

TENDER DOCUMENTS

FOR

BF 13924 – CULVERT REPLACEMENT AND OTHER WORK

NW 25 – 48 – 17 - W4M

IN

BEAVER COUNTY



WSP CANADA INC

PROJ2025-01INFR

January 2025

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1 INSTRUCTIONS TO BIDDERS

1.1 PREPARATION OF TENDERS

The Tender must be submitted on the forms provided. Each Bidder shall specify on the Tender Form the unit price and the total for each item in the total bid column. In case of discrepancy, the unit price figure will take precedence.

The Bidder shall sign his Tender correctly in ink and his post office address must be shown.

1.2 DELIVERY OF TENDERS

Bidders must submit the section entitled “Tender Forms” and all addenda issued by WSP Canada Inc. Tenders must be submitted in a sealed envelope with the Bidder’s name and address on the upper left hand corner of the envelope, marked and addressed as follows:

**BEAVER COUNTY
c/o WSP Canada Inc.
5671 – 70 Street NW
Edmonton, Alberta, T6B 3P6
Attention: Mr. Riaz Abbas, M. Eng., P.Eng.**

Tender for: **Culvert Replacement and Other Work
Bridge File 13924, SW 30 –46 – 13 - W4M
Local Road Over Tributary to Waskwei Creek
In the Beaver County**

will be received until: **2:00 p.m. Thursday February 6, 2025.**

It is the Bidder’s responsibility to make sure its submission is received by WSP Canada Inc. on or before the tender closing date and time. Late submissions will be disqualified.

1.3 ACCEPTABILITY OF TENDERS

The Bidder will be allowed to withdraw and modify his tender up to **thirty (30)** minutes before the tender closing time. The modified tender must be resubmitted in a sealed envelope prior to the tender closing time.

Modifications to the unit price schedule only will be accepted via email and by so doing, Bidders accept the following conditions:

- (a) the message shall be sent to riaz.abbas@wsp.com with the Subject as “BF 13294 Bridge Culvert Replacement and Other Work – Tender Modification”.

- (b) to be accepted, the message must be submitted on the form provided and received no later than **thirty (30)** minutes prior to the time stipulated for closing of tenders.
- (c) the Owner, his employees and the Consultant shall not be liable nor responsible for Fax messages not achieving the purpose intended for any reason whatsoever.

Tenders that are unsigned, incomplete, conditional, illegible, unbalanced, obscure, or that contain additions not called for, reservations, erasures, alterations, or irregularities of any kind, may be rejected as unacceptable.

The Bidder shall fill in every item in the Tender form. Where quantities are not given, unit prices only shall be entered.

If there is a discrepancy found between the Unit Price and the total amount, the unit price will be considered as representing the intention of the Bidder.

As it is the purpose of the Owner to obtain the Tender most suitable and most advantageous to the interests of the Owner, notwithstanding anything else contained within the Tender Documents, the Owner reserves the right, in its sole and unfettered discretion, to reject or accept any Tender, including the right to reject all Tenders. Without limiting the generality of the foregoing, any Tender which

- a) is incomplete, obscure, irregular or unrealistic;
- b) is non-compliant or conditional;
- c) has erasures or corrections;
- d) omits a price on any one or more items in the Tender;
- e) fails to complete the information required in the Tender, or
- f) is accompanied by an insufficient certified cheque, or irrevocable letter of credit or by a Bid Bond in an unsatisfactory form;

may at the Owner's sole and unfettered discretion be rejected or accepted.

The Owner reserves the right after Closing Time to seek clarification or to ask for additional information from one or more Bidders and reserves the right to negotiate after Closing Time with the Bidder that the Owner deems has provided the most advantageous Tender; in no event will the Owner be required to seek clarification or to ask for additional information from all Bidders or to offer any modified terms to other than the most advantageous Bidder prior to entering into a Contract with the successful Bidder and the Owner shall incur no liability to any other Bidders as a result of such discussion, negotiation or modification.

In addition to the foregoing, each Bidder, by submitting a Tender, agrees that it will not claim damages in any court proceeding or other dispute resolution forum in respect of any aspect of the within tender process, including but not limited to representations made or purported to be made at any time before, during or after the tender process and anything arising during the contract

negotiation phase, in excess of an amount equivalent to the reasonable costs incurred by the Bidder in preparing its Tender, and each Bidder, by submitting a Tender, specifically waives any claim for loss of profits if no agreement is entered into with the Bidder.

The **Beaver County** will not consider bids from any Bidder who has initiated litigation with the County. Any such Tenders received will be returned unopened.

1.4 AVAILABILITY OF TENDER DOCUMENTS

Tender Documents are available on the Alberta Purchasing Connection website, Beaver County website, and BuildWorks Canada website. The County will assume no responsibility or liability for the completeness of any Tender Documents obtained from any other source.

1.5 COMPLETING TENDER FORMS

The “Unit Price Schedule” must be completed by:

- Showing the Unit Price (where applicable) and the total for each item in the “Total Bid” column (in case of a discrepancy, the unit price figure will take precedence)
- Showing the tendered lump sum (where applicable) in the “Total Bid” column, and
- Showing the sum of all the tender items in the space marked “Total Tender”.

The Tender must be signed by an authorized representative of the Bidder, and

- The official title of the Bidder must be shown; and
- The official seal of the Bidder must be affixed, or the signature must be witnessed, and the Affidavit of Execution of the Witness must be completed.

1.6 TENDER DEPOSIT

The Tender must be accompanied by a certified cheque or bid bond made payable to the Owner in the amount of **ten percent (10%)** of the total sum tendered for the work. Electronic copy of the bid bond is acceptable.

Unsuccessful Bidder’s certified cheques or bid bonds will be returned as soon as possible after the award of the Contract, or if no Contract is awarded, after such decision is reached by the Owner. The successful Bidder’s electronic copy of the bid bond must be replaced with an original copy as soon as possible upon awarding of the Contract. The successful Bidder’s certified cheque or bid bond will be returned upon receipt of the necessary guarantee bonds of alternative securities by the Owner.

1.7 GUARANTEE BONDS

Pursuant to Section 1.2.3, “Security,” of the General Specifications, the successful Bidder shall deposit the following bonds with the Owner at the time of signing the Contract:

- (a) A **Performance Bond** in the amount of **fifty percent (50%)** of the agreed tender price, for the due performance of the Contract.

- (b) A **Labor and Materials Payment Bond** in the amount of **fifty percent (50%)** of the agreed tender price.

Both bonds shall be issued by the same Surety Company, which shall be licensed to do business in the Province of Alberta.

The cost of the bonds shall be borne by the Contractor.

The Bidder, with his Tender, shall enclose a "Consent of Surety" from the Surety stating that the Surety is willing to supply the bonds referred to previously. The "Consent of Surety" will be required whether the Bidder uses a bid bond or a certified cheque under the provisions of Clause 1.8, "Tender Deposit."

1.8 SITE CONDITIONS

The Bidder must examine the site(s) of the work before submitting a bid, either personally or through a representative, and satisfy himself as to the nature and location of the work, site access, local conditions, soil structure and topography at the site of this work, the nature and quality of materials to be used, the equipment and facilities needed preliminary to and during the prosecution of the work, and all other matters which can in any way affect the work under this Contract. Submission of a Tender by the Bidder acknowledges awareness of all matters that such a site inspection would reveal to the reasonable Bidder.

1.9 SCHEDULE / COMPLETION OF THE WORK

The Bidder shall be expected to complete the following work by **October 30, 2025**.

- The scope of work for BF 13924 is to supply and install 1- 2,400 mm diameter CSP culvert, 40.50 m invert length, by open cut method, removal and dispose of existing 1 – 1800 mm CSP culvert, heavy rock riprap, and erosion control measurements.

The Bidder shall state in the Tender Form the anticipated date of commencement of the work.

1.10 EQUIPMENT

The successful bidder may be required to supply evidence of experience, equipment, ability, and financial capability before the Contract is executed.

1.11 SUBCONTRACTORS

The Contractor shall note that the plans and specific clauses of the Specifications have been arranged into various sections to better describe the work to be carried out under this Contract.

The Contractor named in the Agreement is solely responsible for all work under the Contract and for the allocation of work to Subcontractors.

The Contractor is responsible for the administration and subdivision of the work to Subcontractors, and all disputes as to scope of the work to be carried out by the various Subcontractors shall be the responsibility of the Contractor so that all work is carried out to the satisfaction of the

Consultant. No claims for Extra Work will be allowed on the basis that Subcontractors did not include same in their scope of work due to any subdivision of work expressed or implied in the Plans or Specifications.

1.12 GOODS AND SERVICES TAX (GST)

Tender prices are to be submitted GST exempt. The Owner will add appropriate adjustments for GST to the total tendered amounts.

1.13 OMISSIONS OR DISCREPANCIES

Should a Bidder find discrepancies in, or omissions from, the Drawings or other Tender Documents, or should he be in doubt as to their meaning, he should at once notify the Consultant who publish an addendum on APC. No oral interpretations shall be made to any Bidder as to the meaning of any part of the Tender Documents. Every request for an interpretation shall be made in writing and addressed and forwarded to the Consultant at:

WSP Canada Inc.
5671 – 70th Street NW
Edmonton, AB
T6B 3P6
Attention: Mr. Riaz Abbas, M.Eng., P.Eng.
email: riaz.abbas@wsp.com

1.14 REJECTION OF TENDERS

1.14.1 Acceptance

The Owner is not required to accept the lowest cost tender and may reject any or all tenders.

1.14.2 Tender Irregularity

Submitted tenders must substantially comply with the requirements of the tender documents. Bidders are advised to pay careful attention to the wording used throughout the tender documents. Failure to satisfy any term, condition or mandatory requirement may result in rejection of the Bidder's tender. Further, in submitting a tender, the Bidder understands and acknowledges that ambiguous, unclear, unreadable, or qualified tenders may be rejected.

The Owner may waive an irregularity with the requirements of the tender documents where the irregularity is minor or inconsequential. The determination of what is or is not a minor or inconsequential irregularity, and the determination of whether to waive or not waive the irregularity is at the Owner's sole discretion.

The lowest priced compliant Bidder may be required to supply evidence of experience, qualifications, equipment, ability, and financial capability for completing the project(s) before the Contract is executed. Lack of any of these will be considered sufficient cause for rejecting the tender.

1.15 ACCEPTANCE OF TENDER AND ITS EFFECT

The acceptance of the Tender shall bind the successful Bidder to execute the Contract in accordance with Clause 1.16.

Notwithstanding the provisions of Clause 1.16, hereinafter, or any other provisions in the Tender, if the Consultant, after acceptance of the Tender but before execution of the Contract, objects to any Subcontractor proposed to be employed by the successful Bidder in the performance of the Contract, and the Contractor refuses or neglects to nominate another Subcontractor, acceptable to the Consultant, the Tender may be rejected.

1.16 TIME FOR EXECUTING CONTRACT AND DAMAGES FOR FAILURE TO EXECUTE

Tenders shall be open for acceptance by the Owner for **thirty (30) days** after the date for closing of tenders.

Any bidder whose Tender is accepted within the time set out above, will be required to execute the Contract in accordance with the following:

1.16.1 Requirements

Each contract must be accompanied by a Performance Bond and Labor and Materials Payment Bond in the amount of fifty percent (50%) of the agreed tender price.

1.16.2 Forfeiture

If, within 21 days after the Contract is presented to the successful bidder for signature, hand delivered or sent by registered mail or courier addressed to the successful bidder at the address stated in his tender, the Bidder refuses or fails:

- (i) to sign and return to the Owner the Contract for the performance of the Work and the supplying of Material covered by his tender; or
- (ii) to provide the security for the performance of the Contract and for labor and material payment as required by Section 1.2.3, Security; or
- (iii) to provide the insurance required by Section 1.2.4, Insurance;

the bid bond or deposit shall be subject to forfeiture to the Owner, and if a Contract for that Work and Material is then entered into with some other person for a greater amount, the Bidder is liable to the Owner in the amount equal to the difference between the amount of their tender and the amount of the Contract actually entered into, the maximum not exceeding the amount of the security required under this Section.

1.17 SAFETY REQUIREMENTS

Contracts will only be awarded to Bidders who, prior to the time fixed for receiving tenders, possess a Certificate of Recognition (COR) which is relevant to their industry and which is recognized by Alberta Jobs, Skills, Training, and Labor, Workplace Health and Safety.

Bidders are advised that a small employer's certificate of recognition (for employers with less than ten employees) is not considered acceptable.

For Bidders who have not obtained a Certificate of Recognition, a valid Temporary Letter of Certification (TLC) issued by the Alberta Construction Safety Association (ACSA) will not be considered acceptable.

The Owner will confirm that the Bidder possesses a COR through the Alberta Construction Safety Association prior to award.

Prospective Bidders who do not possess a COR and wish to obtain information about obtaining a COR, are advised to contact:

Alberta Construction Safety Association
225 Parsons Road SW
Edmonton, Alberta T6X 0W6
Telephone: (780) 453-3311 or (Toll Free) 1-800-661-2272
Fax: (780) 455-1120 or 1-877-441-0440
Web Site: www.acsa-safety.org
E-mail Edmonton@acsa-safety.org

1.18 TENDERS TO BE UNDER SEAL

All Tenders shall be signed and sealed, in the case of a Body Corporate, and in the case of an individual or partnership, or non-incorporated organization, shall be signed and witnessed.

1.19 DAMAGES FOR DELAY

See General Specifications **1.2.40, “Failure to Complete on Time”**.

1.20 ADDENDA

Addenda, when issued, form part of the Tender document. The Bidder shall acknowledge receipt of each addendum in Section 2.6 “Addenda Received”, provided in the Tender Forms. The individual items included in the addendum shall be added, deleted or changed in accordance with the instructions contained in the addendum letter. Addenda received shall be submitted with the Tender Forms.

During the tendering period, all addenda will be available on the Alberta Purchasing Connection website only.

1.21 TENDER OPENING

Tender opening will be in WSP Canada Inc. Office at 5671-70 Street, Edmonton, AB T6B 3P6.

1.22 CONTRACT INFORMATION DOCUMENTS

The following additional information is available for viewing during the Tender period at WSP Canada Inc. office at 5671 70 Street NW, Edmonton, AB, T6B 3P6:

- Fish and Fish Habitat Assessment BF 13924 Culvert Replacement, Beaver County, Range Road 171 over an unnamed tributary to Waskwei Creek in NW 25-48-17-W4, Southeast of Ryeley, Alberta dated January 2025.

2 TENDER FORMS

2.1 CONDITIONS

The Undersigned (also referred to as the "Bidder" and the "Contractor"), having carefully read the Tender Documents and inspected the site(s), hereby agrees to execute and complete the Work contemplated in strict accordance with the said Tender Documents at the prices shown in the Unit Price Schedule.

It is understood that:

1. The estimated quantities shown in this Tender are approximate only and are used for the purpose of comparing bids.
2. No claim shall be made by the Bidder on account of any loss of anticipated profits resulting from any excess or deficiency in the estimated quantities.
3. Payment for work under this Contract will be made on the basis of quantities measured on the site and at the unit prices or lump sum prices submitted, which shall be compensation in full for all the work done under the terms of the Contract.
4. The prices quoted shall bear a proper relationship to the value of work to be done or materials to be supplied.
5. The Owner reserves the right to terminate or to cancel any or all portions of the work and no claim shall be made on account of any loss of anticipated profits resulting from any cancellations or terminations in this Contract.
6. The Contractor shall complete the Unit Price or Lump Sum Price for all items on the Unit Price Schedule.
7. The Owner reserves the right to waive irregularities and informalities in a Tender, or to reject any or all Tenders, or to accept the Tender deemed most favorable in the interest of the Owner.

The _____ Sureties are willing to provide a Performance Bond and a Labour and Materials Bond each in the amount of **fifty percent (50%)** of the total amount tendered. The "Consent of Surety" form to this effect is complete.

Accompanying this Tender is a certified cheque or bid bond in the amount of **ten percent (10%)** of the total amount tendered for in the work.

If our Tender is accepted we agree to commence work on _____, and complete the work on or before the **30th day of October, 2025** or such later date as the Owner may for any reason determine.

It is understood that if this Tender is accepted within **thirty (30) days** of the time stated for closing of the Tender, and if we fail or decline to enter into a Contract in accordance with the terms of our Tender, our certified cheque or bid bond shall be forfeited to the Owner as an accepted and agreed determination of the damages to which the Owner may be entitled by reason of our failure or refusal to enter into such Contract.

SIGNED

WITNESS OR SEAL

CONTRACTOR (BIDDER)

DATE

ADDRESS

2.2 COMPLIANCE WITH SPECIFICATIONS

This form must be completed and signed to constitute a formal Tender.

We have examined these Specifications thoroughly and fully understand all conditions that do or can affect the work to be done under these Specifications. We hereby certify that the work offered in our Tender complies in every respect to the Owner's Specifications.

We understand the requirements set out by Alberta Environment and Parks that do or can affect the Work to be performed. We hereby certify that the Work in our Tender complies with the guidelines of Alberta Environment and Parks.

WITNESS OR SEAL

CONTRACTOR (BIDDER)

DATE

2.3 ADDENDA RECEIVED

(Indicate time and date received)

Addendum:

#1

#2

#3

#4

#5

SIGNED

CONTRACTOR (BIDDER)

DATE

ADDRESS

2.4 UNIT PRICE SCHEDULE

**BF13924 – Culvert Replacement and Other Work
 In Beaver County**

ITEM NO.	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
1.	Mobilization (1.2.9)	1	lump sum	\$
2.	Site Occupancy – Bridge Structures (1.2.41)	days	\$800 /day	\$
3.	Demolition, Disposal, and Salvage of Existing Bridge Structure (BCS 21.6)	1	lump sum	\$
4.	Traffic Accommodation for Bridge Construction (7.1.12; 7.1.15)	1	lump sum	\$
5.	Excavation - Structural (BCS 1.6.1.3)	1	lump sum	\$
6.	Supply of CSP - (1-2400 mm dia. X 3.5 mm thickness) (BCS 18.7)	40.50 m	\$ /m	\$
7.	Installation of CSP - (1-2400 mm dia. X 3.5 mm thickness) (BCS 18.7)	40.50 m	\$ /m	\$
8.	Backfill – Compacted Granular (BCS 2.4.2)	1	lump sum	\$
9.	Backfill – Compacted Non-Granular (Clay Seals) (BCS 2.4.2)	1	lump sum	\$
10.	Heavy Rock Riprap – Class 1 (BCS 10.7)	75 m ³	\$ /m ³	\$
11.	Roadway Work (Special Provisions)	1	lump sum	\$
12.	Total Suspended Solids (TSS) Testing (Special Provisions)	10 days	\$ /day	\$
13.	Erosion Control Barrier (Silt Fence) (6.5.6)	200 m	\$ /m	\$
Total Tender Amount				\$

CONTRACTOR'S NAME (PRINT)

CONTRACTOR'S SIGNATURE

CONTRACTOR'S G.S.T. NO.

DATE

**ALBERTA CONSTRUCTION SAFETY ASSOCIATION NUMBER OR
EQUIVALENT SAFETY CERTIFICATION NUMBER (MANDATORY)**

CONTRACTOR'S PHONE NUMBER

3 TENDER AMENDMENT FORM

**BF13924 – Culvert Replacement and Other Work
 In Beaver County**

We, _____
 (Name of Contractor)
 the undersigned modify the Unit Price Schedule for our Tender as shown in the following table.

UNIT PRICE SCHEDULE CHANGES Replacing ALL Previous Unit Price Changes				
BID ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE CHANGE + OR -	TOTAL CHANGE FOR THIS ITEM + OR -
If necessary, use additional forms for more revisions + or – Change in Total Tender				

- We also acknowledge and agree that:
1. This change supersedes all previous changes including those to other bid items. Previously submitted changes are all null and void.
 2. We accept full responsibility for any lack of confidentiality arising from the use of this process.
 3. We accept full responsibility, for failure for any reason whatsoever, of these revisions to arrive on time, for their accuracy and for their completeness.

_____ Being _____
 of _____ Dated _____
 SIGNATURE POSITION in COMPANY
 COMPANY NAME DATE

Send To: WSP Canada Inc.
 Attention: **Mr. Riaz Abbas** Email: **riaz.abbas@wsp.com**

4 SPECIAL PROVISIONS

4.1 GENERAL

The Contractor is advised that, except for the changes and amendments as detailed in the section “Modifications to Standard Specifications”, the specifications for work performed under this Contract shall be as detailed in the Alberta Transportation manual of **“Standard Specifications for Bridge Construction”, Edition 17, 2020, “Standard Specifications for Highway Construction”, Edition 16, 2019, and “Standard Specifications for Bridge Construction”, Edition 16, 2019 in conjunction with the “General Specifications, Specification Amendments and Supplemental Specifications for Highway and Bridge Construction”, Edition 16, 2019.**

Generally, and unless otherwise noted or context dictates otherwise, the following changes are to be made to the Alberta Transportation **“Standard Specifications for Bridge Construction”, Edition 17, 2020, “Standard Specifications for Highway Construction”, Edition 16, 2019 and the “General Specifications, Specification Amendments and Supplemental Specifications for Highway and Bridge Construction”, Edition 16, 2019.**

For erosion control methods and approved best management practices, the Contractor shall refer to **“Erosion and Sediment Control Manual” June 2011, and “Field Guide for Erosion and Sediment Control” June 2011**, published by Alberta Transportation. Copies of these books are available from Program Management Branch, Alberta Transportation, 1st Floor, Twin Atria Building, 4999 - 98 Avenue, Edmonton, Alberta, phone: (780) 415-1068.

In addition, the work shall be in accordance with other applicable typical plans and drawings published in the following Alberta Transportation Manuals:

- **“Traffic Accommodation in Work Zones”, 2nd Edition, 2018.**

4.1.1 Name Change

Due to government reorganization, all references to Alberta Transportation and Utilities, Alberta Infrastructure or Alberta Infrastructure and Transportation shall mean Alberta Transportation. Some specifications, drawings, plans, and other documents in this contract may continue to reference Alberta Transportation and Utilities, or Alberta Infrastructure, or Alberta Infrastructure and Transportation.

4.1.2 Definition

The “Owner” as defined in this Contract is **Beaver County**.

4.2 SPECIFICATION AMENDMENTS

GENERAL

The Contractor shall not take advantage of any apparent error, omission, discrepancy or conflict in the preceding changes and amendments.

4.2.1 Applicable Specifications

The following checked off supplemental specifications and specification amendments as contained in the manual entitled “**General Specifications, Specification Amendments and Supplemental Specifications for Highway and Bridge Construction**” - Edition 16, 2019, “**Specifications for Bridge Construction**”, Edition 17, 2020, and “**Standard Specifications for Highway Construction**,” Edition 16, 2019 are applicable for this Contract. Those items not checked off do not apply to this Contract. These specification amendments may contain

modifications to the pay clauses for those specifications that are amended.

X	AMENDMENTS TO SPECIFICATIONS	
	DESIGNATION	GENERAL DESCRIPTION
SECTION 1 - GENERAL SPECIFICATIONS		
	AMC_C125.2	PRIORITY LINE PAINTING FOR SITE OCCUPANCY
	AMC_C125.3	NON-PRIORITY LINE PAINTING FOR SITE OCCUPANCY
	AMC_S53.1	AMENDMENT TO SPECIFICATION 1.2, GENERAL, RE: CONSTRUCTION STAKING AND SURVEY – MAJORITY BY CONTRACTOR
	AMC_S53.2	AMENDMENT TO SPECIFICATION 1.2, GENERAL, RE: CONSTRUCTION STAKING AND SURVEY - MAJORITY BY CONSULTANT
X	AMC_S53.3	AMENDMENT TO SPECIFICATION 1.2, GENERAL, RE: CONSTRUCTION STAKING AND SURVEY FOR BRIDGE CONSTRUCTION
	AMC_C230	AMENDMENT TO SPECIFICATION 1.2, GENERAL, RE: DIESEL FUEL COST ADJUSTMENT
SECTION 3 - SURFACING		
	AMC_S116	AMENDMENT TO SPECIFICATION 2.3, GRADING, 3.1 SUBGRADE PREPARATION, AND ALL BASE COURSE SPECIFICATIONS, RE: TOLERANCES FOR SURFACE FINISH
	AMC_S155	AMENDMENT TO SPECIFICATION 3.50, ASPHALT CONCRETE PAVEMENT (EPS), RE: HOT IN-PLACE RECYCLED ASPHALT PAVEMENT
	AMC_S201	AMENDMENT TO SPECIFICATION 3.50, ASPHALT CONCRETE PAVEMENT (EPS), RE: ACCEPTANCE TESTING FOR CONTRACTS WITH SMALL QUANTITIES (LESS THAN 1000 TONNES) OF ASPHALT CONCRETE PAVEMENT
SECTION 5 - MATERIALS		
	AMC_S9.4	SUPPLY OF AGGREGATE – CONTRACTOR’S SUPPLY WITH OPTION
X	AMC_S9.5	SUPPLY OF AGGREGATE – CONTRACTOR’S SUPPLY WITH NO OPTION
	AMC_S9.6	SUPPLY OF AGGREGATE - DESIGNATED SOURCE
	AMC_C218	INTERIM PAYMENT FOR SUPPLY OF MATERIALS

X	AMENDMENTS TO SPECIFICATIONS	
	DESIGNATION	GENERAL DESCRIPTION
BRIDGE CONSTRUCTION SPECIFICATIONS		
X	AMC_B013	ADJUSTMENT OF COMPLETION DATE AND DAMAGES FOR DELAY FOR BRIDGE CONSTRUCTION WORK
X	AMC_B010	DURATION OF WORK AND SITE OCCUPANCY FOR BRIDGE CONSTRUCTION
	AMC_B011	LANE CLOSURE FOR BRIDGE CONSTRUCTION
X	AMC_B020	SITE OFFICES FOR BRIDGE CONSTRUCTION
	AMC_B219	OPTIONAL COURSE OF CONSTRUCTION INSURANCE
SUPPLEMENTAL SPECIFICATIONS		
	SPECIFICATION	GENERAL DESCRIPTION
X	6.15	FISH CAPTURE AND RELEASE

4.3 STANDARD DRAWINGS

This Tender refers to various Standard Drawings from the Alberta Transportation web site. The standard drawings listed below, which are referenced in the Special Provisions or on a site-specific drawing, may be obtained at the following web address:

<http://www.transportation.alberta.ca/1286.htm>

Standard Drawings	
S-1418-20	Installation of CSP and SPCSP Structures
S-1848-20	Standard Identification Tags

4.4 CONSULTANT

For this Contract, the Consultant as defined in Section 1.1.7, “Consultant,” and as referenced in the Specifications, will be **WSP Canada Inc.**, 5671 – 70th Street NW, Edmonton, AB, Telephone: (825) 410-4100.

4.5 SCOPE OF WORK

BF13924 – Culvert Replacement and Other Work

The scope of work for BF 13924 is to supply and install 1- 2,400 mm diameter CSP culvert, 40.50 m invert length, by open cut method, removal and dispose of existing 1 – 1800 mm CSP culvert, heavy rock riprap, and erosion control measurements.

Without limiting the provisions of these Specifications and Contract, the scope of work at this site shall include, but not be limited to, the following;

- Traffic accommodation
- Demolition, disposal, and salvage of an existing bridge culvert
- Structural excavation
- Supply and installation of a CSP culvert
- Bedding and Backfill (includes woven geotextile filter fabric, crushed aggregate material Des 2 Class 40, crushed aggregate material Designation 2 Class 25, and clay seals)
- Heavy Rock Riprap Class 1 (includes non-woven geotextile filter fabric)
- Roadway Work (includes road grading, topsoiling, harrowing, seeding)
- Erosion Control Barriers (silt fence)

The Contractor shall supply all materials and all materials shall be new unless noted otherwise. A complete job is called for, therefore any labor or material item not specifically mentioned, but necessary for a complete job, will be considered incidental to this Contract.

4.6 QUANTITY ESTIMATES

The estimated quantities and bridge materials described in this Tender and shown on the Drawings are provided for the Contractor's convenience. Quantity estimates are calculated based on in-place dimensions to the neat lines described. The Contractor shall verify the actual quantities and bridge material required to complete the work prior to submitting a bid. Lump sum prices bid shall reflect the actual quantities and bridge materials that the Contractor determines are required to complete the work.

Payment for individual bid items will be made on the basis of the unit or lump sum price(s) bid, which price shall include full compensation for the cost of furnishing all labor, equipment, materials, tools, and incidentals necessary to complete the work.

4.7 SCHEDULE

A detailed schedule showing the sequence of work shall be submitted to the Consultant a minimum of **fourteen (14) days** prior to the pre-construction meeting.

Completion of the work shall be in accordance with the following:

- ❑ All work under this Contract shall be completed and the local road at the site shall be open to “unrestricted public traffic” by **October 30, 2025**.

To be considered complete and open to “unrestricted public traffic”, the bridge structure shall meet the following conditions:

- ❑ Continuous, smooth, intact graveled road surface,
- ❑ Traffic control removed and traffic fully restored,
- ❑ Control of the road turned back to Beaver County

4.8 WORK IN THE VICINITY OF UTILITIES

The Contractor’s attention is drawn to Section 1.2.49, “Safeguarding Utility installations,” of the General Specifications. The Contractor shall be responsible for contacting the Utility Companies and coordinating the utility relocations or adjustments to service as appropriate.

There is one utility found at this site. There is a one wire overhead powerline located in the east right of way.

The Contractor shall contact:

ATCO Electric
7210 42 St NW,
Edmonton AB T6B 3H1
Phone: (780) 420-8957
Emergency # 1-800-668-5506

4.9 ENVIRONMENTAL PERMITS AND APPROVALS

The Contractor’s attention is drawn to Section 1.2.50, “Environmental Management,” of the **“General Specifications, Specification Amendments and Supplemental Specifications for Highway and Bridge Construction” - Edition 16, 2019**. An Environmental Construction Operations Plan (ECO Plan) is required in accordance with this Specification for this site. The Contractor shall submit his ECO Plan to the Consultant a minimum of **fourteen (14) days** prior to the pre-construction meeting. The format of the Contractor’s ECO Plan shall be in accordance with the latest edition of the publication “Environmental Construction Operations (ECO) Plan Framework,” which is available on the Alberta Transportation website.

A “Notification” will be submitted two weeks (14 days) before construction start to Alberta Environment and Parks under the Alberta Water Act Code of Practice for the work at BF13924.

Unnamed watercourse is classified as an unmapped default Class C water body, with restricted activity period from April 16 to June 30 in any year.

The Request for Review under the Fisheries Protection Provisions of the Fisheries Act of the proposed culvert replacement of Bridge File 13924 has been submitted. We have not yet received the response from the Department of Fisheries and Oceans (DFO). All the conditions of the approval shall be applied for this project.

The Contractor shall be responsible for complying with all of the terms and conditions of environmental permits, approvals, authorizations and Codes of Practice, including implementation of appropriate and applicable mitigation measures included in these Special Provisions. Any changes or amendments required to approvals and permits for temporary works will be the responsibility of the Contractor. The Contractor shall maintain copies of approvals, permits and authorizations onsite until construction is complete.

The Contractor shall not commence work until all required approvals are obtained. Beaver County reserves the right to delay or cancel the Work if the required environmental approvals cannot be obtained in a reasonable time frame.

All costs associated with adhering to the requirements of the environmental permits, approvals and authorizations will be considered incidental to the Work, and no separate or additional payment will be made.

The Contractor shall have no claims against the County or its Representatives for any damages or delays that are caused by delays in receiving environmental permits, approvals or authorizations or complying with the conditions of environmental approvals. No separate or additional payment will be made for costs associated with submission of notifications or delays.

The Contractor shall construct temporary works to accommodate water through the site, implement measures that prevent siltation of the watercourse, and he shall complete the work in a manner that ensures care of water and restoration of the site meet Contract requirements.

In addition, the following terms and conditions shall apply:

- Construction will be halted during periods of heavy precipitation.
- Effective sediment and erosion control measures will be in place prior to disturbance, during and after construction to prevent sediment from entering any watercourse or water body. All sediment and erosion control measures will be inspected regularly to ensure that they are functioning properly and are maintained, cleaned and/or upgraded as required until complete re-vegetation of all disturbed areas is achieved.
- Machinery will be operated in a manner that minimizes disturbance to the banks. Banks will be restored to the original condition if any disturbance occurs.
- Machinery will arrive on site in a clean condition and is to be maintained free of fluid leaks. Washing, refueling and servicing machinery will be conducted in a manner to prevent any deleterious substance from entering the water and shall be conducted a minimum of 100 m away from the watercourse. An emergency spill response plan will be developed, and

implemented, if required. An emergency spill kit will be kept on site in case of fluid leaks or spills from machinery.

- Only clean rock, appropriately sized and free of deleterious substances will be used for riprap. These materials will be obtained off site and will not be taken from below the average high-water level of any watercourse.
- All spoil materials and debris from construction will be removed from the site and properly disposed of above the high water mark such that they do not enter any water body.

Measures relating to the isolated worksite:

- Any in-stream works in flowing water conditions should be isolated during construction. 100% of downstream flow should be maintained at all times. If a pump is used to maintain downstream flow, the intake should be screened in accordance with DFO's Freshwater Intake End-of-Pipe Fish Screen Guideline (available at www.dfo-mpo.gc.ca/Library/223669.pdf). The outlet will have a diffuser or be placed in a location that is not subject to erosion from the outflow.
 - Fish rescue operations shall be conducted within the isolated area employing effective methods (e.g. electrofishing, seine netting, minnow trapping) and carried out as stipulated in the Provincial Fish Research License to be obtained from AEP. Any fish found within the isolated portion of the construction site shall be removed and released alive, without harm or destruction, to an area of the water body outside of the construction site. Fish rescue operations will require a permit from AEP and must be conducted by a qualified aquatic environmental specialist.
 - Materials in isolation berms will be made of non-earthen materials and not introduce clay or silt into any watercourse. In-stream works will be confined to the isolated channel section. Accumulations of deposited sediment will be removed from within the isolated area prior to removing the isolation barrier.
 - Should the need for dewatering arise, water will be released into a well vegetated area or settling basin and not directly into any watercourse. Water returning to the watercourse will be of equal or better quality than the water in the watercourse.
- The Alberta *Water Act* and applicable Codes of Practice apply.
 - The deposition of deleterious material in the watercourse is prohibited.
 - Disturbance of the bed and banks of the watercourse is to be kept to a minimum and confined to the site. Precautions shall be taken to prevent soil erosion.
 - The Contractor shall take appropriate measures to prevent siltation of the watercourse.
 - All disturbed areas are to be reclaimed and stabilized by seeding.

4.10 TURBIDITY

4.10.1 Definitions

Instream Construction Activity	Any planned instream construction activity below the high water mark that has the potential to result in additional turbidity in the watercourse. This would include the installation and removal of isolation measures (i.e., cofferdams, berms, silt curtains, etc.), placing of riprap in the water, bank excavation, etc.
Isolated Construction Activity	Any planned construction activity that occurs when working in-stream within a stable site isolation measure (i.e., coffer dams, berms, silt curtains, etc.).
Site Isolation	The placement, erecting or installation of a system whose function is to assure sediment produced from construction activities is contained to the isolated work site.
Visually Conspicuous Plume	A plume of suspended solids that can be visually observed in the watercourse.
Accidental Occurrence	Any situation, beyond the Contractor's control, that results in elevated turbidity levels in excess of the specified compliance limits. This would include situations like the unexpected breaching of a cofferdam due to flood conditions exceeding the design levels.

4.10.2 Sampling and Testing

The Contractor is responsible for all sampling and testing of Total Suspended Solids (TSS) as specified herein.

Prior to the start of Construction, the Contractor shall determine the normally occurring linear relationship between Total Suspended Solids (TSS) and turbidity in the watercourse as per the Conversion Relationship between Nephelometric Turbidity Units (NTU) into mg/L for Alberta Transportations' Turbidity Specification.

<https://www.alberta.ca/assets/documents/tr-conversion-of-nephelometric-turbidity-units.pdf>

Laboratory results and the linear relationship will be sent to the Consultant for review prior to initiating the program. During construction, the Contractor shall:

Measure suspended solids in NTU accurate to within 2% of the calibration solution of the equipment;

Convert NTU into mg/L to establish the relationship specific to the site; and

Measure upstream and downstream NTU levels within a maximum period of 30 minutes of each other, or as directed by the Department, unless there is a sediment release (see monitoring frequency below).

The Consultant shall be afforded full access to facilities for random quality assurance inspection. The results of the Consultant’s quality assurance testing will serve to monitor the Contractor’s quality control program.

4.10.3 Sampling Frequency

Sampling shall occur from 30 minutes prior to daily construction activities until 30 minutes after construction activities have been completed. All sampling information shall be compiled in a daily report. The frequency of total suspended solid sampling by the Contractor shall be in accordance with the following:

Table 4.11.1 Sampling Frequency

Site Condition	Monitoring Frequency
Instream Construction Activities and Accidental Occurrences	<ul style="list-style-type: none"> • During construction hours, sample at a minimum of once every hour at all compliance transects. • If an exceedance or plume is observed, sampling shall be done within the plume until TSS levels have returned to acceptable background levels for two consecutive sampling events. • No sampling events shall occur during Accidental Occurrences until it is safe to do so.
Isolated Construction Activities	<ul style="list-style-type: none"> • When the Contractor is working within site isolation samples will be taken at all transects at three hour intervals, during construction hours. • If sample results have not exceeded 5 mg/L above background levels for five consecutive active construction days, the sample frequency may be reduced to a minimum of twice per day, as directed by the Consultant.

4.10.4 Compliance Monitoring

- Compliance monitoring is dependent on the type of the watercourse. There are five types of watercourses:
- Systems such as lakes, reservoirs and wetlands where velocities are less than 0.5 m/s;
- Watercourses where the wetted width is less than 3 m;
- Watercourses where the wetted width is between 3 m and 10 m;
- Watercourses where the wetted width is between 10 m and 50 m, and

- Watercourses where the wetted width is greater than 50 m.

Table 2 summarizes the compliance monitoring locations for each watercourse. For watercourses water depth less than 1 m, one measurement will be taken at 50% of the depth for each sample point along the transect. For watercourses greater than 1 m deep, two (2) measurements will be taken at 20% and 80% of water depth at each sample point along the transect and the results averaged.

Table 4.11.2 Compliance Monitoring Locations

Watercourse Type	Number of Transects	Sample Points Along Transect
Systems such as lakes, reservoirs and wetlands where velocities are less than 0.5 m/s.	Transect 1: the lesser of 5 m, or the maximum surface dimension of the waterbody.	5 m intervals around the circumference of the turbidity barrier.
	Transect 2: 20 m from Transect 1 (dependent on the size of the waterbody).	
	Transect 2: 20 m from Transect 1 (dependent on the size of the waterbody).	
Wetted width <= 3 m	Background: upstream of the work area	50% of wetted width at each transect
	Transect 1: 1 stream width from the work area	
	Transect 2: 2 stream widths from the work area	
	Transect 3: 3 stream widths from the work area	
Wetted width > 3 m and <= 10 m	Background: upstream of the work area	33% and 67% of wetted width at each transect
	Transect 1: 1 stream width from the work area	
	Transect 2: 2 stream widths from the work area	
	Transect 3: 3 stream widths from the work area	
Wetted width > 10 m and <= 50 m	Background: upstream of the work area	25%, 50% and 75% of wetted width at each transect
	Transect 1: 30 m downstream from the work area	
	Transect 2: 60 m downstream from the work area	
	Transect 3: 90 m downstream from the work area	
Wetted width > 50 m	Background: upstream of the work area	25%, 50% and 75% of wetted width at each transect
	Transect 1: 50 m downstream from the work area	
	Transect 2: 125 m downstream from the work area	
	Transect 3: 225 m downstream from the work area	

4.10.5 Visual Plume Monitoring

In the event a visually conspicuous plume is observed, the Contractor shall immediately cease all Work, undertake mitigation measures, contact the Consultant and promptly initiate a plume TSS monitoring program in accordance with the following:

- All Work that may have a direct or indirect effect on water quality will cease during all plume occurrences.
- A sample must be taken from the middle of the plume and as close to the source of the plume as possible (within safety limits).
- Monitoring will be done at all transects, and the plume sampling point, as often as feasible (a minimum of an hourly basis), and will continue until two consecutive monitoring events show no compliance exceedances.

4.10.6 Compliance Criteria

Criteria are set by the current versions of the Environmental Quality Guidelines for Alberta Surface Waters, which are based on the Canadian Council of Ministers of the Environment.

Following completion of each TSS monitoring event, the Contractor will know if the construction activities are within compliance limits as defined below in Table 4.22.3. This will be accomplished as follows:

- The results for each of the upstream sample points will be averaged to determine a background TSS (mg/L) for each event.
- The average TSS concentration (mg/L) shall be calculated for each of the downstream transects (cross sections). The average value for each transect will be compared to the background TSS concentration (mg/L). If the result for any transect exceeds the limits in Table 3, the project is not in compliance. The average value for any transect is calculated as the arithmetic average of the sample points in that transect.
- Any differences will be compared with the TSS Compliance Criteria to determine if the construction works (i.e. isolated or instream construction activities) are within compliance.

The Contractor's operations shall utilize equipment, labour, and procedures that ensure that the levels of suspended solids are maintained below the following levels:

Table 4.11.3 Maximum Allowable Increase of Total Suspended Solids

Site Conditions (Background TSS)	Exceedance Levels (TSS in Excess of Normal Background Levels)
TSS < 25mg/L	<ul style="list-style-type: none"> • A maximum instantaneous increase of 25 mg/L over background levels at any time. • An average increase of >5 mg/L over background levels for greater than 24 hours.
TSS 25 mg/L – 250 mg/L	<ul style="list-style-type: none"> • A maximum instantaneous increase of 25 mg/L from background levels at any time.

Site Conditions (Background TSS)	Exceedance Levels (TSS in Excess of Normal Background Levels)
TSS > 250 mg/L	<ul style="list-style-type: none"> Maximum instantaneous increases of 10% of background levels at any time.

The Contractor shall notify the Consultant at least 48 hours (2 calendar days) prior to the start of any Instream Construction Activity.

In the event of a measurement is over the Exceedance Levels listed in Table 4.22.3, or an Accidental Occurrence that results in a visually conspicuous plume of sediment, the Contractor shall cease all Work that may have a direct or indirect impact on water quality and immediately initiate mitigation actions. The Contractor shall immediately notify the Consultant and call the Alberta Energy and Environment Response line at 1-800-222-6514.

If an exceedance occurs during Isolated Construction Activity and a reduced sampling program is in effect, the sampling frequency must be reset to the requirements, as listed in Table 4.22.1, where the sampling frequency is to return to three hour intervals during construction hours.

4.10.7 Record Keeping

A detailed record of the sampling completed for the TSS monitoring program during Instream Construction Activity and Isolated Construction Activity shall be kept by the Contractor and reported to the Consultant in a weekly summary format. The Contractor shall ensure that daily sampling records are up-to-date and kept onsite at all times during the period in which the monitoring program is in effect. Upon completion of the Construction Activities, the Contractor shall also forward a final report containing all sampling and testing data to the Consultant. The weekly summary report shall include at a minimum:

- Brief description of the works and types of construction activities completed during the sampling period.
- Date and time of each sample.
- Weather conditions at the time of each sample.
- Changes of depth of flow at the upstream transect.
- Documentation of daily NTU instrument calibrations.
- Both turbidity (NTU) and TSS (mg/L) for each sample taken.
- The daily average value (mg/L TSS) of the upstream background samples.
- The daily average value (mg/L TSS) for each downstream transect (all three sites per transect combined).
- Documentation of all non-compliance instances, including the level of exceedance, the duration of exceedance, the mitigation measures taken, verification of the reporting of the exceedance and any related communications with regulators regarding the exceedance event, and future measures to be taken to avoid or control further exceedances.
- Description of events or circumstances that may have prevented or hindered completion of the TSS monitoring program.

4.10.8 Measurement and Payment

Payment for sampling, testing and reporting of TSS for Instream Construction Activity and Isolated Construction Activity will be made at the unit price bid per day for “Total Suspended Solids (TSS) Testing” for each day that testing is mandated. Payment will be full compensation for all testing as required to establish the linear relationship between TSS and NTU as well as for each 24-hour period; including labour, equipment, tools and incidentals necessary to complete the work to the satisfaction of the Consultant.

All costs associated with sampling, testing and reporting of TSS associated with Accidental Occurrences will be considered incidental to the Work, and no separate or additional payment will be made.

4.11 CONTROL OF CLUBROOT

4.11.1 General

Clubroot, caused by *plasmodiophora brassicae*, is a serious disease of cruciferous crops (i.e. mustards, canola, etc.) which can result in reduced to severe yield losses. Clubroot was declared a pest under Alberta’s Agricultural Pests Act in April 2007. Enforcement of the Act is the responsibility of the Agricultural Service Board located in each municipality.

The Contractor shall carry out his operations in accordance with the following Provisions and Best Management Practices outlined in the Alberta Clubroot Management Plan which is available on-line at the following location:

[http://www1.agric.gov.ab.ca/\\$Department/deptdocs.nsf/all/agdex11519](http://www1.agric.gov.ab.ca/$Department/deptdocs.nsf/all/agdex11519)

4.11.1 ECO Plan Requirements

As part of the ECO Plan, the Contractor shall detail his proposed Clubroot control measures for soil disturbance work at locations involving Clubroot infected soils. Details shall include proposed equipment cleaning procedures as well as any control measures recommended by the Municipality’s Agricultural Fieldman. Soil disturbance work shall not commence until the Contractor’s ECO Plan has been reviewed and accepted by the Consultant.

All costs associated with the implementation of Clubroot control measures, including those required by the applicable Agricultural Service Board, will be considered incidental to the Work and no separate or additional payment will be made.

4.12 TRAFFIC ACCOMMODATION

Traffic accommodation shall conform to Section 7.1 of the Standard Specifications for Highway Construction, and “Traffic Accommodation in Work Zones,” 2018, 2nd Edition, the provisions contained herein, as directed by the Consultant, and in accordance with the following:

The Contractor shall prepare a Traffic Accommodation Strategy to detour traffic from Range Road 171 west to Range Road 172 and east to Range Road 170 between Twp Road 484 and Twp Road 490 during the period of bridge culvert construction.

In addition to the requirements of Specifications 7.1, Section 7.1.12, “Traffic Accommodation for Bridge Construction” of the Standard Specifications for Highway Construction, the following shall apply:

- Where a crossing is closed to public traffic during construction, traffic shall be accommodated on roads that are accepted as detour routes by the Responsible Road Authority. Prior to commencing construction, the Contractor shall provide one week’s notice to **Peggy Ewert Infrastructure Project Coordinator, Beaver County {ph: (780) 663-3730 Ext 1001}**. The Contractor shall liaise with the Responsible Road Authority to implement road closures and to ensure emergency services are informed of the closures and traffic restrictions. Signing requirements and responsibilities are as follows:

a) Where Road Closure is Required - Crossing Site and Immediate Approach Roads

- At the crossing sites the Contractor shall supply, erect, securely fasten down, and maintain standard reflectorized barricades for the width of the roadway adjacent to the bridge, culvert or excavation. A minimum of two barricades shall be required at each end of the bridge, culvert or excavation.
- In order to implement a road closure, to accommodate local traffic and construction access up to the crossing site, the Contractor shall install and maintain two staggered reflectorized barricades with “Bridge Out” signs and “Local Traffic Only” signs at the adjacent road intersections on the approach road leading to the crossing site.

b) Detour Signing

- The Contractor shall supply, erect, and maintain all signs for the designated detour route. The detour shall be clearly marked by **installing signs at each road intersection** on the detour route.

c) Traffic Accommodation Plans

- The Contractor’s signage plans shall be provided for the **Consultant’s approval at least fourteen (14) days** prior to the pre-construction meeting. Additional signs may be required as deemed necessary by the Consultant. All signs shall be in place and approved by the Consultant prior to the commencement of any work at the site. As the project will be of long duration, all signs shall be on posts.

Payment for “Traffic Accommodation for Bridge Construction” will be at the lump sum price bid, which price shall be full compensation for all labor, equipment, materials, tools, signs, barricades, and incidentals necessary to complete the work.

4.13 REMOVAL OF EXISTING BRIDGE

The Contractor shall demolish and dispose the existing 1 – 1800 mm CSP culvert in accordance with Section 21 of the Specifications for Bridge Construction.

All culvert materials shall be demolished and disposed by the Contractor at an approved disposal site. Written approval from the owner of the disposal site shall be submitted, and evidence of their acceptance of the site clean-up will be required before full payment for this work is made.

The estimated quantity of excavation required to demolish and dispose the existing bridge and its substructure elements is as follows:

Demolish and Dispose Bridge: 1975 cubic metres of Excavation

4.14 EXCAVATION – STRUCTURAL

All excavation shall be in accordance with Section 1, “Excavation” of the Specifications for Bridge Construction. The Contractor shall excavate for ditch construction and for removal of existing culvert ends as shown on the Drawings and as directed by the Consultant.

Payment for “Excavation – Structural” will be made at the lump sum price bid for this work, which price shall be full compensation for all labor, equipment, materials, tools, incidentals, and excavations necessary to complete the work to the acceptance of the Consultant.

4.15 BACKFILL

Backfill shall meet the requirements of Section 2, “Backfill” of the Specifications for Bridge Construction, and supplemental details described on the Drawings.

Payment for “Backfill – Compacted Granular” and “Backfill – Compacted Non-Granular” will be at the lump sum price bid, which price shall be full compensation for all labor, material, equipment, haul, processing, testing, and other items of expense that may be necessary for successful completion of the backfill.

4.16 ROADWAY WORK

Roadway Work shall include all other earthworks not included under another bid item. It shall be carried out in accordance with Section 2.3, “Grading”, of the Standard Specifications for Highway Construction, as shown on the drawings, and as directed by the Consultant.

The Contractor shall reconstruct the roadway on existing profile as shown on the Drawings. The designed road top width is to be 8.0 m wide over the culvert. Side slopes vary from 4:1 away from the culvert site to 3:1 in close proximity to the culvert site as shown on the drawings. The crown rate is 3% along the existing profile grade. The Contractor shall transition the new side slopes at the limits of the grading to meet the existing side slopes as directed by the Consultant.

Testing of embankment material for Roadway Work shall be by the Contractor, which testing shall be in accordance with Section 2.3.4.7.5.1, “Layer and Density Requirements,” of the Standard Specifications for Highway Construction. Compaction tests for Roadway Work shall be obtained for every **fourth (4th) lift** of embankment material and as directed by the Consultant. The top 300 mm of the new road grade shall be compacted the 100% standard proctor density.

The suitability of any excavated material from the existing road for use as common embankment material above and around the new culvert or within the road grade within the proposed Limits of Grading is subject to the approval of the Consultant. The Contractor shall dispose of unsuitable material to the acceptance of the Consultant and the Owner. Material that is too wet or is otherwise unsuitable for embankment material may be placed on the roadway side slopes, subject to the approval of the Consultant.

Roadway Work also shall include the following:

- ❑ Clearing and grubbing as required for the roadway construction within the grading limits shown on the drawings and as determined by the Consultant.
- ❑ Construction of adjacent embankment material around and over the structural backfill envelope within the grading limits and constructing the road as shown on the cross section and site plan and as directed by the Consultant.
- ❑ Provide a smooth transition between newly constructed road profile and the existing road profile at the Limits of Grading as directed by the Consultant.
- ❑ Trimming, topsoiling, harrowing, and seeding all new and disturbed slopes including embankment and channel slopes within the grading limits.

In addition, the Contractor is advised of the following work and additional estimated quantities at the bridge culvert site:

Structural Excavation: **1975 cubic metres** (includes topsoil stripping and replacement)

Seed mix supplied by the Contractor shall be free of Scentless Chamomile and Downy Brome. After all topsoil materials have been replaced, the Contractor shall seed all disturbed areas within the right of way and/or outside the right of way as determined by the Consultant.

Certified # 1 grass seed mix of the following proportions shall be applied with a broadcast seed spreader on all disturbed areas at a rate of 50 lbs. /acre (56 kg/hectare) at the bridge culvert site:

75% Creeping Red Fescue
15% Timothy
10% Alsike Clover

The Contractor shall provide the Consultant with the certificate of analysis for all lots of seed used. The seed must also be free of all noxious weeds and sweet clover. The Contractor shall allow a minimum of two weeks for the seed mix review and approval.

All grass seed shall be placed after the disturbed areas and side slopes are trimmed and accepted by the Consultant. Upon completion of the seeding and harrowing of the road side slopes and ditches, the Contractor shall use a crawler tractor to travel up and down the slopes to create horizontal grooved track marks to help reduce soil erosion and promote grass catch on the side slopes and ditches.

The Contractor shall supply and place a 50 mm thick lift of Designation 2 Class 25 crushed aggregate material as surfacing material on the new road surface within the Limits of Grading and as directed by the Consultant. The estimated volume of surfacing gravel is 30 cubic metres.

Payment for “Roadway Work” will be made at the lump sum price bid for this item, which price shall include all work associated with grading and shall be full compensation for the cost of all compaction testing, and all labour, materials, equipment, tools, grass seed, road surfacing gravel, and incidentals necessary to complete the work as described.

4.17 WORKMANSHIP

For all work performed under this Contract, the Contractor shall provide a product conforming in quality and accuracy of detail to the dimensional and tolerance requirements of the specifications and drawings. Where no tolerance is specified, the standard of workmanship shall be in accordance with normally accepted industry good practice

5 MODIFICATIONS TO STANDARD SPECIFICATIONS

For this Contract, Specification 1.1, “Definitions and Interpretations”, and Specification 1.2, “General” apply except for the changes and amendments detailed below.

5.1 SPECIFICATION 1.1, DEFINITION AND INTERPRETATION

- i) The definition of Section 1.1.7, CONSULTANT, is replaced in its entirety with the following:

“Consultant” means the Professional Engineer or Engineering consulting firm that has been retained by the Owner to administer the Contract. The Consultant is the Owner's representative during construction and until completion of any correction of defects or until the issuance of the Final Acceptance Certificate, whichever is later, and will continue to the end of the warranty period. The Owner's instructions to the Contractor will be forwarded through the Consultant. The Consultant will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified by written agreement.

In the event of the termination of the employment of the Consultant, the Owner will immediately appoint a Consultant to whom the Contractor makes no reasonable objection and whose status under the Contract shall be that of the former Consultant.

Nothing contained in the Contract Documents shall create any contractual relationship between the Consultant and the Contractor, his Subcontractors, his suppliers, or their agents, employees or other persons performing any of the work.

- ii) The following definition is added:

“Owner” means the person, firm, or corporation identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Owner means the Owner or his authorized agent or representative as designated to the Contractor in writing but does not include the Consultant. The words “Minister” and “Department” in all specifications shall be replaced by the word “Owner” unless noted otherwise.

5.2 MODIFICATION TO SPECIFICATION 1.2, GENERAL, RE: FORCE MAJEURE

- i) The definition of Section 1.1.13, FORCE MAJEURE EVENT, is replaced in its entirety with the following:

“Force Majeure Event” means any war, invasion, insurrection, armed conflict, act of foreign enemy, revolution, terrorist act, interference by military authorities, nuclear explosion, contamination by ionizing radiation, epidemic, pandemic including Covid-19, or quarantine restriction that prevents, delays or interrupts the performance of any obligation under this Contract, other than any obligation to pay any money, and provided such event does not occur by reason of:

- i) The negligence of the party relying on the Force Majeure Event (or those for whom it is in law responsible); or*

ii) Any act or omission of the party relying on the Force Majeure Event (or those for whom it is in law responsible) that is in breach of the Contract.”

ii) Section 1.2.39.2, Force Majeure Delay, is deleted.

iii) The following is inserted in Section 1.2, GENERAL SPECIFICATIONS:

“1.2.58 FORCE MAJEURE EVENT

If a Force Majeure Event occurs then notwithstanding any other provision of the Contract:

i) To the extent that and for so long as either party is prevented by the Force Majeure Event from performing any obligation under the Contract, that party is relieved from liability due to its inability to perform or delay in performing that obligation; and

ii) If the Force Majeure Event wholly or substantially prevents the Contractor from proceeding with the Work then the specified or adjusted interim completion date or Construction Completion date as applicable shall be adjusted for the period of the Force Majeure Event.

Upon either party becoming aware of the occurrence of a Force Majeure Event that prevents that party from performing any obligation under the Contract, that party shall in a timely manner give the other party notice of the Force Majeure Event, including reasonable details of the anticipated effects on performance of the Contract, and thereafter the Contractor shall, on an ongoing basis, notify the Owner of its plans for remedying or mitigating the effects of the Force Majeure Event.

If the Contractor anticipates that the Force Majeure Event will delay completion of the applicable Work by the specified interim completion date or Construction Completion date as applicable but is of the opinion the delay can be avoided or mitigated through extraordinary measures, the Contractor may propose to the Owner that such extraordinary measures be taken by the Contractor at the Owner’s expense.”

5.3 MODIFICATION TO SPECIFICATION 1.2, GENERAL, RE: HIERARCHY OF DOCUMENTS

The first paragraph of Section 1.2.1.2, HIERARCHY OF DOCUMENTS, is replaced with the following:

In the event of discrepancies in the Specifications or Plans or both, the hierarchy of documents in descending order is as follows:

- *Special Provisions*
- *Modifications to Standard Specifications*
- *Project specific construction plans*
- *Standard construction plans*
- *Specification Amendments*
- *Supplemental Specifications*
- *General Specifications*

- *Standard Construction Specifications*

5.4 MODIFICATION TO SPECIFICATION 1.2, GENERAL, RE: PRE-CONSTRUCTION MEETING

The last paragraph of Section 1.2.8.1, PRE-CONSTRUCTION MEETING, is replaced with the following:

The Contractor must provide a list of all planned sub-contractors for the Project and identify which ones he believes should attend the meeting. The Consultant may review the list and may require the Contractor to ensure certain key sub-contractors attend. In addition to the sub-contractors, the Contractor must ensure that its project supervisor and its designated safety and traffic representatives are in attendance. In addition, the Contractor cannot mobilize to Site until after the Contract is executed and the Owner has indicated it has received and is satisfied with all requested documents. The Contractor is responsible for ensuring requested documents are provided and understands that the Owner will not authorize mobilization to the Site if all requested documents have not been received by the Owner. The Contractor acknowledges and agrees that it cannot make a claim for any costs, delays, additional time or completion date adjustments, or damages associated with its delay or failure to submit all requested documents and not being authorized to mobilize to Site.

5.5 MODIFICATION TO SPECIFICATION 1.2, GENERAL, RE: ALTERNATIVE FORMS OF SECURITY

- i) The following is inserted in Section 1.2.3.2, ALTERNATIVE FORMS OF SECURITY:

Where the Owner is other than Alberta Transportation, the following shall apply:

- *Alternative forms of security are subject to the approval of the Owner.*
- *Performance bonding or security in lieu of bonds shall remain in force until the end of the Warranty period.*

5.6 MODIFICATION TO SPECIFICATION 1.2, GENERAL, RE: INSURANCE

- ii) The following is inserted in Section 1.2.4, INSURANCE:

The Owner and the Consultant shall be included in the Contractor's Comprehensive or Commercial General Liability Insurance as additional insured.

5.7 MODIFICATION TO SPECIFICATION 1.2, GENERAL, RE: ENVIRONMENTAL MANAGEMENT

Section 1.2.16.4.4, PRODUCED SAND AND CONTAMINATED SOILS, is replaced in its entirety with the following:

Produced Sand (oilfield waste sand) or any other contaminated soils as defined in Provincial Legislation are prohibited from use as a stand-alone or component material in any or all phases of construction on Alberta Transportation projects including grading, base course, paving and bridge work.

5.8 MODIFICATION TO SPECIFICATION 1.2, GENERAL, RE: GOODS AND SERVICES TAX

The following is inserted in Section 1.2.47, GOODS AND SERVICES TAX:

Where the Owner is other than Alberta Transportation, GST will be added on to payments made to the Contractor.

5.9 MODIFICATION TO SPECIFICATION 1.2.57.1.2, "RESOLUTION OF CLAIMS"

Modify as follows:

Where the Owner is other than Alberta Transportation, the administrative review structure shall be as follows:

- (i) Consultant Project Manager
- (ii) Consultant Project Director
- (iii) The Owner

5.10 MODIFICATION TO SPECIFICATION 2.3, GRADING, RE: LIME FOR DRYING

The second paragraph of Section 2.3.6.13.5.2., LIME FOR DRYING, is deleted in its entirety. Lime, if used, will NOT be reimbursed by the Owner.

5.11 AMENDMENT TO SPECIFICATION 7.1, TRAFFIC ACCOMMODATION AND TEMPORARY SIGNING, RE BONUS AND PENALTY ASSESSMENT

5.11.1 The following is added after the final paragraph of Section 7.1.15.2, Bonus and Penalty Assessment:

The following is added after the final paragraph of subsection 7.1.15.2, "Bonus and Penalty Assessment:"

Where the Owner is other than Alberta Transportation the potential lump sum bonus payment of \$2,000 does not apply. Penalties for written warnings or orders to suspend work shall apply as indicated.

6 PLANS

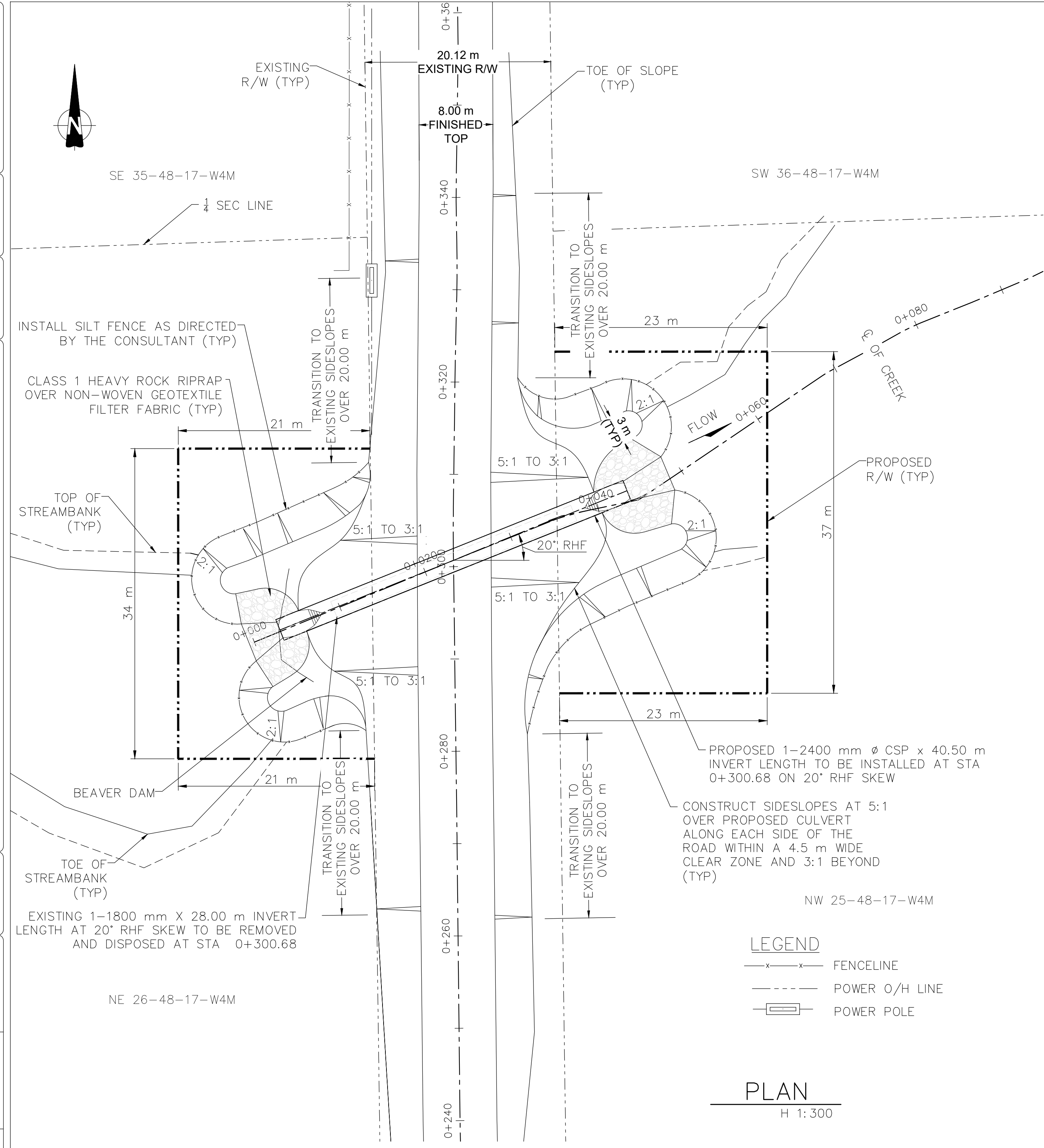
The following site-specific plans, which are folded separately on the back cover, form part of the Tender Documents:

DRAWING NUMBER	DESCRIPTION
55943-P	Watercourse Culvert on Local Road 23 km SE of Ryley – General Layout
55944-P	Watercourse Culvert on Local Road 23 km SE of Ryley – Information Sheet

7 ENVIRONMENTAL NOTIFICATIONS

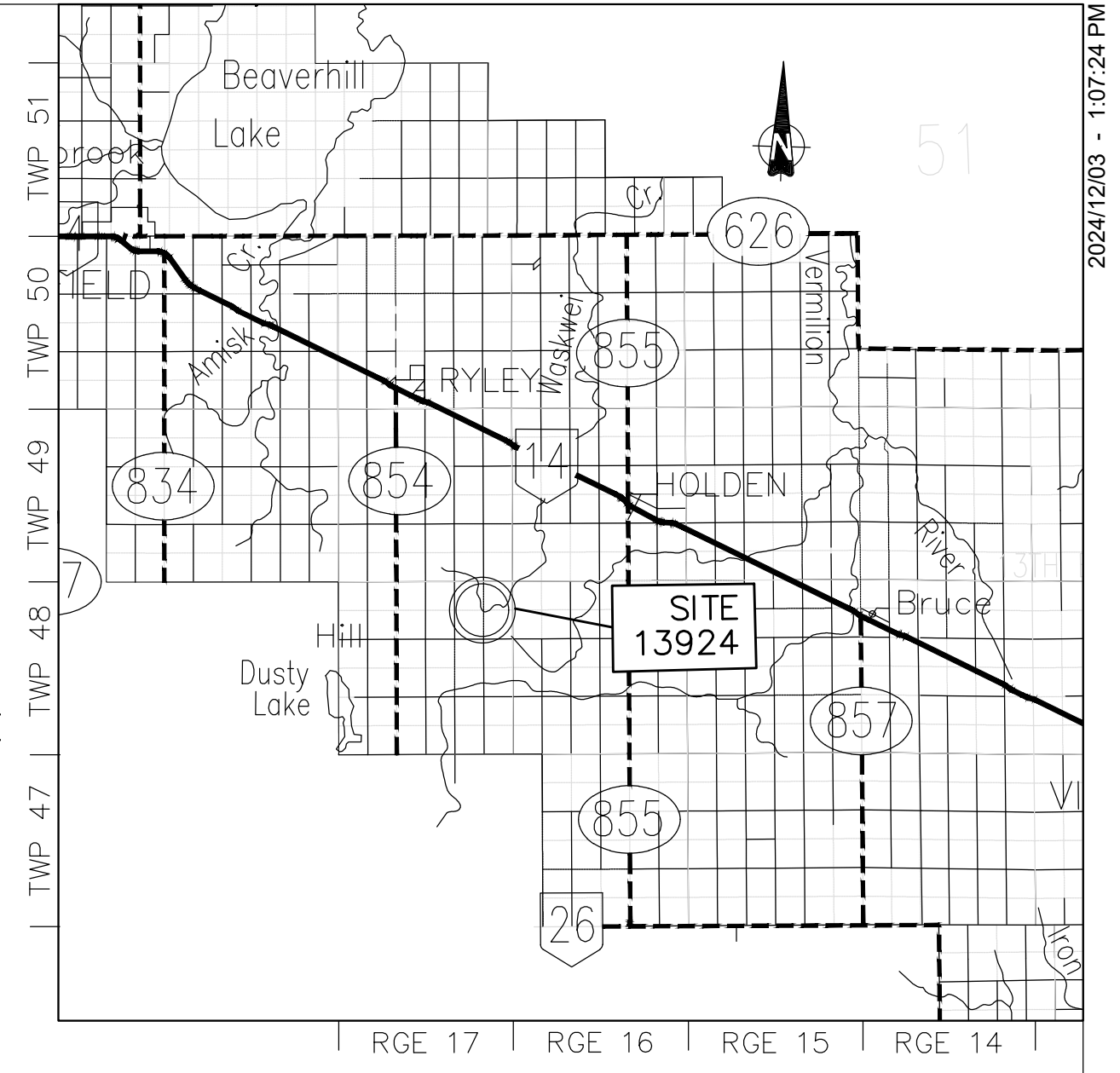
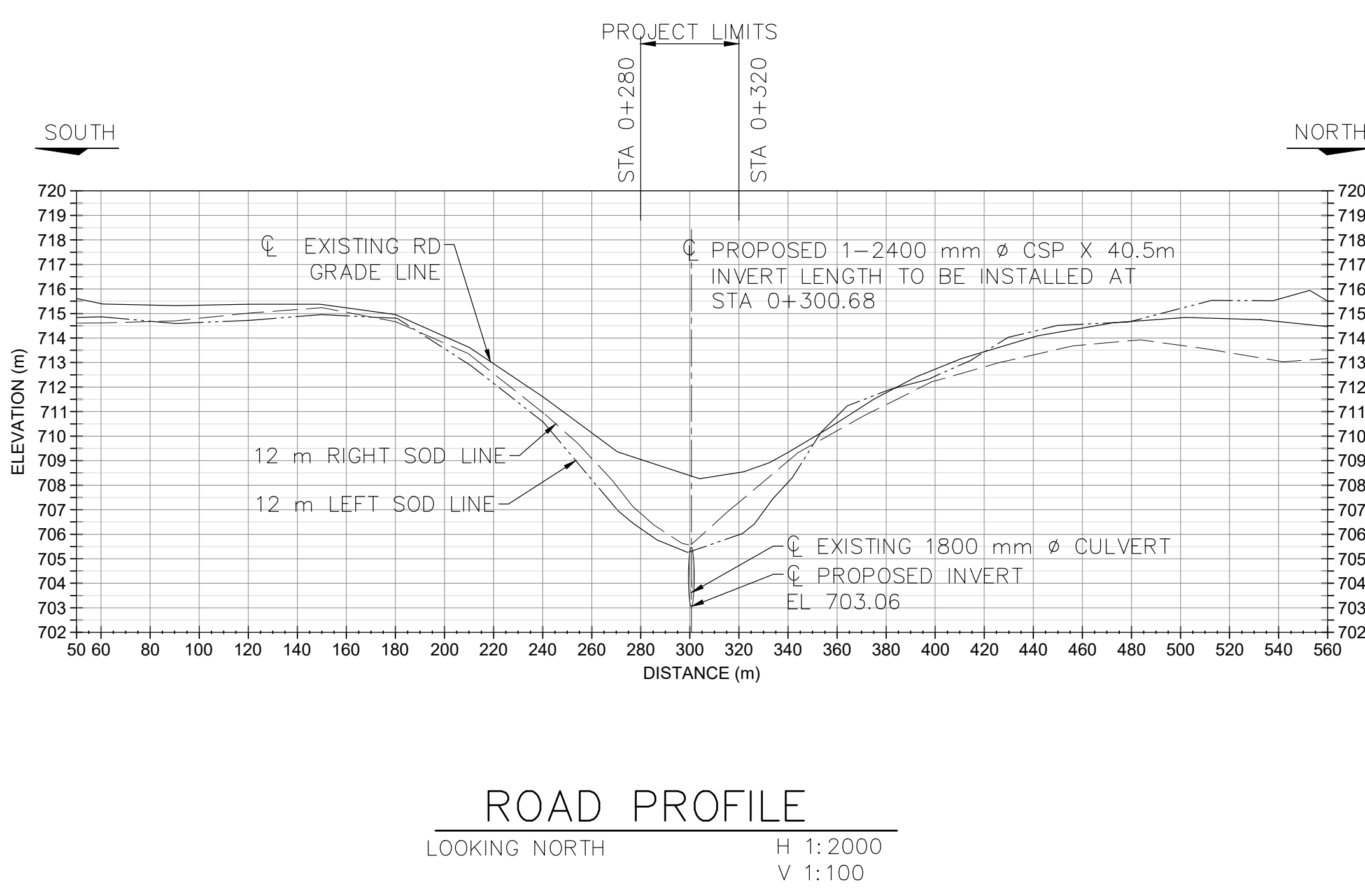
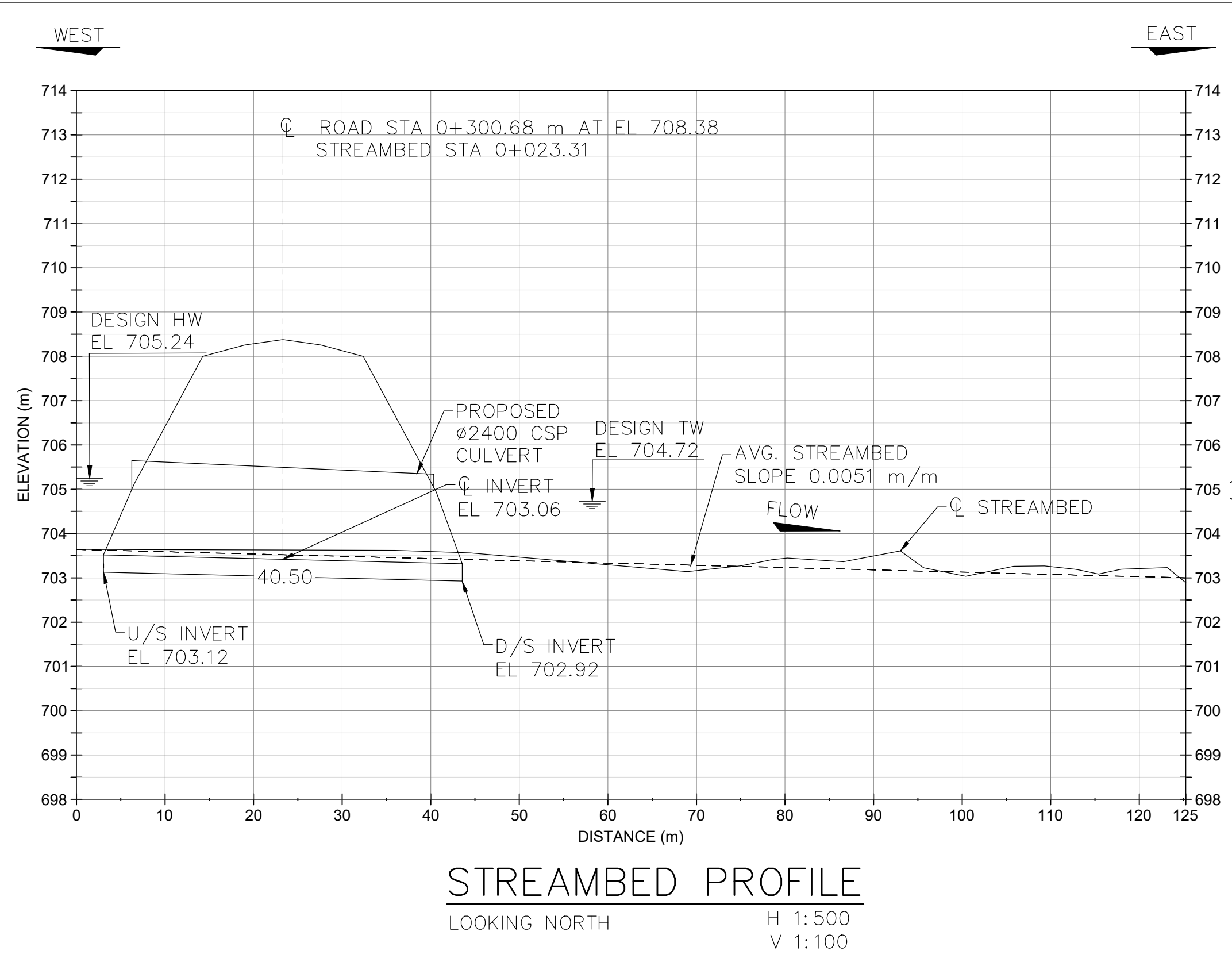
8 ADDENDA

DRAWING XXXXX-P
 HIGHWAY LOCAL ROAD
 CONTRACT
 DESCRIPTION WATERCOURSE CULVERT ON LOCAL ROAD, 15 km SE OF RYLEY - GENERAL LAYOUT
 PHOTO
 DATE 2024-12-10
 BY WSP
 SURVEYED
 DEPARTMENT BAR CODE



ITEM	UNIT	ESTIMATE AS CONST
SUPPLY 1-2400 mm Ø CSP	m	40.50
ASSEMBLY OF 1-2400 mm Ø CSP	m	40.50
REMOVAL OF EXISTING CULVERT	LUMP	1
EXCAVATION - STRUCTURAL	m ³	1975
BACKFILL		
CRUSHED AGGREGATE MATERIAL - DES 2, CLASS 25	m ³	18
CRUSHED AGGREGATE MATERIAL - DES 2, CLASS 40	m ³	440
CLAY SEALS	m ³	250
WOVEN GEOTEXTILE FILTER FABRIC	m ²	400
BRIDGE IDENTIFICATION TAG	UNIT	1
HEAVY ROCK RIPRAP - CLASS 1	m ³	75
NON-WOVEN GEOTEXTILE FILTER FABRIC	m ²	200
GEOTEXTILE FENCE BARRIER (SILT FENCE)	m	200
TOTAL		

QUANTITY ESTIMATE



SITE MAP
 HIGHWAY 1-216
 HIGHWAY 500-986
 LOCAL ROAD

SURVEY AND BENCHMARK
 WSP CANADA INC. UNDER THE DIRECTION OF JAMES NHIEU, NOVEMBER 9, 2024
 CP-1000:N 5893003.56 m E 408595.56 m EL 712.30 m
 CP-2000:N 5892565.50 m E 408588.92 m EL 716.85 m

HYDROTECHNICAL DATA
 DRAINAGE AREA = 73 Km²
 ESTIMATED AVERAGE CHANNEL SLOPE = 0.0051 m/m
 DESIGN DISCHARGE = 7.0 m³/s
 MEAN OUTLET VELOCITY AT PROPOSED CULVERT FOR DESIGN DISCHARGE = 1.9 m/s
 FISH MIGRATION DISCHARGE = 0.4 m³/s
 MEAN OUTLET VELOCITY AT PROPOSED CULVERT DURING FISH MIGRATION DISCHARGE = 0.21 m/s

PROPOSED STRUCTURE
 1-2400 mm Ø CSP x 40.50 m INVERT LENGTH, WITH 125 x 25 mm CORRUGATION PROFILE, 2:1 STEP BEVEL ENDS, 3.5 mm WALL THICKNESS, GALVANIZED COATING OF 610 g/m² INSTALLED AT 20° RHF SKEW AT STA 0+300.68

GENERAL NOTES
 DIMENSIONS AND ELEVATIONS ARE GIVEN IN METRES UNLESS NOTED OTHERWISE
 ROADWAY DESIGN STANDARD RLU-208G-90
 STRUCTURAL DESIGN IN ACCORDANCE WITH CAN/CSA S6-19 AND CL 800 DESIGN LIVE LOAD
 CULVERT AND HEAVY ROCK RIPRAP EXTEND BEYOND BASIC RIGHT OF WAY. ADDITIONAL RIGHT OF WAY AS SHOWN ON THE PLAN IS REQUIRED FOR THE INSTALLATION.
 CULVERT ASSEMBLY, BACKFILL AND OTHER TYPICAL DETAILS SHALL BE IN ACCORDANCE WITH THE DWGS, DWG S-1418 AND SECTION 18 OF SPECIFICATIONS FOR BRIDGE CONSTRUCTION (2020)
 THE INFORMATION AND SPECIFICATIONS INCLUDED ON THIS PLAN MEET STANDARDS SPECIFIED IN (c) AND (d) OF PART I OF SCHEDULE 2 OF THE WATER ACT CODE OF PRACTICE FOR WATERCOURSE CROSSING

SHEET	DESCRIPTION	DRAWING
4	STANDARD IDENTIFICATION TAGS	S-1848-20
3	INSTALLATION OF CSP AND SPCSP STRUCTURES	S-1418-20
2	INFORMATION SHEET	55944-P
1	GENERAL LAYOUT	55943-P

INDEX

CONSULTANT

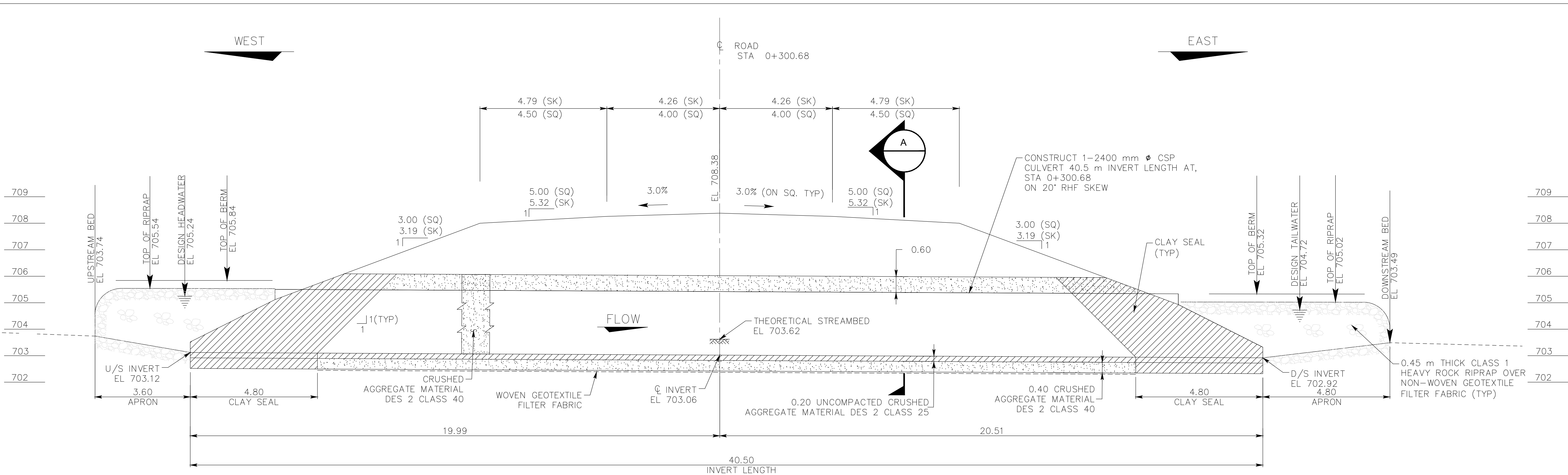
 WSP Canada Inc.
 JOB No. PLAN No.

DESIGNER
 CHECKER
 REV DATE REVISION
 2024-12-10 ISSUED FOR REVIEW RA
 DATE LOCATION SITE
 2024-12-10 NW 25-48-17-W4M BF13924

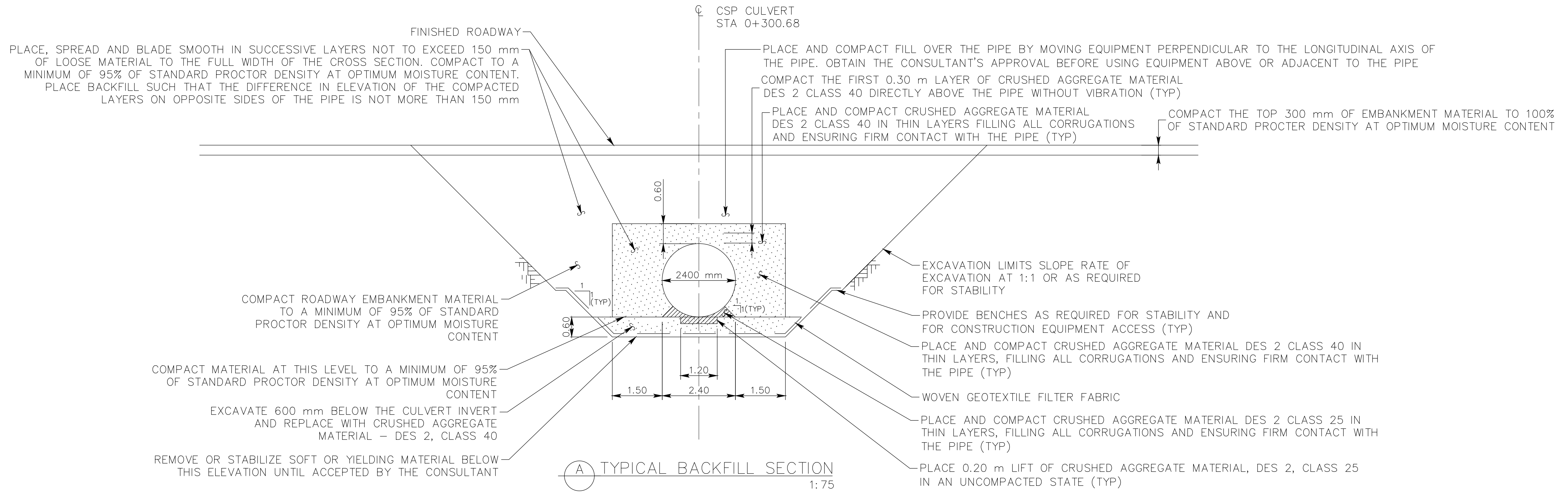
BEAVER COUNTY
 WATERCOURSE CULVERT
 ON LOCAL ROAD, 23 km SE OF RYLEY
 GENERAL LAYOUT
 CONTRACT HIGHWAY SHEET DRAWING
 - LOCAL 1 OF 4 55943-P

C:\USERS\WDS_ATHAR\QURESHI\DRIVE - WSP\0365\DESKTOP\PROJECTS\BF13924-1 SURVEY TRANSLATION\DRAWINGS\BF13924 DEC 3 2024-ALAN.DWG 2024/12/03 - 1:07:24 PM

DRAWING: XXXXX-P
 HIGHWAY: LOCAL ROAD
 CONTRACT: -
 DESCRIPTION: WATERCOURSE CULVERT ON LOCAL ROAD, 15 km SE OF RYLEY - INFORMATION SHEET
 PHOTO: -
 DATE: 2024-12-10
 BY: WSP
 SURVEYED: -
 DEPARTMENT BAR CODE: -



LONGITUDINAL SECTION
 (ALONG CULVERT CENTERLINE AT STA 0+300.68 (LOOKING NORTH))
 1:75



CONSULTANT		DESIGNER		CHECKER		BEAVER COUNTY					
 WSP Canada Inc.						WATERCOURSE CULVERT ON LOCAL ROAD, 23 km SE OF RYLEY INFORMATION SHEET					
JOB No.	PLAN No.	DATE		LOCATION		SITE		CONTRACT	HIGHWAY	SHEET	DRAWING
XXXXXX	-	2024-12-10		NW 25-48-17-W4M		BF13924			LOCAL	2 OF 4	55944-P

2024/12/03 - 1:07:24 PM
 C:\USERS\WDS_ATHER\QURESHIZONE\DRIVE - WSP\0385\DESKTOP\DESKTOP-PROJECTS\BF13924-1 SURVEY TRANSLATION\PIP-DRAWINGS\BF13924 DEC 3 2024-ALAN.DWG