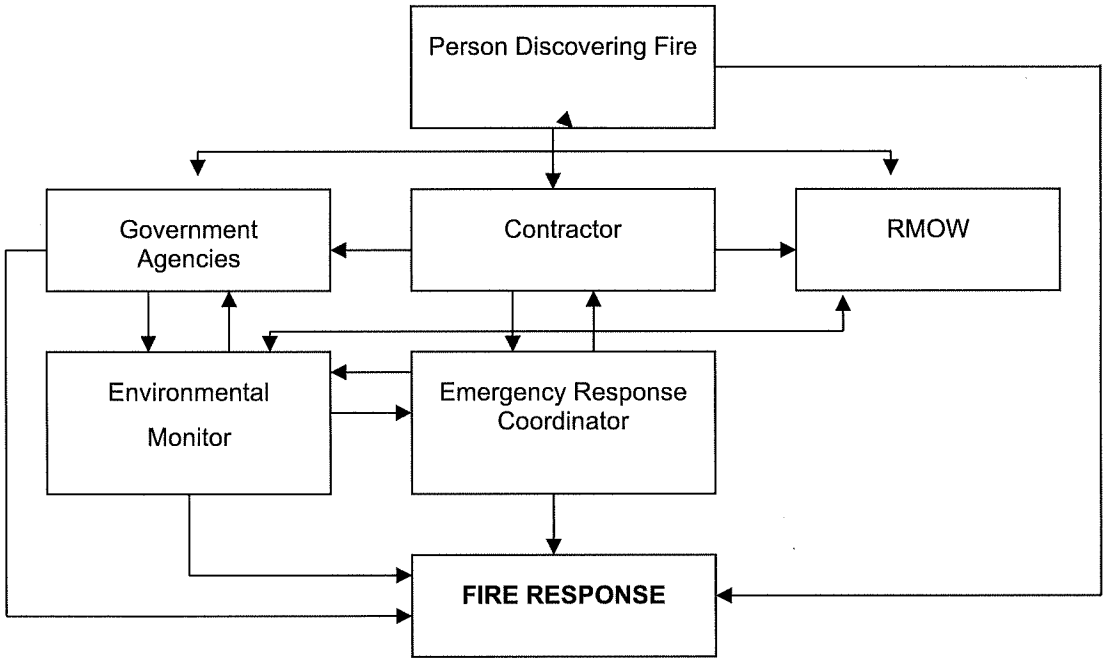
Canadian Fire Weather Index

The Canadian Forest Fire Index provides a numerical rating of relative fire potential. Calculation of the daily hazard class is based on consecutive daily observations of temperature, relative humidity, wind sped and 24-hour rainfall. The Daily Fire Hazard Class ratings are available on the internet at http://www.for.gov.bc.ca/protect/. The Daily fire hazard Classes are defined below;

- Very Low: Normal Operations
- Low: Normal Operations
- Moderate: Fire watch to be conducted for the period of 1 hour after daily site operations have ceased.
- High: Daily fire watch to be conducted after each work shift for the period of 1 hour. Early work shift to commence after 4th consecutive day of high fire danger.
- Extreme: Daily fire watch to be conducted after each work shift for the period of 1 hour. Operations on the site must stop after 3 consecutive operating days under extreme fire hazard.

The Project Manager will be responsible for obtaining the daily hazard class ratings, communicating with contractors to determine appropriate operations given the daily fire hazard class rating, and reporting daily fire hazard class ratings to the contractor. All project staff and sub-contractors will be responsible for acknowledging the current daily fire hazard class, and adjusting their daily operations accordingly.

Table 3: Onsite Chain of Command for Reporting and Responding to a Wildland Fire



Contractor Fire Identification Instructions

1. Identify ignition and/or fuel source for fire, and remove if possible.
2. Notify Emergency Response Coordinator of the fire and provide the following details.
   - Location of Fire – using site specific landmarks; what is the easiest access to the fire.
   - Fuel type – What caused the fire, what fire fuel is present, are there any natural fire breaks
   - Size of Fire – What is the current size of the fire, and how fast is it spreading.
   - Wind - current wind direction and speed
3. Respond to fire with personal fire suppression kit. Personal fire suppression kit will include;
   - 2.5 Gal Piss can or 10 lb Fire extinguisher
   - Shovel and/or Pulaski

4. Goals of initial fire fighting response

- Remove ignition source for fire and or fuel source of fire if possible
- Extinguish the fire using personal fire extinguisher or piss can
- Contain the fire. Remove potential fuel sources surrounding the fire, including machinery, trucks, and or fuel storage containers
- Ensure personal safety, and the safety of others working around you
- Report back to Emergency Response Coordinator with results of the initial fire fighting response.

Emergency Coordinator Instructions Assessments and Actions

1. Assess situation and be aware that:

- Safety of you and fellow responders is priority.
- There may be hazardous or explosive material on site.
- You may not be able to safely access the site

2. Determine the following:

- Fire location.- Latitudes and Longitudes
- Size - note rate of spread.
- Nature of fire – standing timber, slash, smoking, blazing, crowning
- Wind - direction, speed.
- Access - road, air.
- Water – nearest location and quantity.
- Resources – What resources are on site or near site
- Hazards – Identify Explosive and Fuel storage areas
- Values at Risk – Identify any other values at risk, people, residences, buildings

3. Designate a staging area containing a first aid station (as practical)

4. Take a head count of responding staff.

5. Tell team members:

- Where staging area is
- That if they get lost during the event report to staging immediately.
- Where the safe escape route is from fire.

6. Direct staff to determine fire source and action fire with extinguisher, hose and other equipment.

7. Confer with contractor

- Is it safe to proceed?
- Size and spread of fire.
- Further equipment required?
- Do we need to call on outside help?
- Do we need to consider evacuating site?

8. Direct resources as they arrive. Ensure you keep a record of who is on scene responding.

9. If injured are present, appoint most qualified staff member as Medical Supervisor. If greater than 3 people are injured, appoint a Triage Leader and Transport Supervisor as resources allow (have the Medical Supervisor combine roles as practical).

10. Ensure all staff are accounted for at the end of operation.

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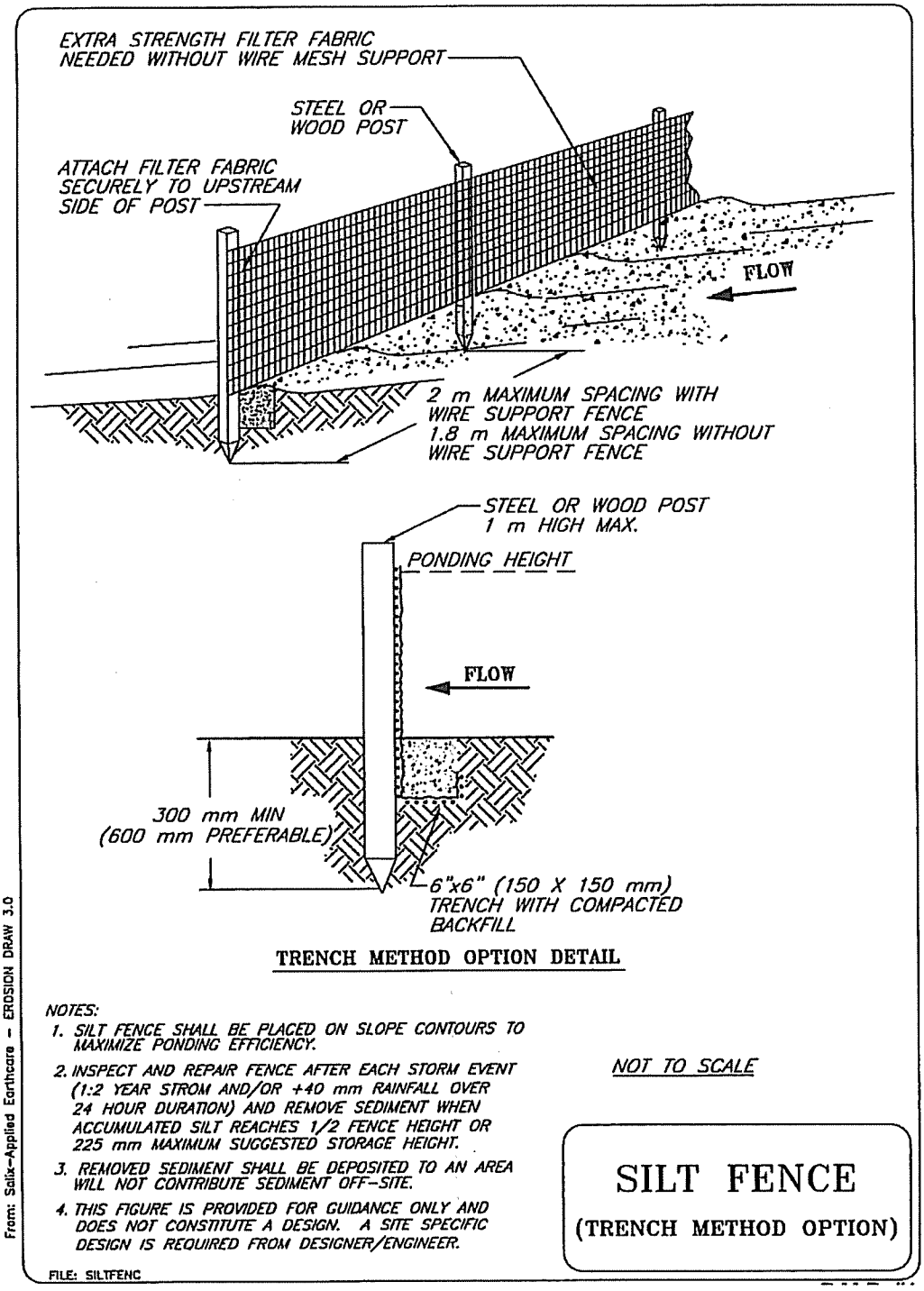
Figure SC BMP #1.6. Sediment Fence Installation – Trench Method Typical Drawing (Alberta Transport, 2003)



Appendix D
Record Drawings

2 - HOT TAPPING SLEEVES ON EX 250mm FORCEMAIN (PVC) C/W 300mm BYPASS PORT

2 - HOT TAPPING SLEEVES ON EX 300mm FORCEMAIN (HDPE) C/W 300mm BYPASS PORT

CSP PIPE & HEADWALLS w/ 250mmØ
CSP C/W TYPE II HEADWALLS.
UPSTREAM INV ELEV: 649.06
DOWNSTREAM INV ELEV: 648.74

MH C
1200mmØ LINED PRECAST MH
RIM ELEV: 649.48
W INV ELEV: 647.89
S INV ELEV: 647.75

MH A
1500mmØ LINED PRECAST MH
RIM ELEV: 649.68
SIPHON INVERT ELEV: 647.54
N INV ELEV: 647.68
S INV ELEV: 647.69

MH E
1800mmØ LINED PRECAST MH
RIM ELEV: 651.80
NW INV ELEV: 649.36
NE INV ELEV: 649.46
S INV ELEV: 649.29

1+000

1+005

14.1m 375mmØ PVC DR35 @ 2.48%

ABANDONED 300mmØ HDPE FM & 250mmØ PVC FM

1+010

MH D
1200mmØ LINED PRECAST MH
RIM ELEV: 651.37
N INV ELEV: 649.12
S INV ELEV: 649.16
E INV ELEV: 649.03

1+015

1+020

1+025

1+030

1+035

1+040

23.9m 375mmØ PVC DR35 @ 4.64%

TAPPING SADDLE C/W 250mm BYPASS PORT ON EXISTING 356mm HDPE SIPHON

EX 356 O.D. HDPE DR11

EX 500mmØ HDPE FM

500mmØ HDPE/400mmØ PVC SEWER FORCEMAIN FROM S126 SLS. THEORETICAL FLOW DATA FROM DRAWDOWN CALCULATOR:

Inflow Rate	370 GPM
Outflow Rate	950 GPM
Fill Time	7.3 minutes
Draw Down Time	4.7 minutes

4.2m 375mmØ PVC DR35 @ 1.9%

1+043

SEE DETAIL A-A FOR FORCEMAIN DETAILS

10.8m 250mmØ PVC DR35 @ 10.0%

EX MH
INV ELEV: 650.21

ABANDONED EX 375mmØ PVC

ABANDONED EX 200mmØ PVC

ABANDONED 300mmØ PVC FM

ABANDONED EX 300mmØ PVC

ABANDONED SANITARY MANHOLES

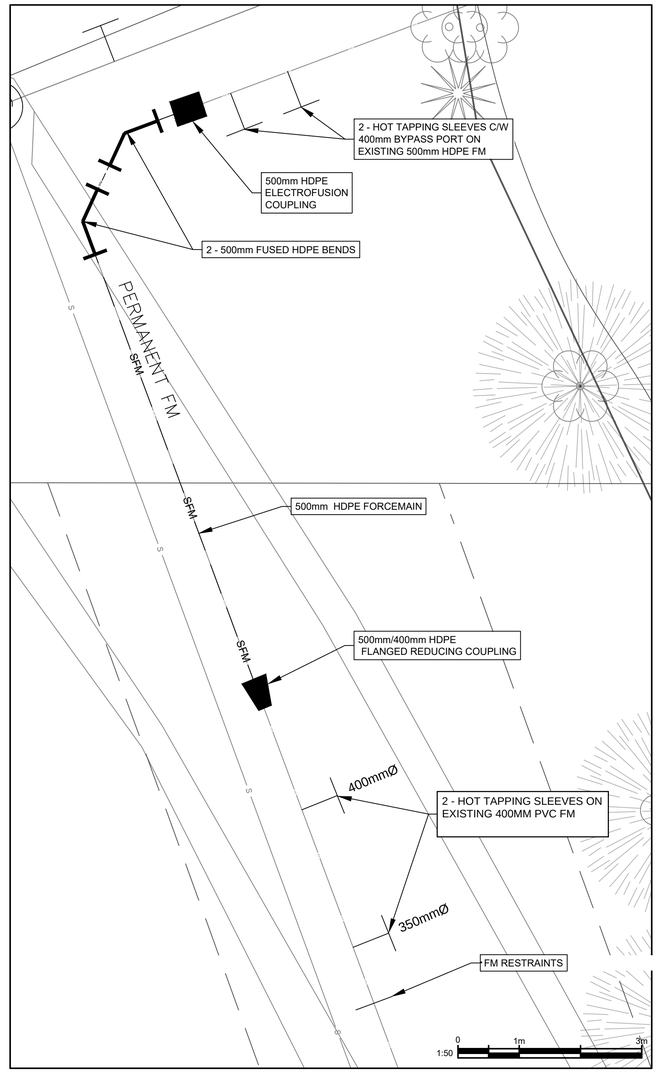
PERMANENT FM

SFM

EX 375mmØ PVC

EX 400mmØ PVC FM

0 3m 9m
1:150



DETAIL A-A: FORCEMAIN

RECORD DRAWINGS

DESIGN NO. 32564

REV NO	REVISIONS	DATE	DRAWN	APPR'D
1	ISSUED FOR TENDER	2021/02/04	RV	GS
2	ISSUED FOR CONSTRUCTION	2021/07/23	RV	GS
3	REISSUED FOR CONSTRUCTION	2021/08/03	RV	GS
4	REISSUED FOR CONSTRUCTION	2021/10/13	RV	GS
5	RECORD DRAWINGS	2022/02/10	RV	GS

SEWER MANHOLE AND MAIN UPGRADES

PLAN VIEW

ISL
#101 - 38026 Second Avenue Squamish, BC V8B 0C3
T: (604)815-4646 F: (604)815-4647

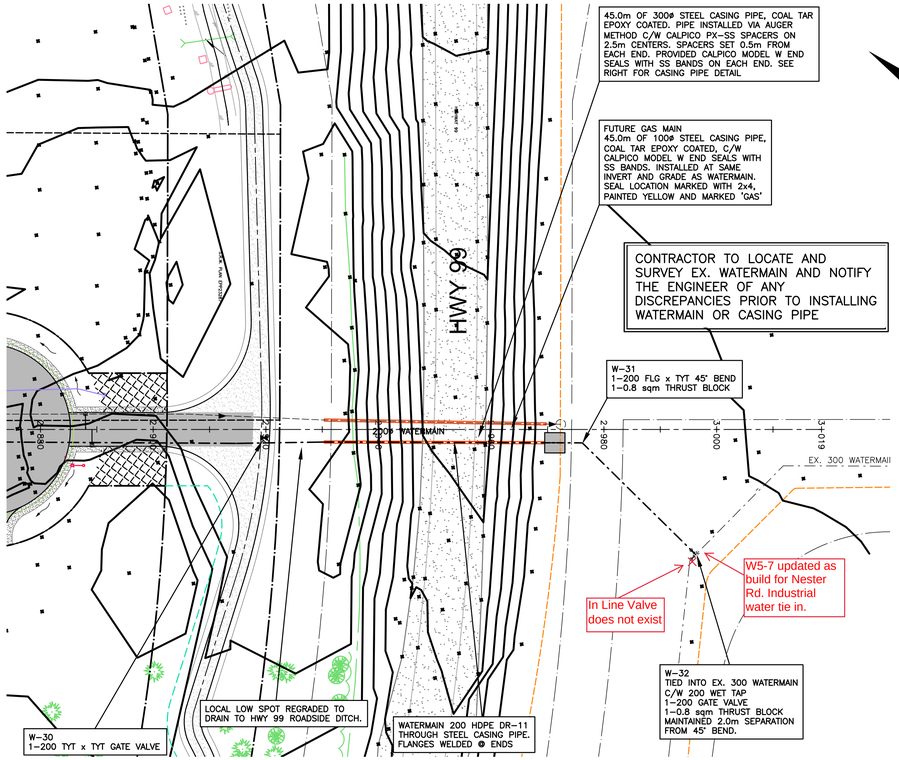
SCALE	1:150	DATE	FEB 2022
DRAWN BY	RV	DESIGN BY	RV
CHECKED BY	GW	APPROVED BY	GS

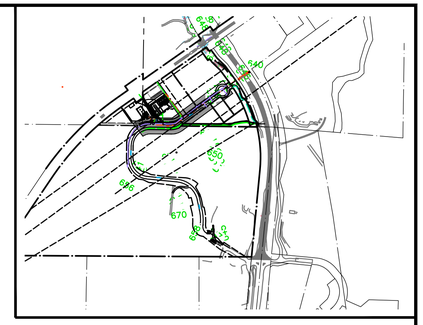
DWG. NO. 3 OF 5

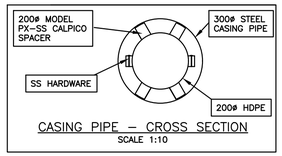
REV. 5

DESTROY ALL PRINTS BEARING PREVIOUS NO.

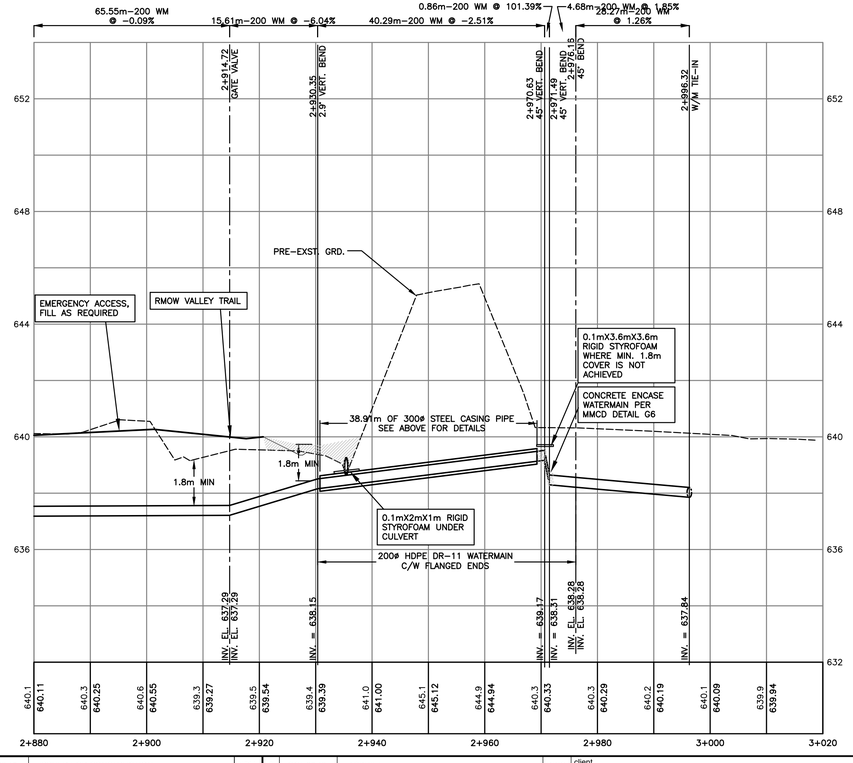
File: G:\Projects\32000\32500\32564_RMW_Fitz_Creek_Manhole_Replacement\02_CADD\20_Drafting\2020-11-30_P_Base_32564_Redesign.dwg | PLOT DATE: 2022/02/17







CASING PIPE – CROSS SECTION
SCALE 1:10



no.	date	revision	chk'd
5	SEP.30.15	ISSUED FOR CONSTRUCTION	NPM
4	JUN.18.15	REVISED PER RMOW COMMENTS	NGB
3	MAR.25.15	ISSUED FOR SUBDIVISION	NGB
2	JULY.26.13	RE-ISSUED FOR DEVELOPMENT PERMIT	STH
1	OCT.26.18	ASBUILT	DWC
8	DEC.08.16	PARTIAL ASBUILT	AGC
7	OCT.29.15	WATER TIE-IN CHANGES	NPM
6	OCT.15.15	POST APPROVAL REVISION	NPM

client: S.J. BAYLY DEVELOPMENT CORPORATION

project: NESTERS CROSSING
WHISTLER, BC

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designed by: F.M.C.
drawn by: A.F.G.
checked by: R.A.W.
date: MAY.02.12

title: WATERWORKS
PLAN & PROFILE (STA. 2+880 - 3+000)

scales: hor: 1:500 vert: 1:100
file no.: 12135
drawing no.: W-4
rev.: 9