



**Public Services and
Procurement Canada**

**Services Publics et
Approvisionnement Canada**

**KM 140.3
EAST CACHE CREEK
CULVERT REPLACEMENT
ALASKA HIGHWAY, BC**

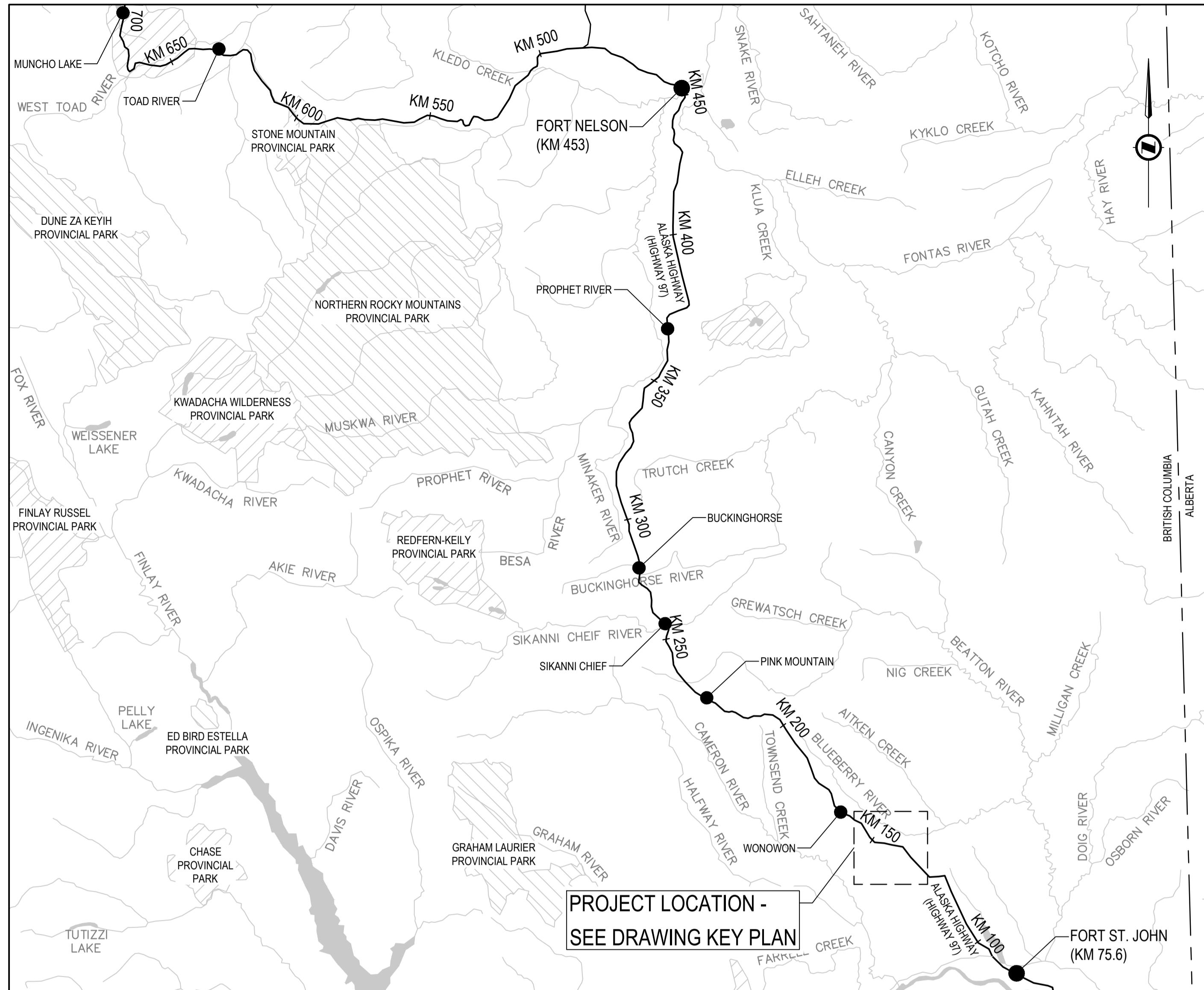
**ALASKA HIGHWAY
BRITISH COLUMBIA**



PROJECT No. R.109448.002

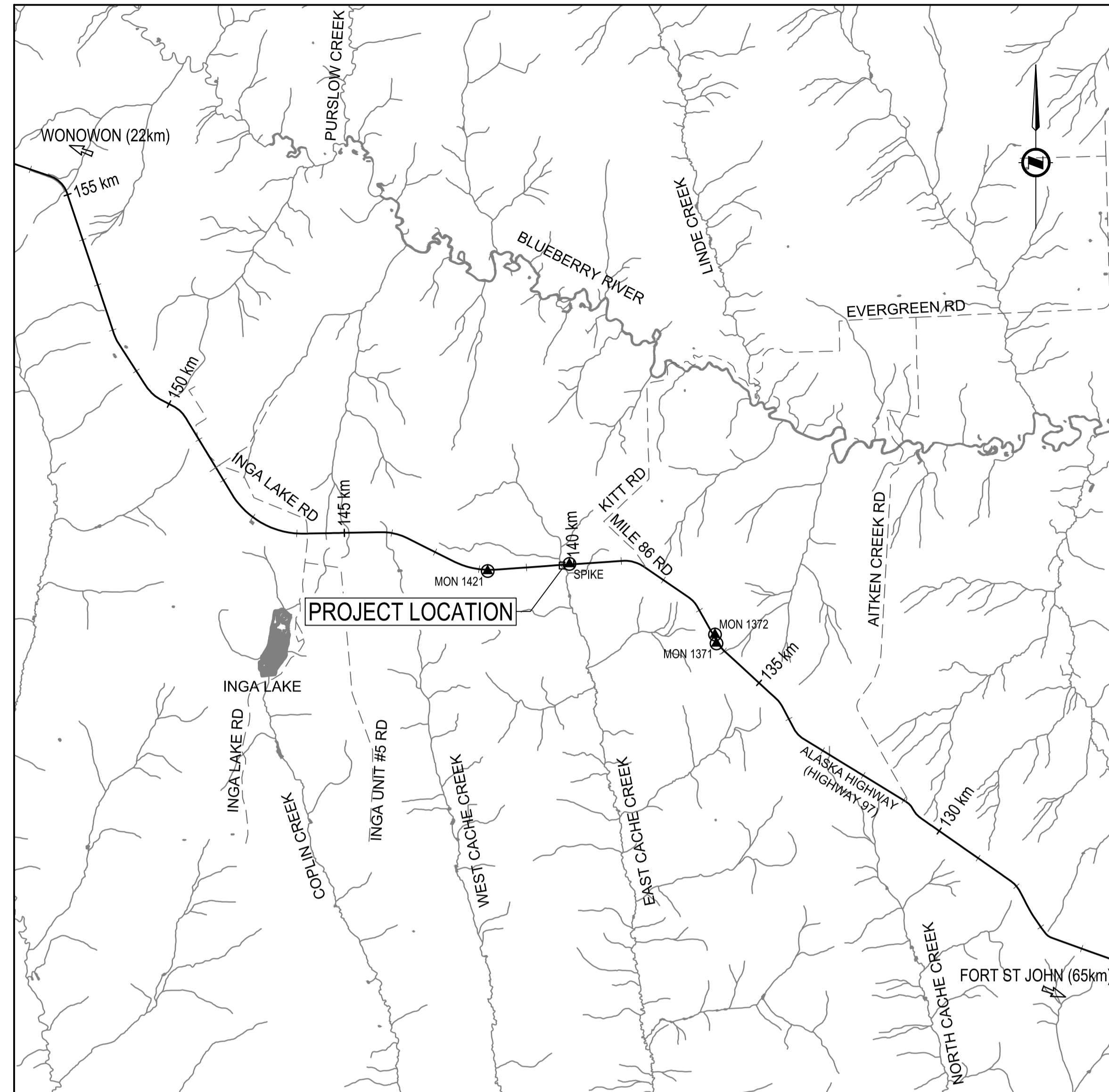
**ISSUED FOR TENDER
JUNE 19, 2020**

PROJECT LOCATION PLAN



SCALE: 1:1,000,000

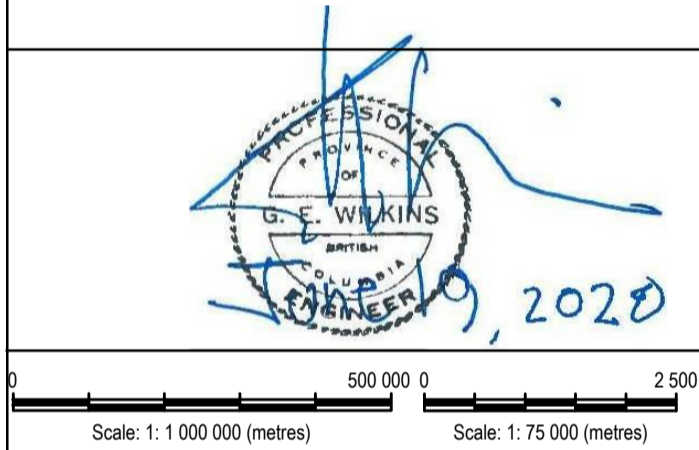
DRAWING KEY PLAN



SCALE: 1:75,000

ISSUED FOR TENDER

- GENERAL NOTES:
 1. DIMENSIONS, COORDINATES, ELEVATIONS ARE IN METRES UNLESS NOTED OTHERWISE
 2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION



I:\Local\alal\Legacy\lancouvet\Transportation\TRN\VHM\Projects\TRN\VHM\03146\Culvert Replacement\Tender\2\CADD\KM 140\C000-002 COVER & KEY PLAN KM 140.dwg [C001] June 16, 2020 - 10:06:22 am (BY: DEEPWELL, ANDREW)

DRAWING INDEX

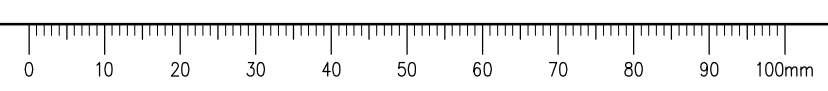
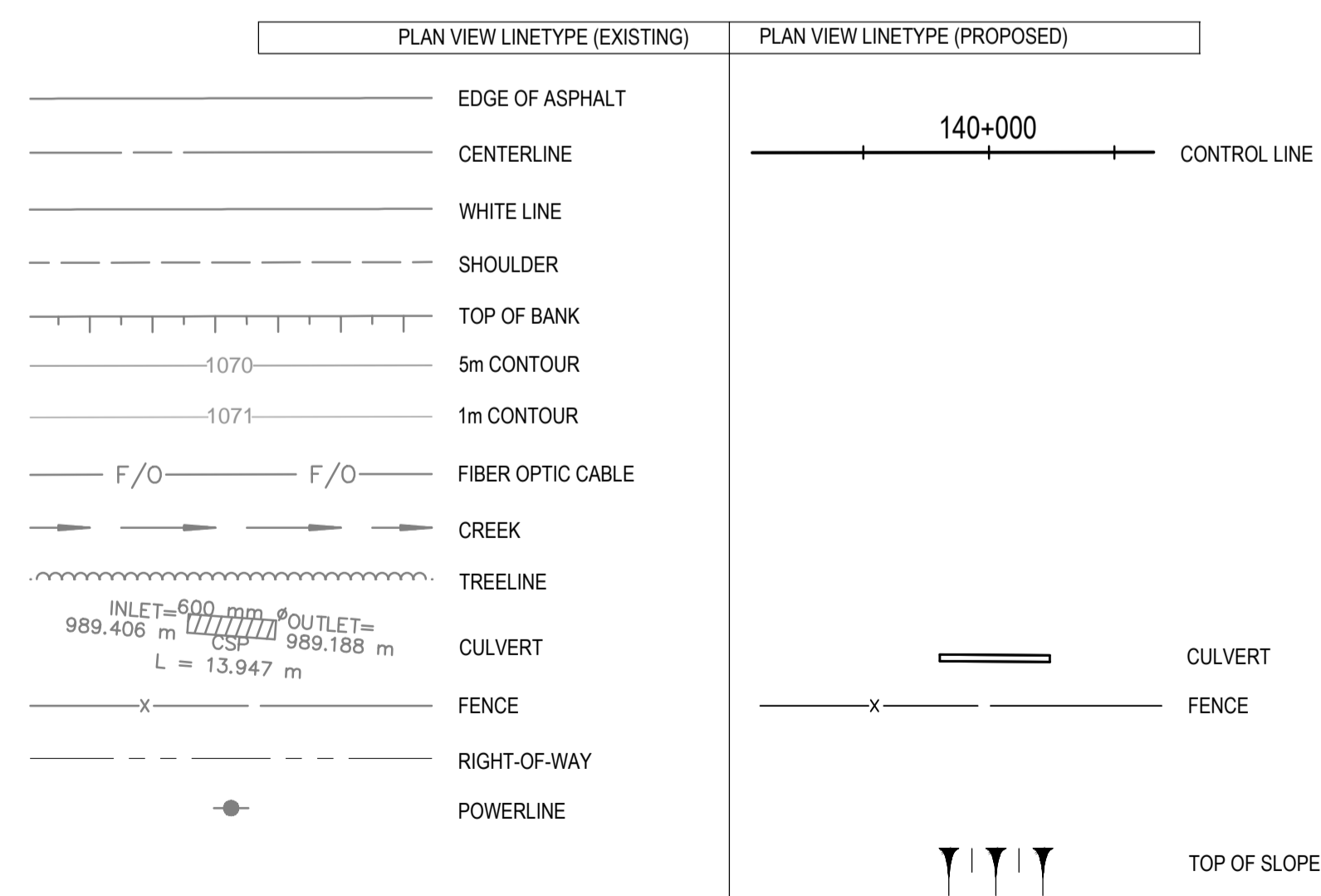
DRAWING	DESCRIPTION
C000	COVER PAGE
C001	PROJECT LOCATION PLAN, KEY PLAN, DRAWING INDEX, LEGEND & CONTROL MONUMENT LOCATIONS
C101	GENERAL ARRANGEMENT PLAN
C102	PLAN / PROFILES - CULVERT INLET
C103	PLAN / PROFILES - CULVERT OUTLET
C104	PROFILES - 914 mm Ø STEEL PIPE LINER
C201	TYPICAL INLET SECTIONS
C301	TYPICAL OUTLET SECTIONS
C401 - C402	INLET CONCRETE HEADWALL DETAILS
C501 - C502	OUTLET CONCRETE HEADWALL DETAILS
C601	FISH BAFFLE DETAILS & CULVERT BACKFILL DETAILS
C701 - C703	CROSS SECTIONS
C801 - C803	ENVIRONMENTAL CONSTRUCTION STAGING - PLAN VIEW
C802	ENVIRONMENTAL CONSTRUCTION STAGING - CHECK DAM DETAILS
C803	ENVIRONMENTAL CONSTRUCTION STAGING - FISH STOP NET DETAILS

PROJECT CONTROL MONUMENTS

POINT DESCRIPTION	EASTING	NORTHING	ELEVATION
MON 1421	587,862.715	6,276,960.411	853.291
MON 1371	592,678.486	6,275,436.999	860.462
MON 1372	592,646.240	6,275,621.573	860.239
SPIKE	589,584.442	6,277,108.579	794.999

- NOTES:
- ELEVATIONS ARE GEODETIC AND DERIVED FROM DUAL FREQUENCY CARRIER PHASE GPS. OBSERVATIONS PROCESSED USING PSPC CONTROL MONUMENTS AND POST PROCESSED POSITIONING
 - CONTROL POINT DATUM: NAD83
CONTROL POINT VERTICAL DATUM: CGVD 28
CONTROL POINT PROJECTION: UTM ZONE 10
 - BASE MAPPING SURVEY FROM APEX SURVEYING SOLUTIONS LTD. DECEMBER 2018
 - ONSITE CONTROL MONUMENTS NOT LISTED IN THE ABOVE CONTROL MONUMENTS SHALL NOT BE USED
 - MONUMENTS ARE LOCATED OUTSIDE PLAN VIEW DRAWINGS LIMITS, THUS NOT SHOWN ON DRAWINGS EXCEPT FOR DRAWING KEY PLAN (THIS SHEET).

LEGEND

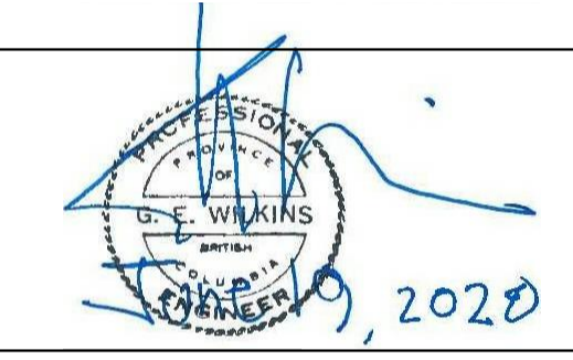
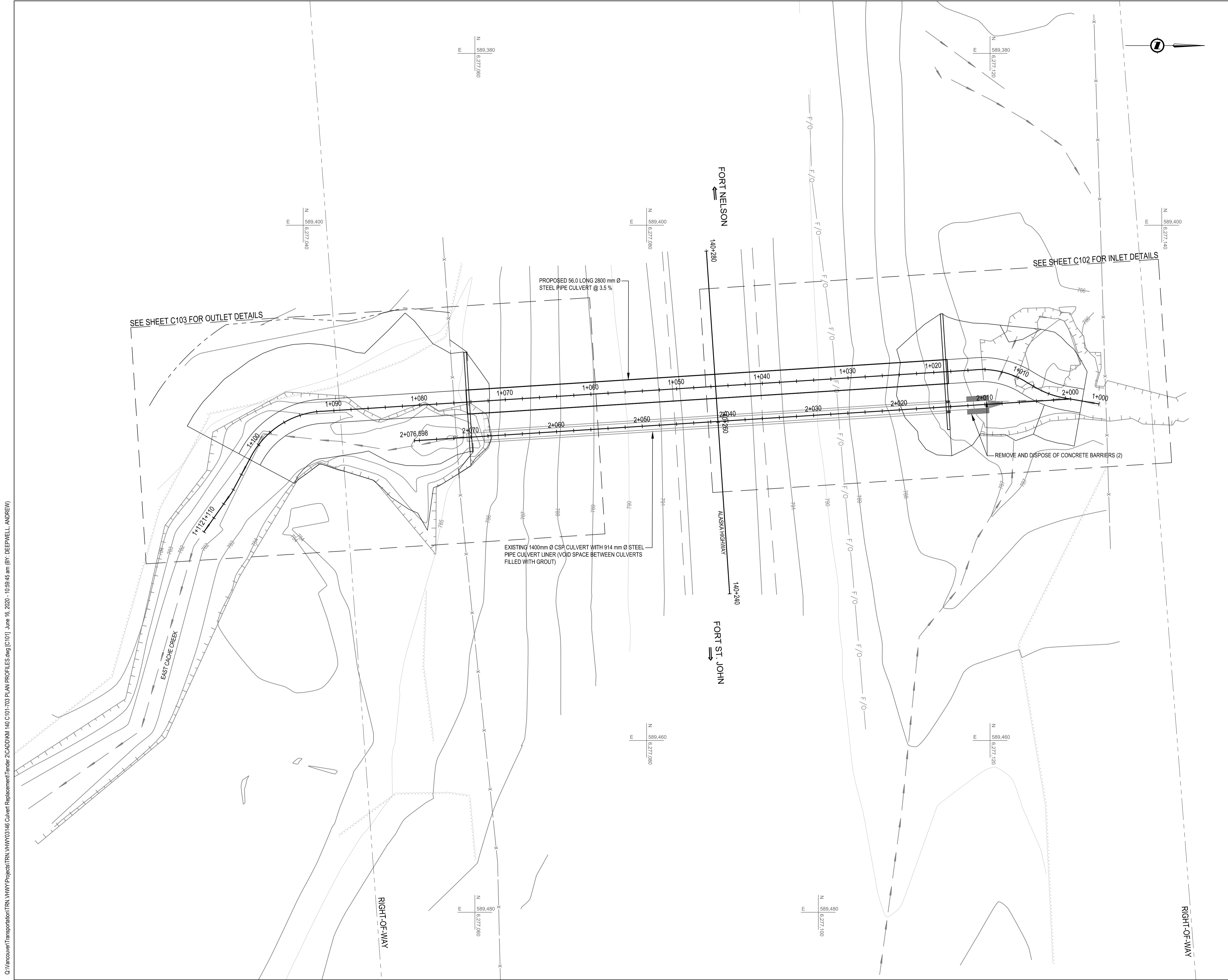


Project No./No. du projet	Sheet/Fauille	Revision no./La Révision no.
R.109448.002	C001	-
	OF	



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Scale: 1:200 (metres)

Revision/Revision	Description/Description	Date/Date
-	ISSUED FOR TENDER	20/06/19

Client/client
PUBLIC SERVICES AND PROCUREMENT CANADA



Project title/Titre du projet
**KM 140.3
EAST CACHE CREEK
CULVERT REPLACEMENT
ALASKA HIGHWAY, BC**

Approved by/Approve par
G. WILKINS
Designed by/Concept par
A. HORWOOD / A. DEEPWELL
Drawn by/Dessine par
A. DEEPWELL
PWSC Project Manager/Administrateur de Projets TPSCG
A. TAHERI
PWSC Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, TPSCG

Client/client
Public Services and Procurement Canada

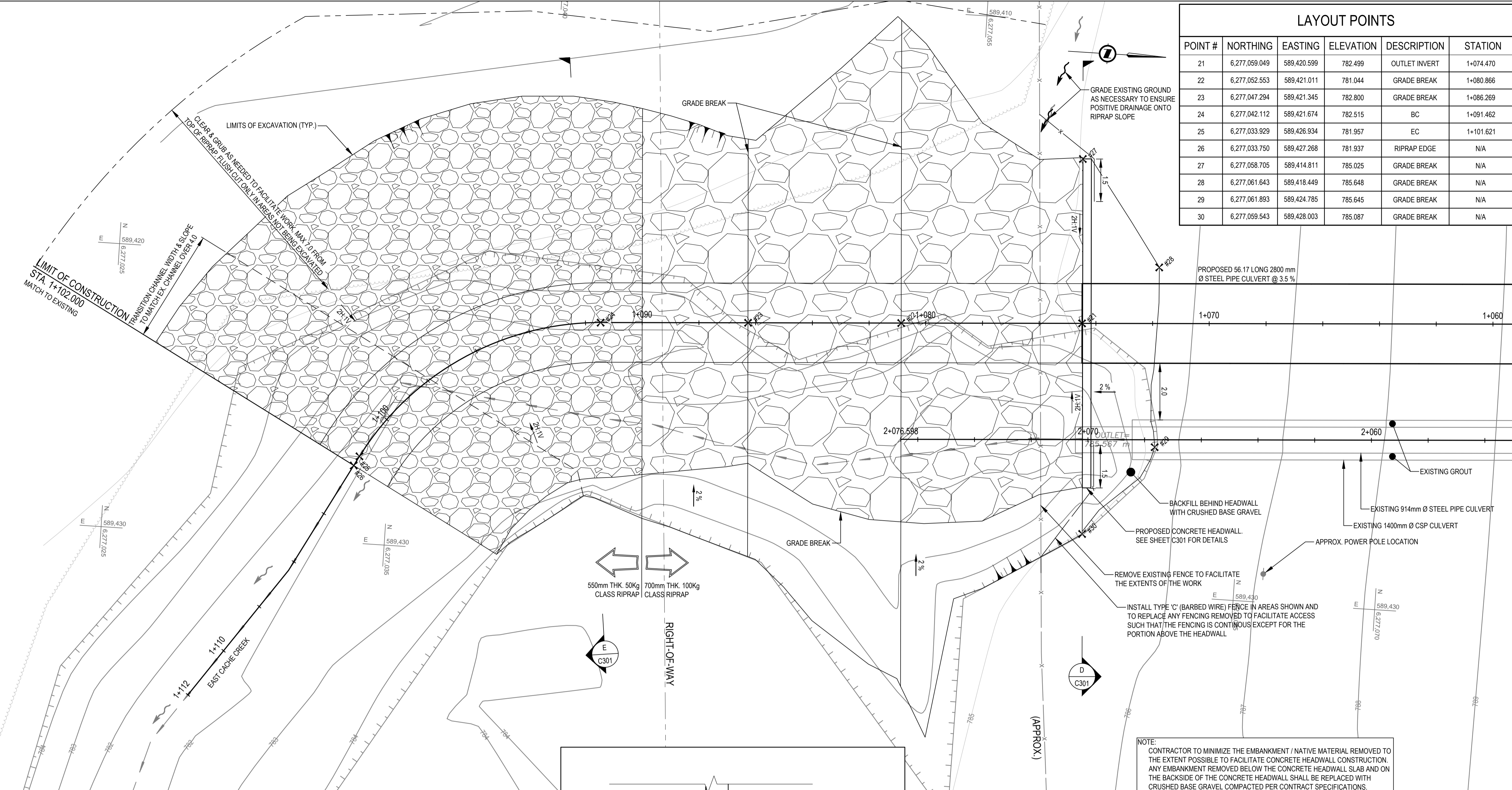
Drawing title/Titre du dessin
GENERAL ARRANGEMENT PLAN

Project No./No. du projet R.109448.002	Sheet/Fauille C101 OF	Revision no./ La Révision no. -
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Q:\VancouverTransportation\TRN\VHWY\Projects\TRN\VHWY03146\Culvert Replacement\Tender 2\CADD\KM 140\C101-1703 PLAN PROFILES.dwg [C101] June 16, 2020 - 10:55:45 am (BY: DEEPWELL, ANDREW)



Q:\Vancouver\Transportation\TRN\VHWY03\46_Culvert Replacement\Tender 2\CADD\KM 140 C101-703 PLAN PROFILES.dwg [C103] June 30, 2020 - 1:52:45 pm (BY: DEEPPWELL, ANDREW)



LAYOUT POINTS					
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION	STATION
21	6,277,059.049	589,420.599	782.499	OUTLET INVERT	1+074.470
22	6,277,052.553	589,421.011	781.044	GRADE BREAK	1+080.866
23	6,277,047.294	589,421.345	782.800	GRADE BREAK	1+086.269
24	6,277,042.112	589,421.674	782.515	BC	1+091.462
25	6,277,033.929	589,426.934	781.957	EC	1+101.621
26	6,277,033.750	589,427.268	781.937	RIPRAP EDGE	N/A
27	6,277,058.705	589,414.811	785.025	GRADE BREAK	N/A
28	6,277,061.643	589,418.449	785.648	GRADE BREAK	N/A
29	6,277,061.893	589,424.785	785.645	GRADE BREAK	N/A
30	6,277,059.543	589,428.003	785.087	GRADE BREAK	N/A

Public Services and Procurement Canada / Services publics et Approvisionnement Canada
REAL PROPERTY SERVICES
 Western Region
SERVICES IMMOBILIERS
 Région de l'ouest

ISSUED FOR TENDER

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Scale: 1:75 (metres)

ISSUED FOR TENDER	20/06/19
Revision/Revisión	Description/Description
Client/Client	

PUBLIC SERVICES AND PROCUREMENT CANADA



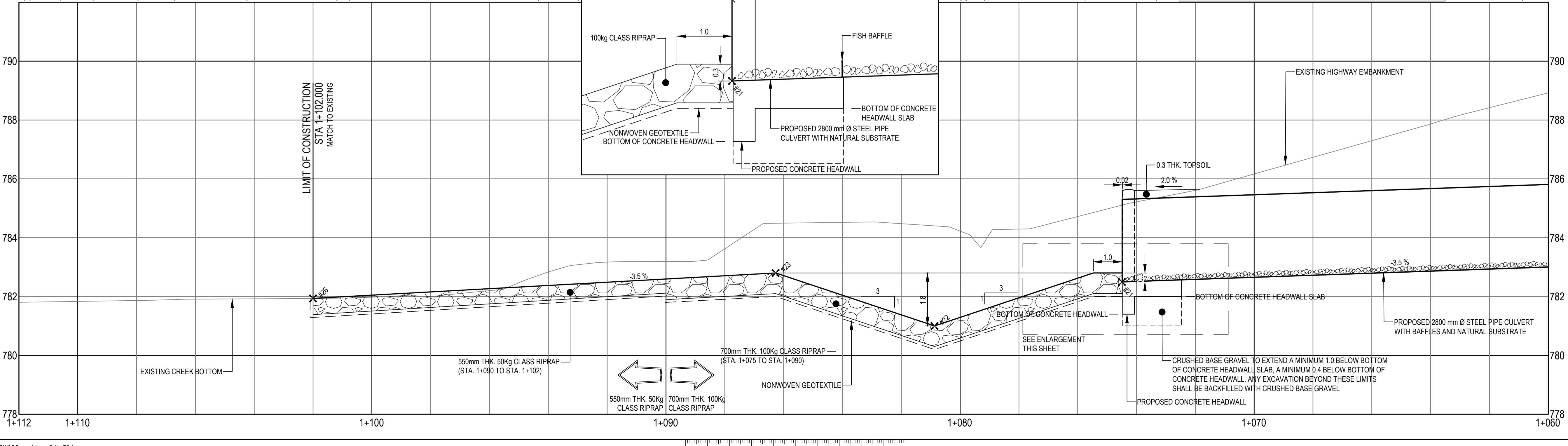
Project title/Titre du projet
KM 140.3 EAST CACHE CREEK CULVERT REPLACEMENT ALASKA HIGHWAY, BC

Approved by/Approve par
G. WILKINS
 Designed by/Concept par
A. HORWOOD / A. DEEPPWELL
 Drawn by/Dessine par
A. DEEPPWELL
 PWSC Project Manager/Administrateur de Projets TPSCG
A. TAHERI
 PWSC Architectural and Engineering Resources Manager/Ressources Architectural et de Directeur d'ingénierie, TPSCG

Client/Client
Public Services and Procurement Canada

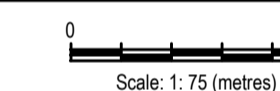
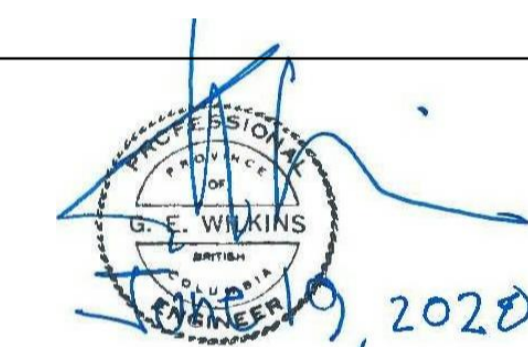
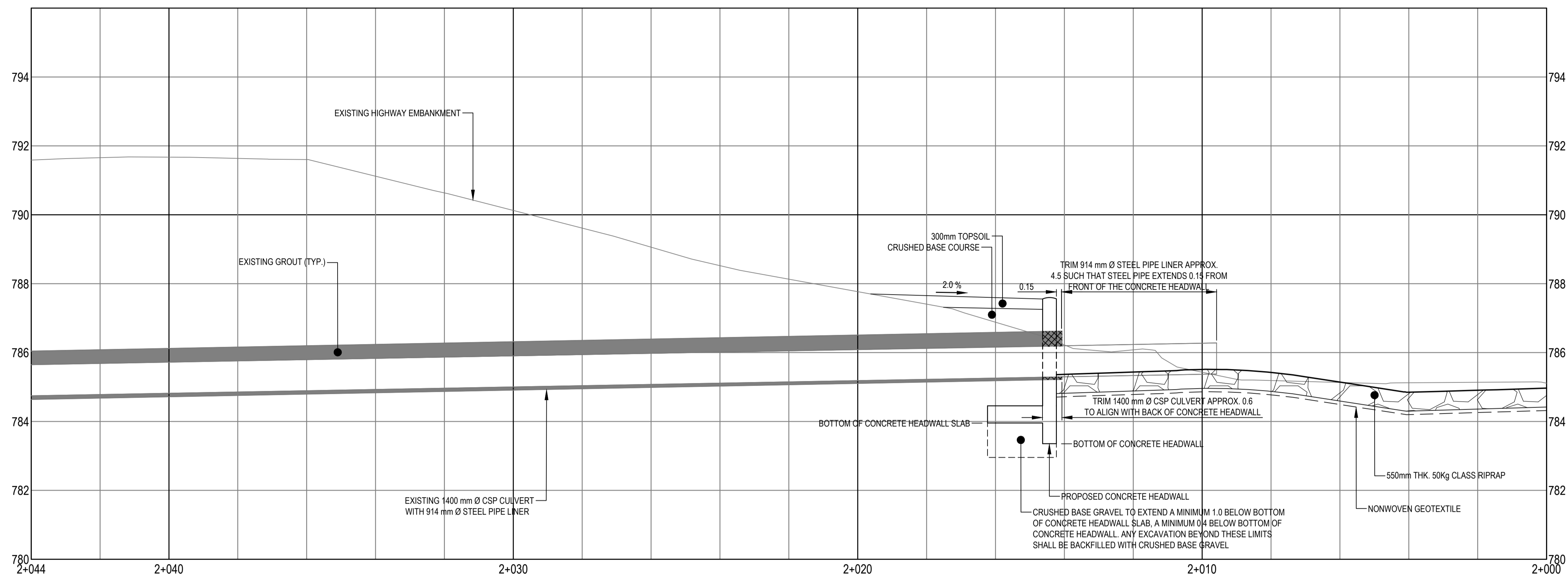
Drawing title/Titre du dessin
PLAN / PROFILES - CULVERT OUTLET

Project No./No. du projet	Sheet/Fauille	Revision no./La Révision no.
R.109448.002	C103	-
	OF	



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ISSUED FOR TENDER		20/06/19
Revision/	Description/	Date/
Revisión/	Descripción/	Fecha/

Client/client
PUBLIC SERVICES AND PROCUREMENT CANADA



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EAST CACHE CREEK
CULVERT REPLACEMENT
ALASKA HIGHWAY, BC**

Approved by/Approve par
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Designed by/Concept par
A. HORWOOD / A. DEEPWELL
Drawn by/Dessiné par
A. DEEPWELL
PWSC Project Manager/Administrateur de Projets TPSCG
A. TAHERI
PWSC Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, TPSCG

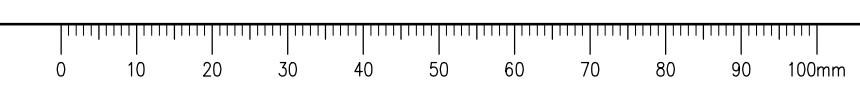
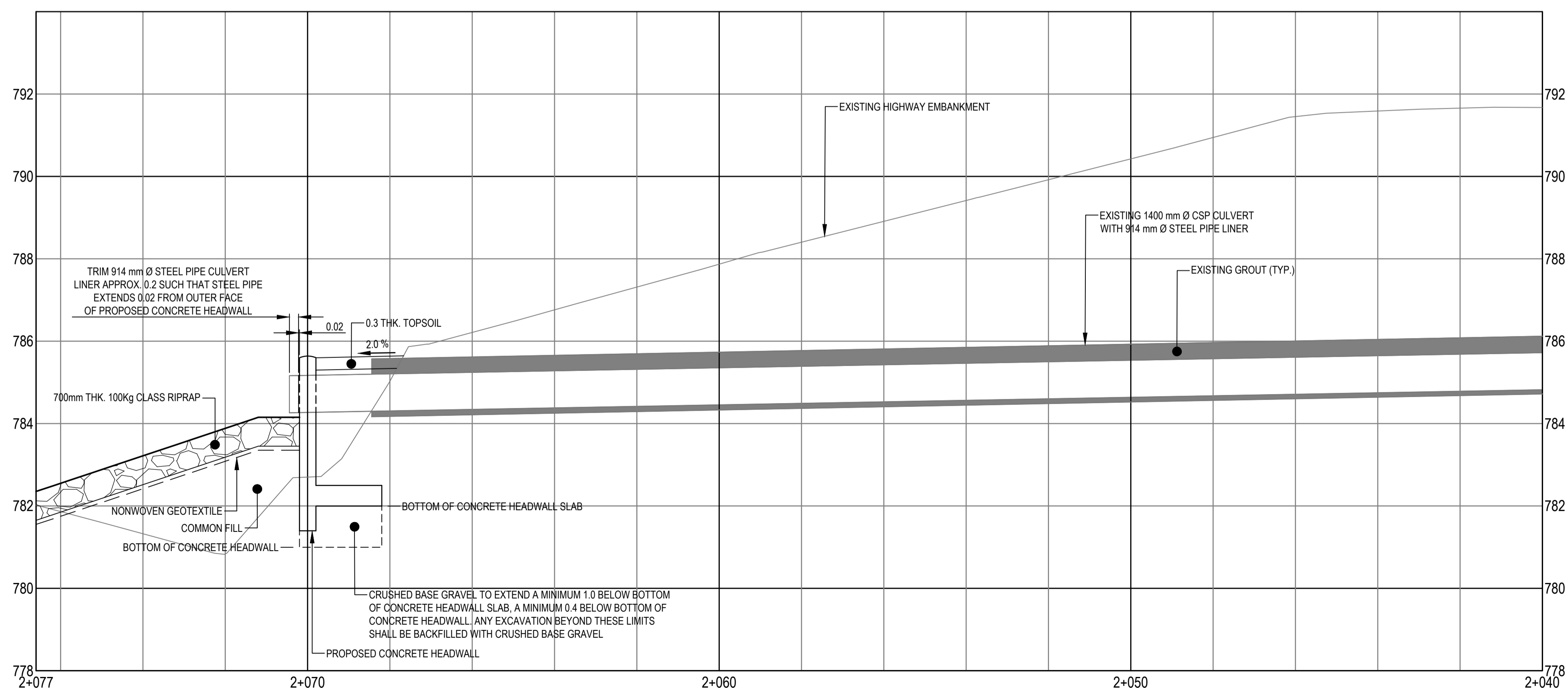
Client/client
Public Services and Procurement Canada

Drawing title/Titre du dessin
**PROFILES -
914 mm Ø STEEL PIPE LINER**

Project No./No. du projet
R.109448.002

Sheet/Fauille
C104
OF

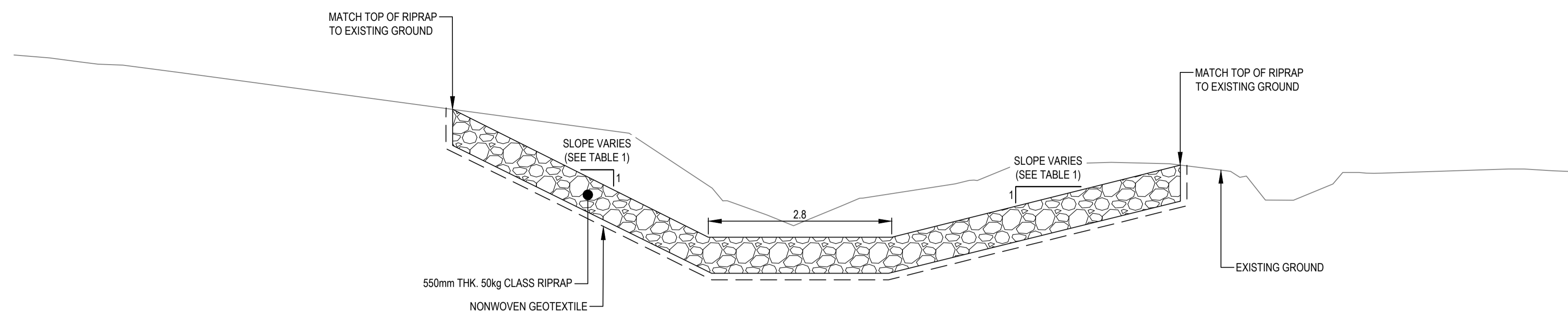
Revision no./
La Révision
no.
-



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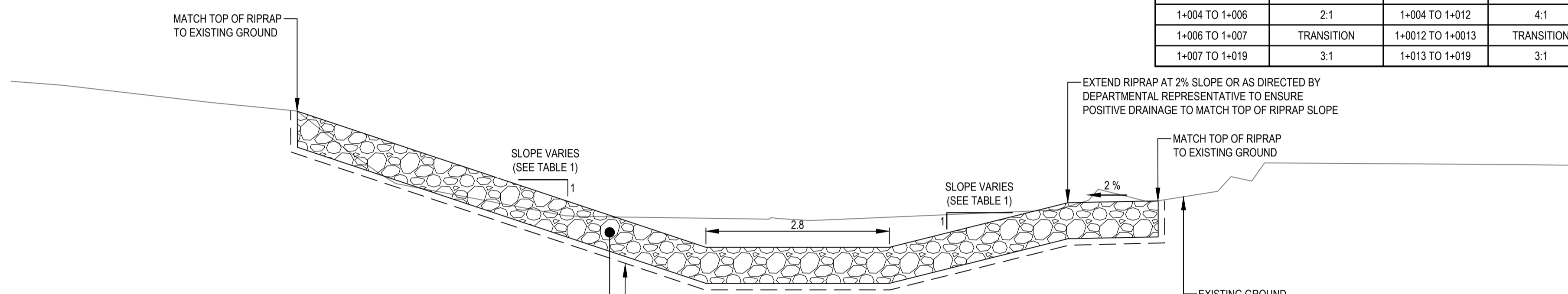
ISSUED FOR TENDER

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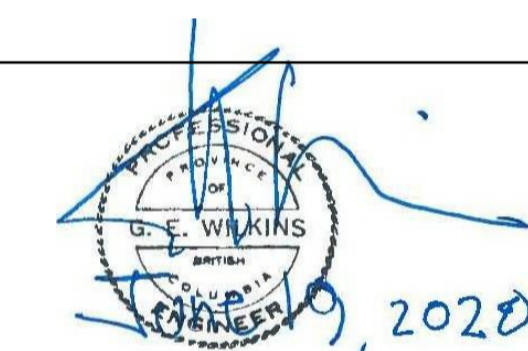


SECTION A
DRAWN AT STA 1+004
TYPICAL FROM STA 1+002 TO 1+010 & 1+013 TO 1+019
1:50

LEFT BANK		RIGHT BANK	
STATION	SLOPE	STATION	SLOPE
1+002 TO 1+004	TRANSITION FROM EXISTING	1+002 TO 1+004	TRANSITION FROM EXISTING
1+004 TO 1+006	2:1	1+004 TO 1+012	4:1
1+006 TO 1+007	TRANSITION	1+012 TO 1+013	TRANSITION
1+007 TO 1+019	3:1	1+013 TO 1+019	3:1



SECTION B
DRAWN AT STA 1+012
TYPICAL FROM STA 1+010 TO 1+013
1:50



Scale: 1:50 (metres)

ISSUED FOR TENDER 20/06/19

PUBLIC SERVICES AND PROCUREMENT CANADA



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Designed by/Concept par
A. HORWOOD / A. DEEPWELL

Drawn by/Dessine par
A. DEEPWELL

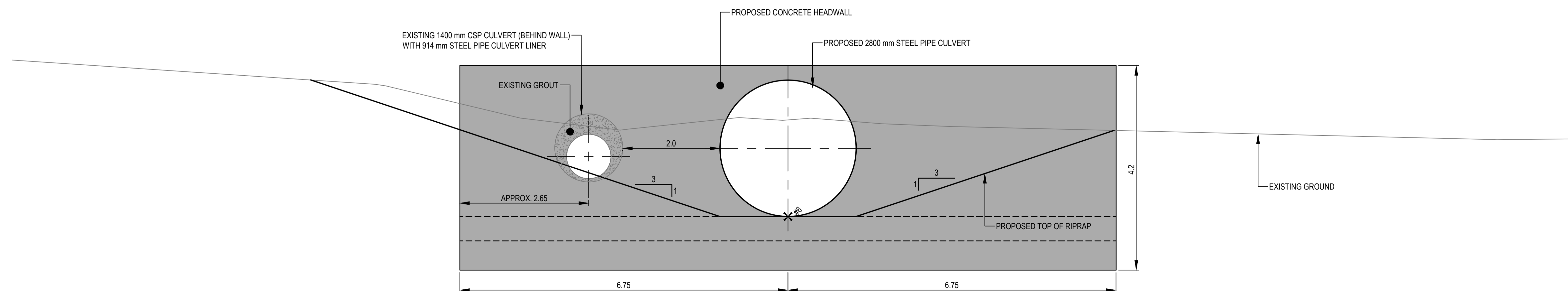
PWSC Project Manager/Administrateur de Projets TPSCG
A. TAHERI

PWSC Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, TPSCG

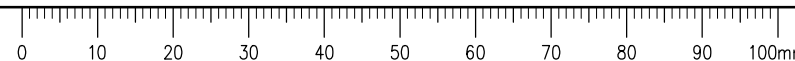
Client/client
Public Services and Procurement Canada

Drawing title/Titre du dessin
TYPICAL INLET SECTIONS

Project No./No. du projet R.109448.002	Sheet/Fauille C201 OF	Revision no./ La Révision no. -
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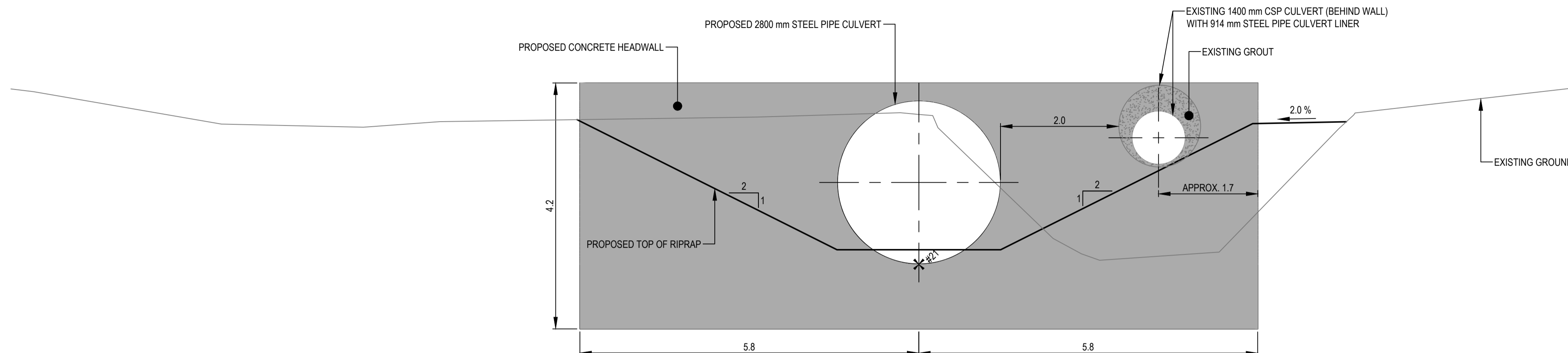


SECTION C
DRAWN AT STA 1+018.500
(AT INLET CONCRETE HEADWALL)
1:50

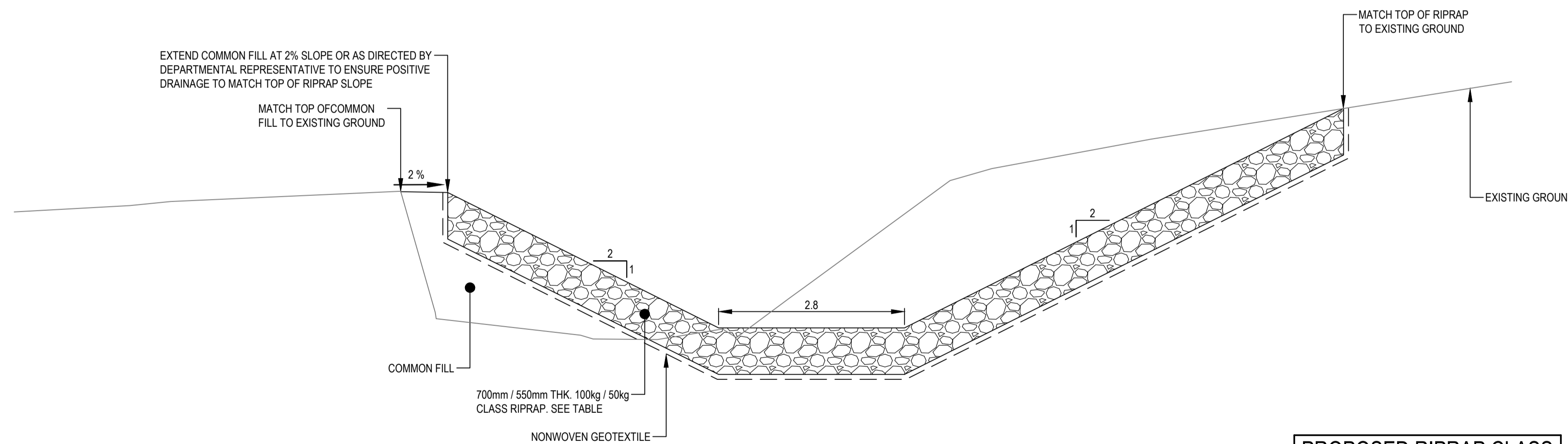
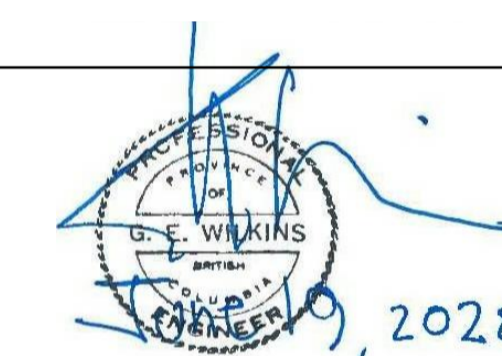


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SECTION D DRAWN AT STA 1+075 (AT OUTLET FACING CONCRETE HEADWALL)
1:50



SECTION E DRAWN AT STA 1+092 TYPICAL FROM STA 1+074 TO 1+102
1:50

PROPOSED RIPRAP CLASS		
STATION	CLASS	THICKNESS
1+074 TO 1+090	100 kg	700 mm
1+090 TO 1+102	50 kg	550 mm

ISSUED FOR TENDER	20/06/19
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PUBLIC SERVICES AND PROCUREMENT CANADA



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ALASKA HIGHWAY, BC**

Approved by/Approve par
G. WILKINS

Designed by/Concept par
A. HORWOOD / A. DEEPWELL

Drawn by/Dessine par
A. DEEPWELL

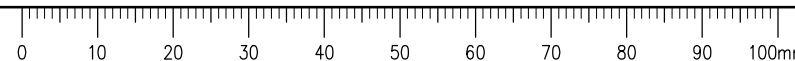
PWOSC Project Manager/Administrateur de Projets TPSCG
A. TAHERI

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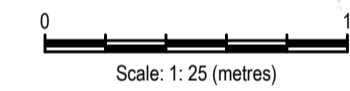
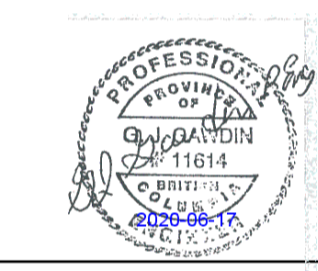
Drawing title/Titre du dessin
TYPICAL OUTLET SECTIONS

Project No./No. du projet R.109448.002	Sheet/Fauille C301 OF	Revision no./ La Révision no. -
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ISSUED FOR TENDER

- GENERAL NOTES:
- DIMENSIONS, COORDINATES, ELEVATIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE
 - ALL REINFORCING SHALL HAVE:
 - 75 mm CONCRETE COVER ADJACENT TO EARTH
 - 55 mm CONCRETE COVER ADJACENT TO OTHER
 - MINIMUM SPLICE LENGTH FOR ALL REINFORCING IS:
 - 350 mm FOR 10M
 - 500 mm FOR 15M
 - 700 mm FOR 20M
 - REFER TO CONTRACT SPECIFICATIONS FOR CONCRETE MIX DESIGN, REINFORCING STEEL DETAILS AND CONCRETE FINISHING DETAILS
 - CONCRETE TO BE 35MPA CLASS C1
 - REFER TO CONTRACT SPECIFICATIONS FOR RETAINING WALL SUB-GRADE REQUIREMENTS
 - DESIGN CRITERIA:
 - THE CULVERT HAS BEEN ENGINEERED IN ACCORDANCE WITH CAN/CSA-S6-06, CANADIAN HIGHWAY BRIDGE DESIGN CODE
 - STEEL REINFORCING SHOP DRAWINGS TO BE SUBMITTED TO DEPARTMENTAL REPRESENTATIVE



Revision/Revisión	Description/Description	Date/Date
A	ISSUED FOR TENDER	20/06/08

Client/client
PUBLIC SERVICES AND PROCUREMENT CANADA



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Drawn by/Dessiné par
A. DEEPWELL

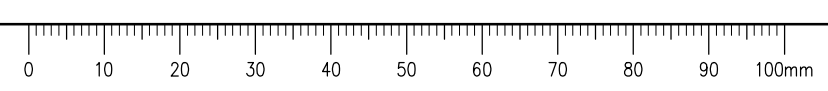
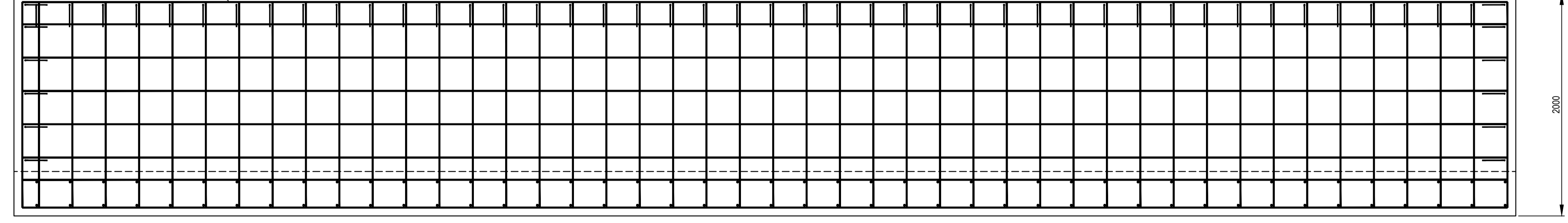
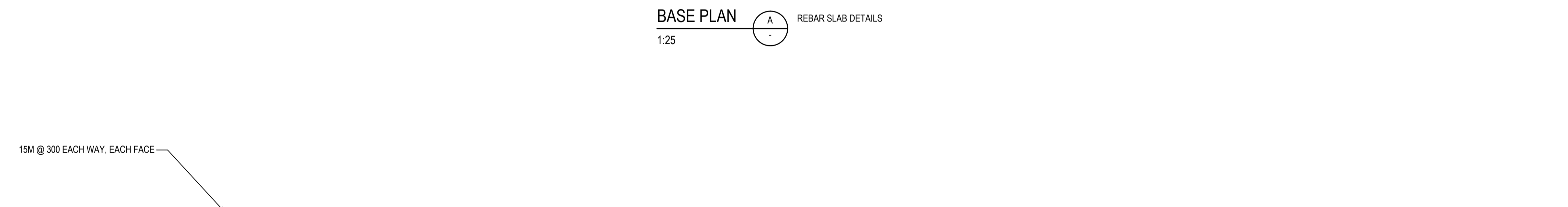
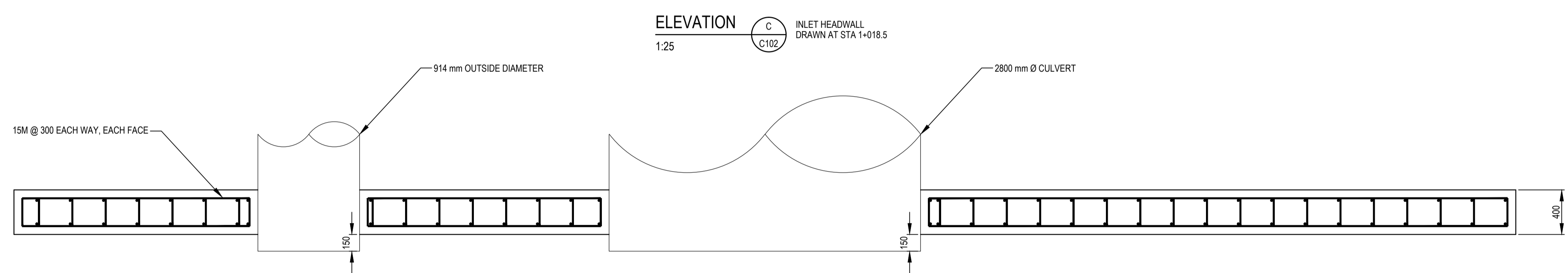
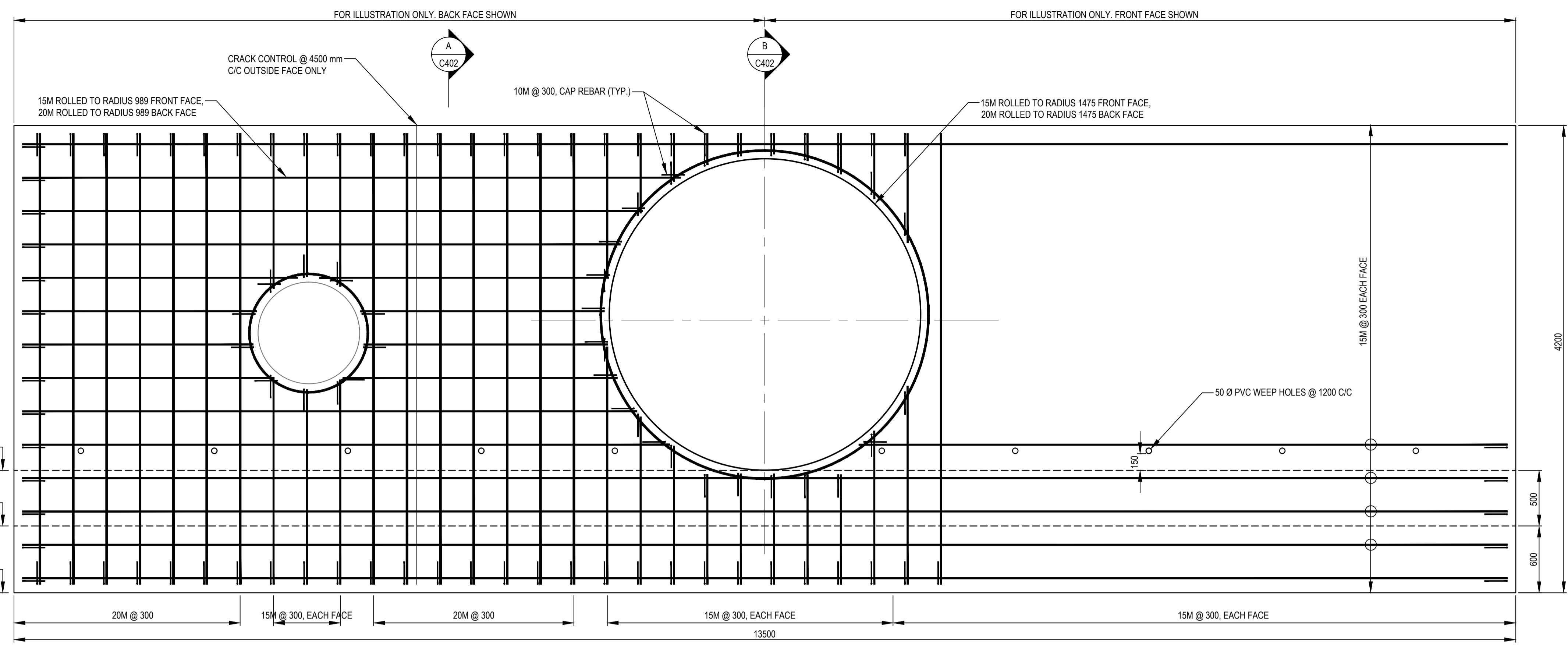
PWOSC Project Manager/Administrateur de Projets TPSCG
A.TAHERI

PWOSC Architectural and Engineering Resources Manager/Ressources Architectural et de Directeur d'ingénierie, TPSCG

Client/client
Public Services and Procurement Canada

Drawing title/Titre du dessin
**INLET CONCRETE HEADWALL
DETAILS (1 OF 2)**

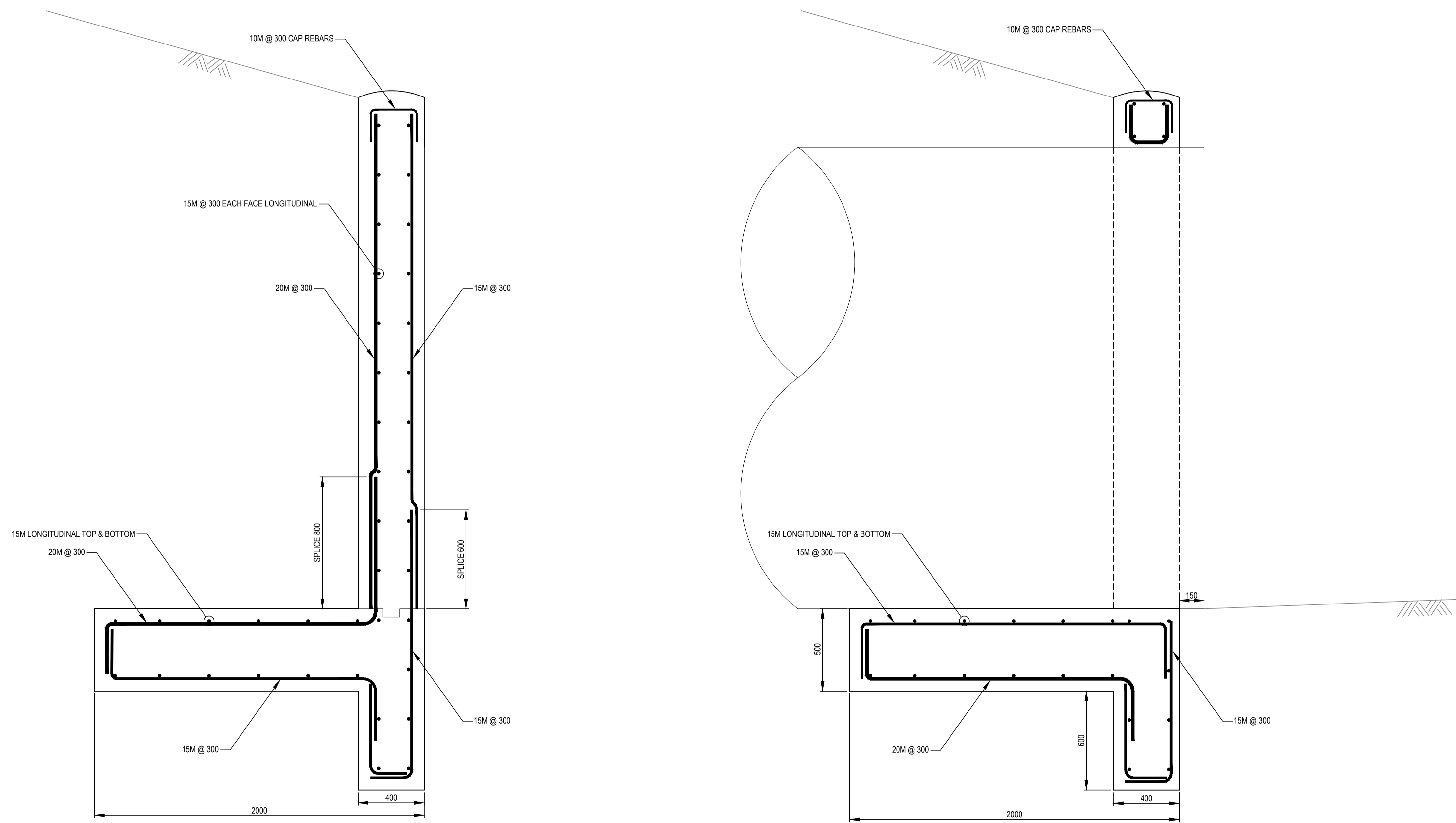
Project No./No. du projet	Sheet/Fauille	Revision no./La Révision no.
R.109448.002	C401	A



Q:\vancouver\Transportation\TRN\VHWY\Projects\TRN\VHWY\03\46\Culvert Replacement\Tender\2\CADD\KM 140 C101-103 PLAN PROFILES.dwg [C401] June 10, 2020 - 3:23:54 pm (BY: DEEPWELL, ANDREW)

ISSUED FOR TENDER

- GENERAL NOTES:
- DIMENSIONS, COORDINATES, ELEVATIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE
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 - 55 mm CONCRETE COVER ADJACENT TO OTHER
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 - CONCRETE TO BE 35MPA CLASS C1
 - REFER TO CONTRACT SPECIFICATIONS FOR RETAINING WALL SUB-GRADE REQUIREMENTS
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 - THE CULVERT HAS BEEN ENGINEERED IN ACCORDANCE WITH CAN/CSA-S6-06, CANADIAN HIGHWAY BRIDGE DESIGN CODE
 - STEEL REINFORCING SHOP DRAWINGS TO BE SUBMITTED TO DEPARTMENTAL REPRESENTATIVE



SECTION A REBAR DETAILS
1:15

SECTION B REBAR DETAILS
1:15

NOTE:
CONTRACTOR TO MINIMIZE THE EMBANKMENT / NATIVE MATERIAL REMOVED TO THE EXTENT POSSIBLE TO FACILITATE CONCRETE HEADWALL CONSTRUCTION. ANY EMBANKMENT REMOVED BELOW THE CONCRETE HEADWALL SLAB AND ON THE BACKSIDE OF THE CONCRETE HEADWALL SHALL BE REPLACED WITH CRUSHED BASE GRAVEL COMPACTED PER CONTRACT SPECIFICATIONS.



Scale: 1:15 (metres)

Revision/Revisi	Description/Description	Date/Date
-	ISSUED FOR TENDER	20/06/19

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Designed by/Concept par
K. KARIMI

Drawn by/Dessine par
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Public Services and Procurement Canada

Drawing title/Titre du dessin
**INLET CONCRETE HEADWALL
DETAILS (2 OF 2)**

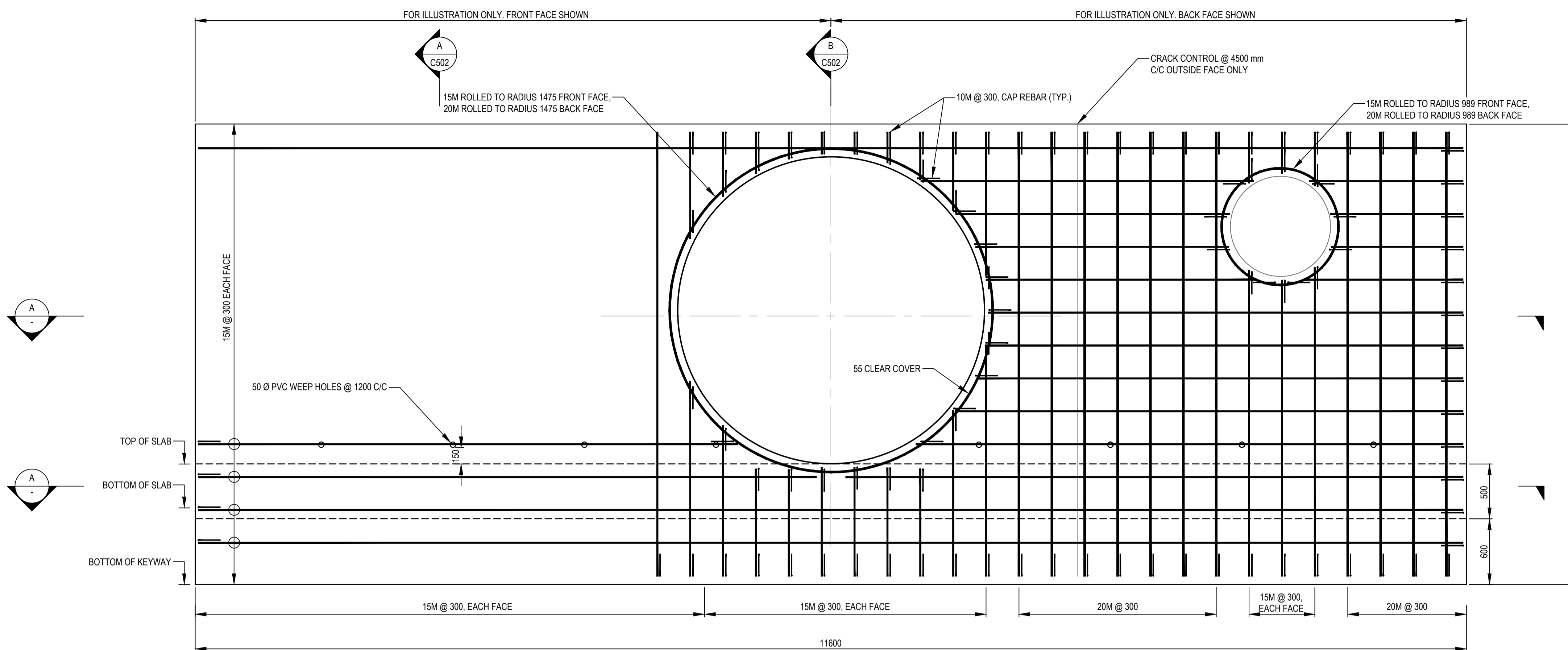
Project No./No. du projet R.109448.002	Sheet/Fauille C402 OF	Revision no./Lo Révision no. -
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Q:\VancouverTransportation\TRN\VHWY03146 Culvert Replacement\Tender 2\CADD\KM 140 C101-703 PLAN PROFILES.dwg [C402] June 16, 2020 - 9:20:33 am (BY: DEEPWELL, ANDREW)

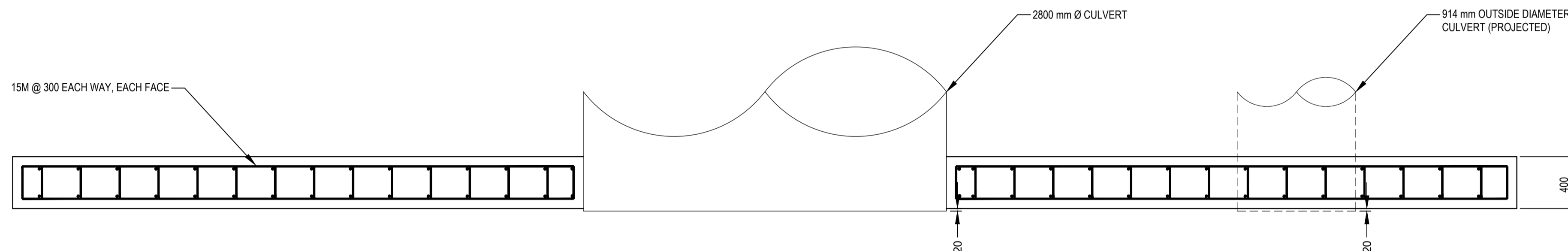


ISSUED FOR TENDER

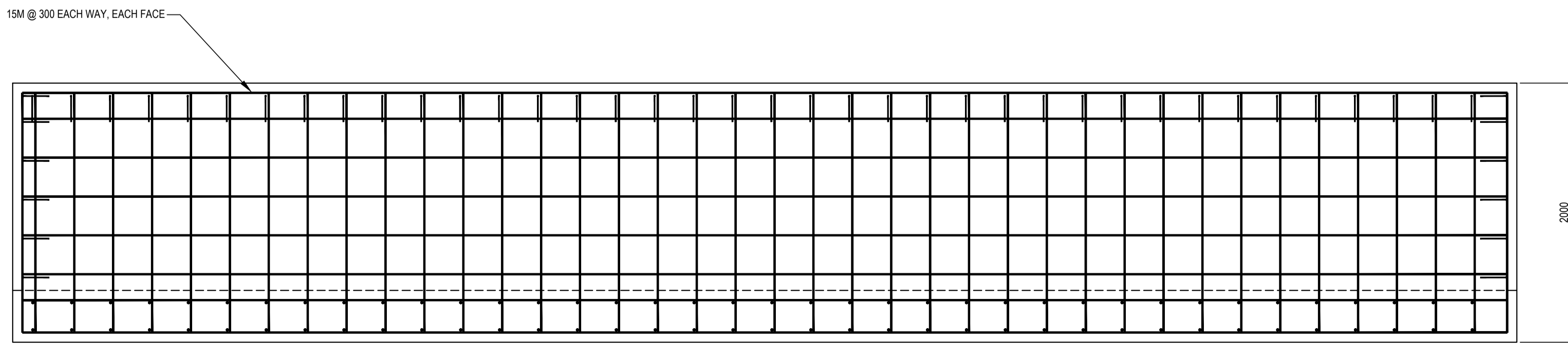
- GENERAL NOTES:
- DIMENSIONS, COORDINATES, ELEVATIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE
 - ALL REINFORCING SHALL HAVE:
 - 75 mm CONCRETE COVER ADJACENT TO EARTH
 - 55 mm CONCRETE COVER ADJACENT TO OTHER
 - MINIMUM SPLICE LENGTH FOR ALL REINFORCING IS:
 - 350 mm FOR 10M
 - 500 mm FOR 15M
 - 700 mm FOR 20M
 - REFER TO CONTRACT SPECIFICATIONS FOR CONCRETE MIX DESIGN, REINFORCING STEEL DETAILS AND CONCRETE FINISHING DETAILS
 - REFER TO CONTRACT SPECIFICATIONS FOR RETAINING WALL SUB-GRADE REQUIREMENTS
 - DESIGN CRITERIA:
 - THE CULVERT HAS BEEN ENGINEERED IN ACCORDANCE WITH CAN/CSA-S6-06, CANADIAN HIGHWAY BRIDGE DESIGN CODE
 - STEEL REINFORCING SHOP DRAWINGS TO BE SUBMITTED TO DEPARTMENTAL REPRESENTATIVE



ELEVATION C103 DRAWN AT STA 1+075 (AT OUTLET FACING CONCRETE HEADWALL) 1:25



BASE PLAN A REBAR SLAB DETAILS 1:25



BASE PLAN A REBAR SLAB DETAILS 1:25



Scale: 1:15 (metres)

Revision/Revisión	Description/Description	Date/Date
-	ISSUED FOR TENDER	20/06/19

PUBLIC SERVICES AND PROCUREMENT CANADA



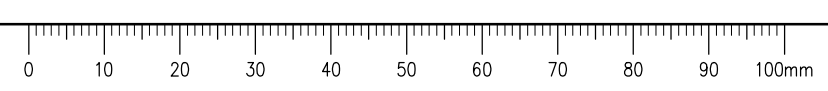
Project title/Titre du projet
KM 140.3 EAST CACHE CREEK CULVERT REPLACEMENT ALASKA HIGHWAY, BC

Approved by/Approve par
G. GAWDIN
Designed by/Concept par
K. KARIMI
Drawn by/Dessine par
A. DEEPWELL
PWGSC Project Manager/Administrateur de Projets TPSCG
A. TAHERI
PWGSC Architectural and Engineering Resources Manager/Ressources Architectural et de Directeur d'ingénierie, TPSCG

Client/client
Public Services and Procurement Canada

Drawing title/Titre du dessin
OUTLET CONCRETE HEADWALL DETAILS (1 OF 2)

Project No./No. du projet	Sheet/Fauille	Revision no./La Révision no.
R.109448.002	C501	-



ISSUED FOR TENDER

- GENERAL NOTES:
- DIMENSIONS, COORDINATES, ELEVATIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE
 - ALL REINFORCING SHALL HAVE:
 - 75 mm CONCRETE COVER ADJACENT TO EARTH
 - 55 mm CONCRETE COVER ADJACENT TO OTHER
 - MINIMUM SPLICE LENGTH FOR ALL REINFORCING IS:
 - 350 mm FOR 10M
 - 500 mm FOR 15M
 - 700 mm FOR 20M
 - REFER TO CONTRACT SPECIFICATIONS FOR CONCRETE MIX DESIGN, REINFORCING STEEL DETAILS AND CONCRETE FINISHING DETAILS
 - CONCRETE TO BE 35MPA CLASS C1
 - REFER TO CONTRACT SPECIFICATIONS FOR RETAINING WALL SUB-GRADE REQUIREMENTS
 - DESIGN CRITERIA:
 - THE CULVERT HAS BEEN ENGINEERED IN ACCORDANCE WITH CAN/CSA-S6-06, CANADIAN HIGHWAY BRIDGE DESIGN CODE
 - STEEL REINFORCING SHOP DRAWINGS TO BE SUBMITTED TO DEPARTMENTAL REPRESENTATIVE



Scale: 1:15 (metres)

Revision/Revisión	Description/Description	Date/Date
-	ISSUED FOR TENDER	20/06/19

Client/client
PUBLIC SERVICES AND PROCUREMENT CANADA



Project title/Titre du projet
**KM 140.3
EAST CACHE CREEK
CULVERT REPLACEMENT
ALASKA HIGHWAY, BC**

Approved by/Approuvé par
G.GAWDIN

Designed by/Concept par
K. KARIMI

Drawn by/Dessiné par
A. DEEPWELL

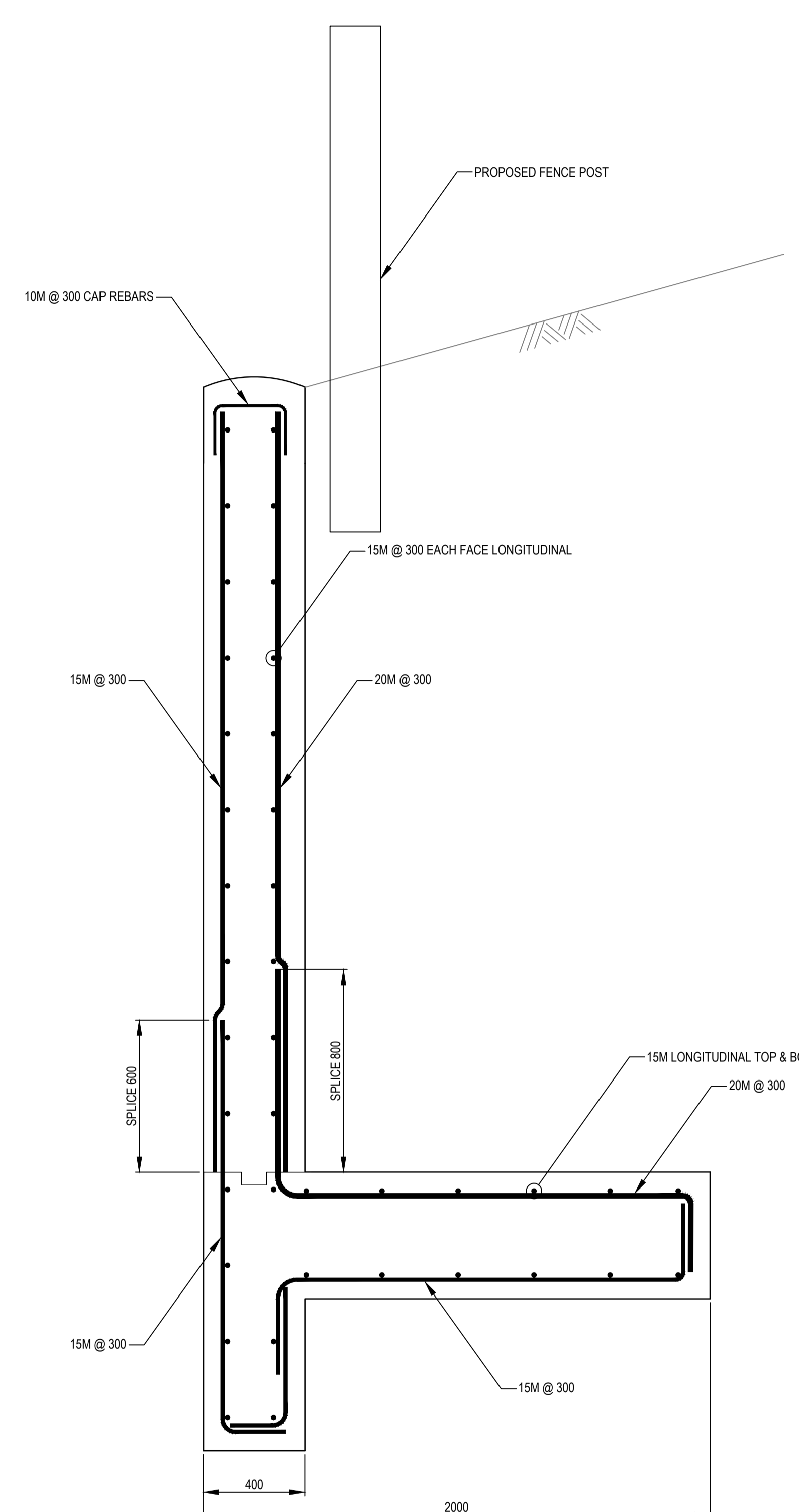
PWSC Project Manager/Administrateur de Projets TPSCG
A.TAHERI

PWSC Architectural and Engineering Resources Manager/Ressources Architectural et de Directeur d'ingénierie, TPSCG

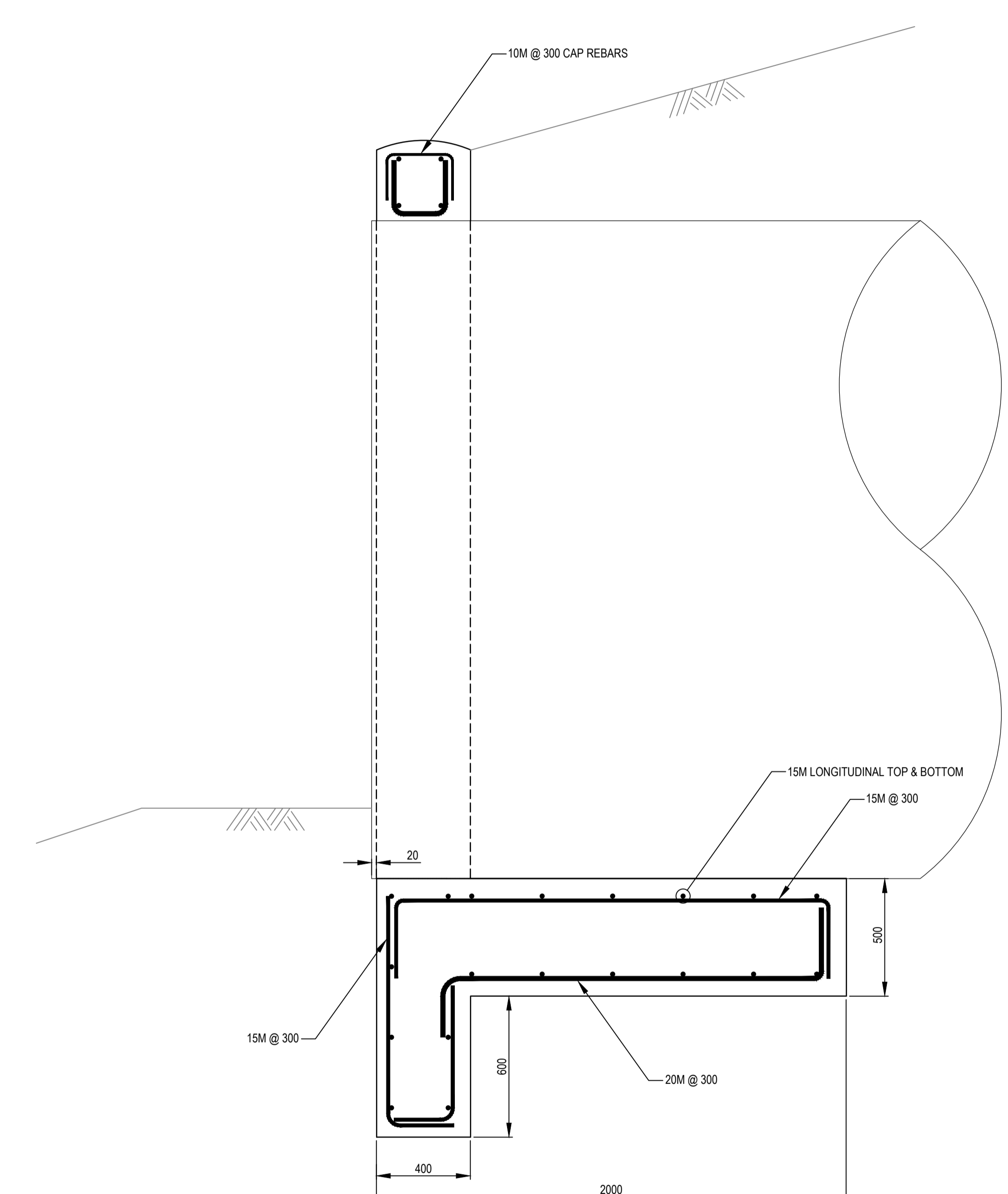
Client/client
Public Services and Procurement Canada

Drawing title/Titre du dessin
**OUTLET CONCRETE HEADWALL
DETAILS (2 OF 2)**

Project No./No. du projet R.109448.002	Sheet/Fauille C502 OF	Revision no./La Révision no. -
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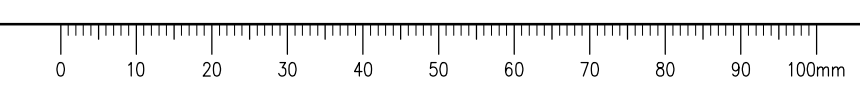
SECTION A REBAR DETAILS
1:15



SECTION B REBAR DETAILS
1:15

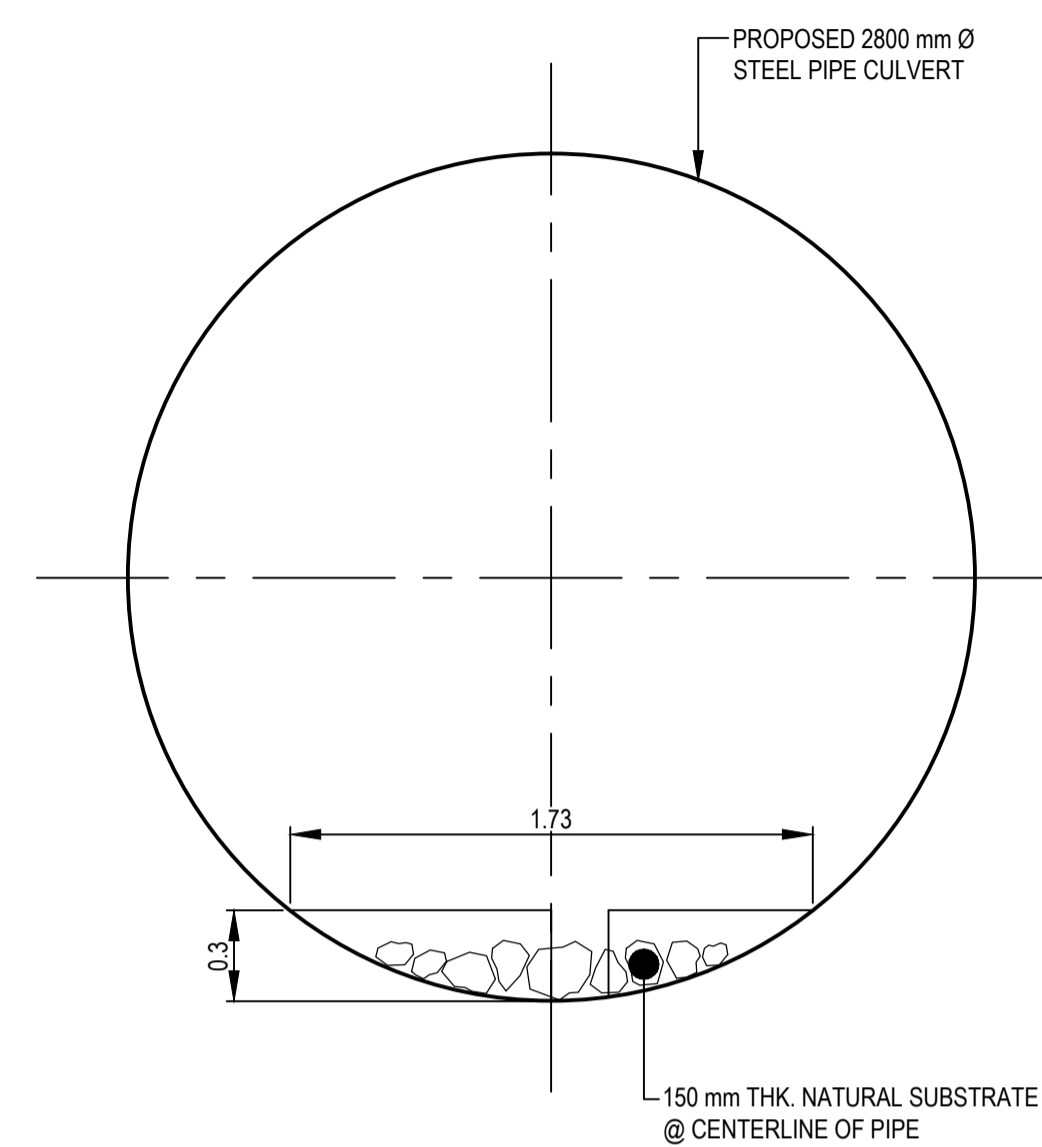
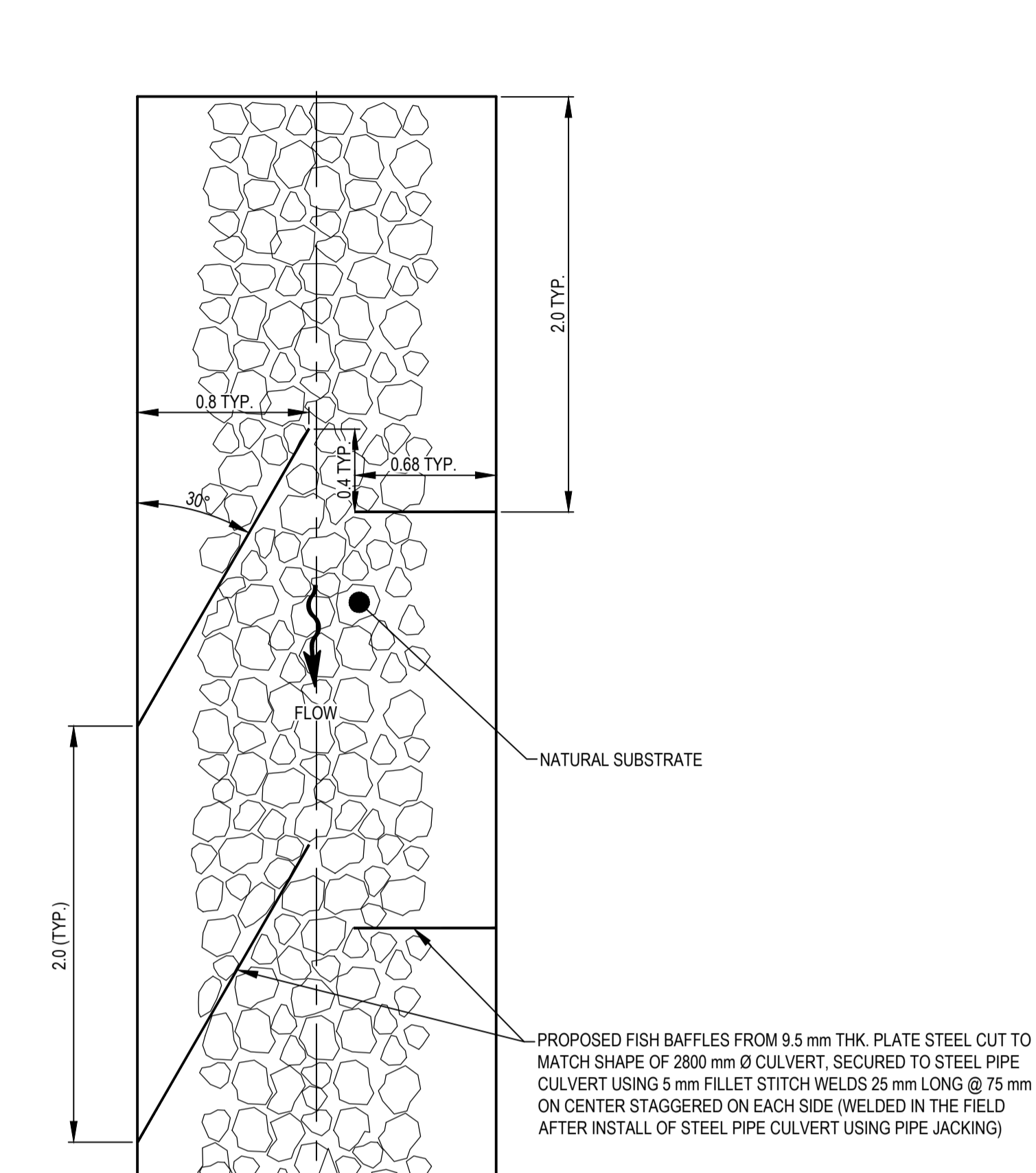
NOTE:
CONTRACTOR TO MINIMIZE THE EMBANKMENT / NATIVE MATERIAL REMOVED TO THE EXTENT POSSIBLE TO FACILITATE CONCRETE HEADWALL CONSTRUCTION. ANY EMBANKMENT REMOVED BELOW THE CONCRETE HEADWALL SLAB AND ON THE BACKSIDE OF THE CONCRETE HEADWALL SHALL BE REPLACED WITH CRUSHED BASE GRAVEL COMPACTED PER CONTRACT SPECIFICATIONS.

Q:\VancouverTransportation\TRN\VHWY03146 Culvert Replacement\Tender 2\CADD\KM 140 C101-1703 PLAN PROFILES.dwg [C502] June 16, 2020 - 9:20:43 am (BY: DEEPWELL, ANDREW)

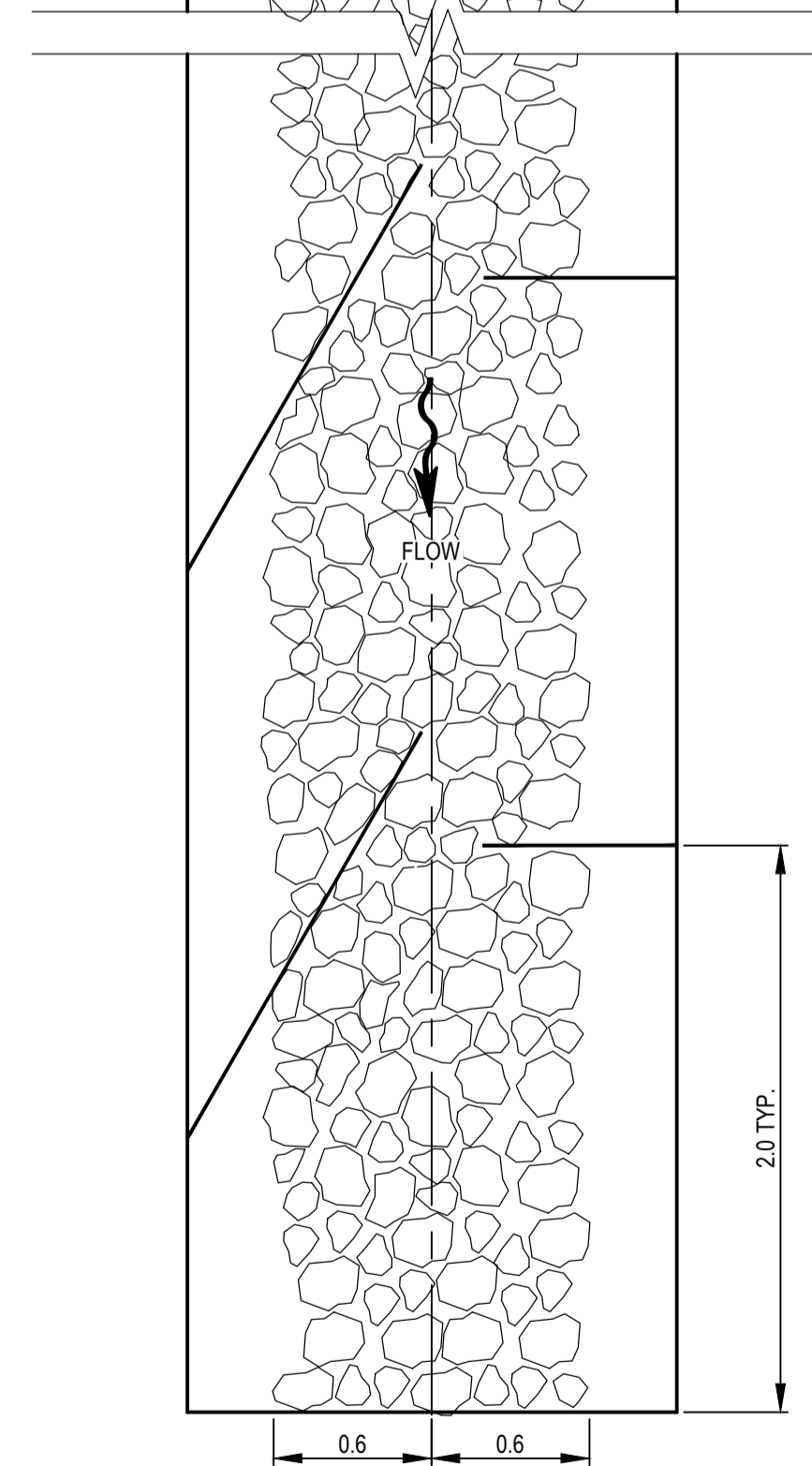


ISSUED FOR TENDER

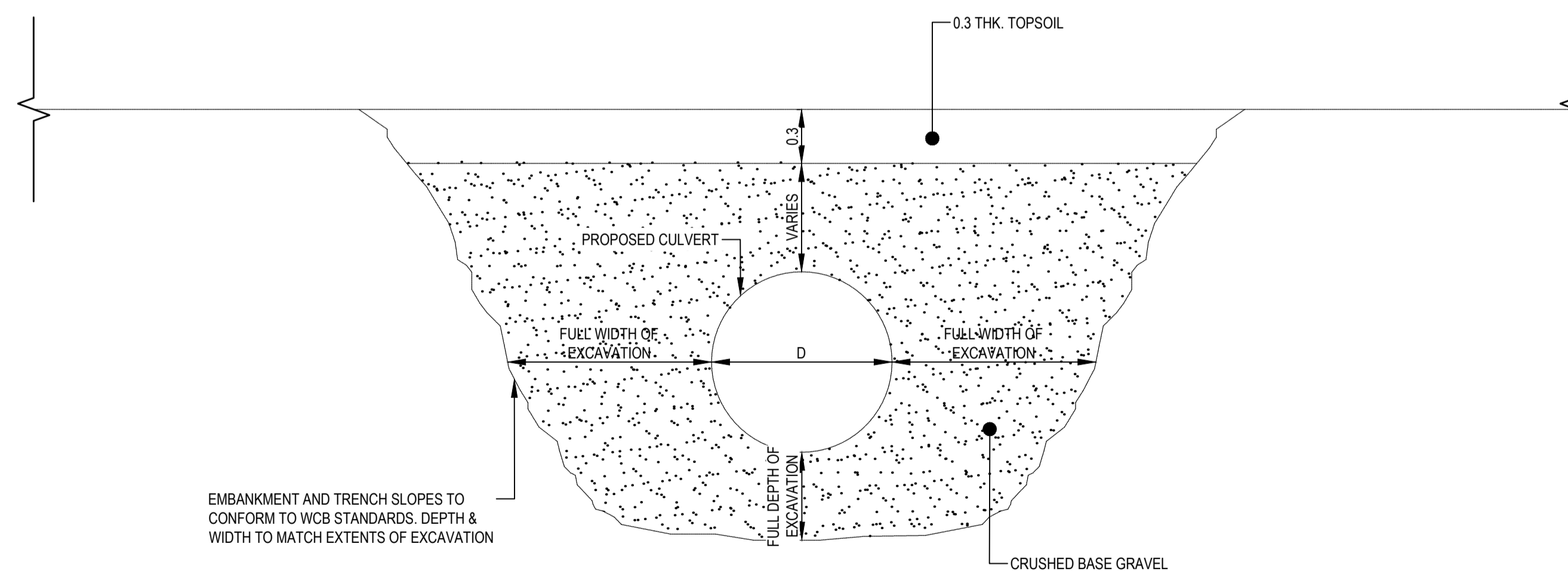
- GENERAL NOTES:
1. DIMENSIONS, COORDINATES, ELEVATIONS ARE IN METRES UNLESS NOTED OTHERWISE
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION



TYPICAL FISH BAFFLE SECTION
SCALE 1:25

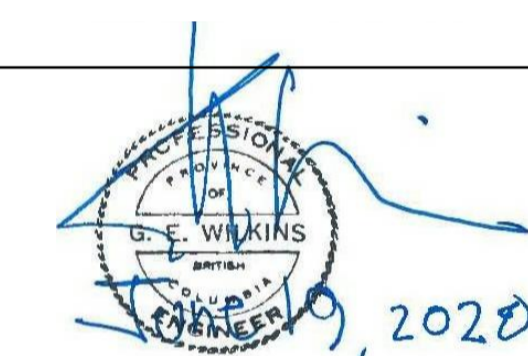


TYPICAL FISH BAFFLE PLAN
DRAWN AT TOP OF BAFFLES
SCALE 1:25



TYPICAL BACKFILL IN AREAS OF EMBANKMENT / NATIVE MATERIAL EXCAVATED
TO FACILITATE CONSTRUCTION OF PROPOSED AND EXISTING CULVERTS
1:25

NOTE:
CONTRACTOR TO MINIMIZE THE EMBANKMENT / NATIVE MATERIAL REMOVED AROUND THE PROPOSED AND EXISTING CULVERT TO THE EXTENT POSSIBLE. ANY EMBANKMENT / NATIVE MATERIAL REMOVED TO FACILITATE CONSTRUCTION SHALL BE BACKFILLED WITH CRUSHED BASE GRAVEL PER THIS DETAIL.



Scale: 1:50 (metres)

Revision/Revisi	Description/Description	Date/Date
-	ISSUED FOR TENDER	20/06/19

PUBLIC SERVICES AND PROCUREMENT CANADA



Project title/Titre du projet
**KM 140.3
EAST CACHE CREEK
CULVERT REPLACEMENT
ALASKA HIGHWAY, BC**

Approved by/Approve par
G. WILKINS

Designed by/Concept par
A. HORWOOD / A. DEEPWELL

Drawn by/Dessine par
A. DEEPWELL

PWSC Project Manager/Administrateur de Projets TPSCG
A. TAHERI

PWSC Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, TPSCG

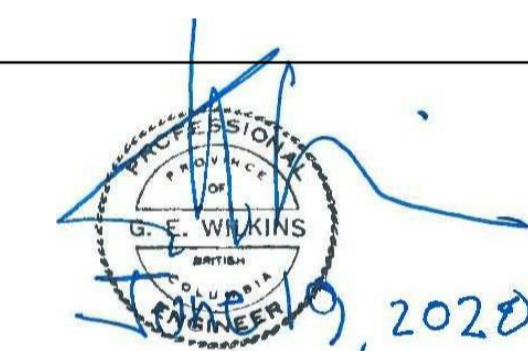
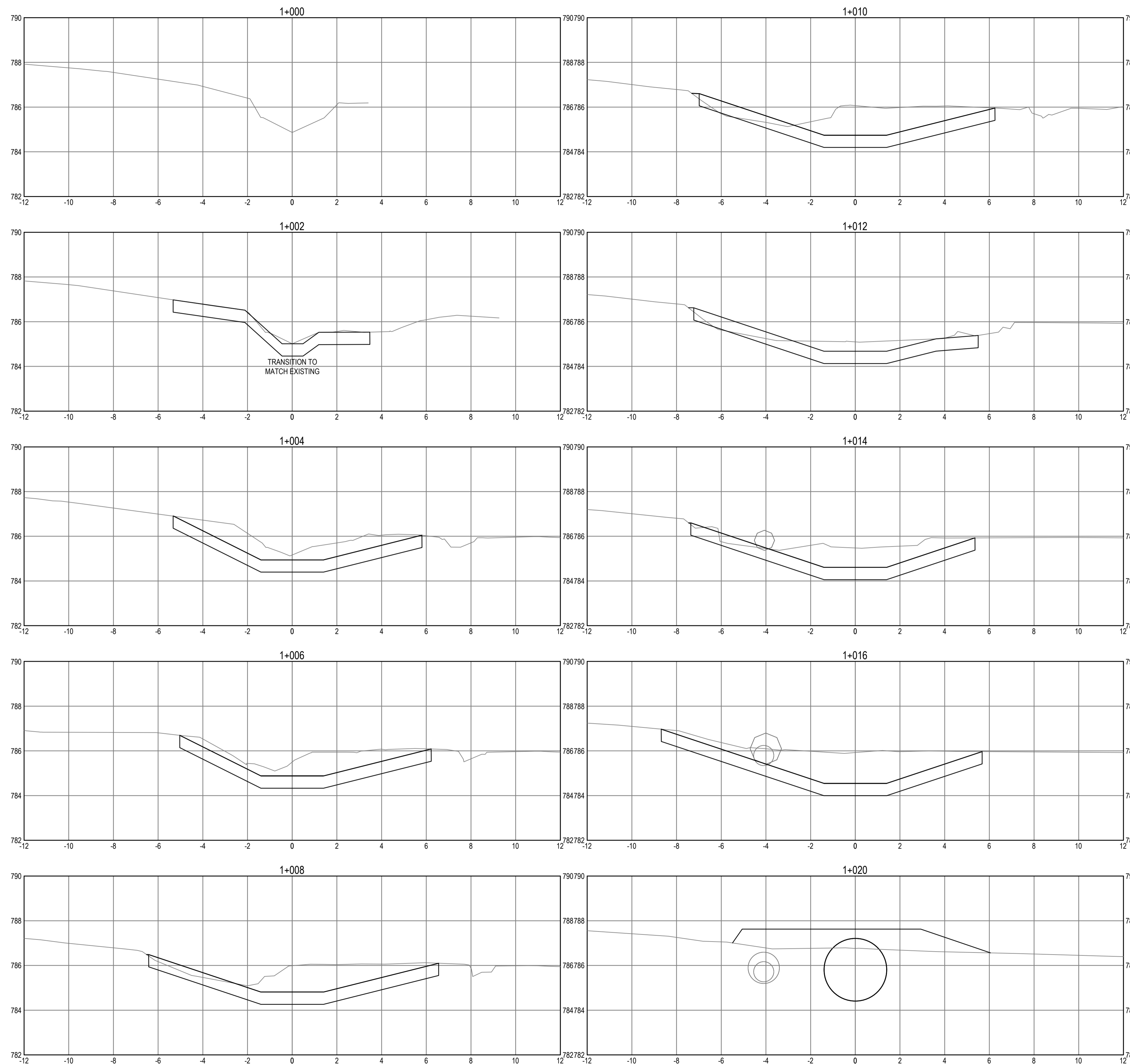
Client/Client
Public Services and Procurement Canada

Drawing title/Titre du dessin
**FISH BAFFLE DETAILS &
CULVERT BACKFILL DETAILS**

Project No./No. du projet	Sheet/Fauille	Revision no./ La Révision no.
R.109448.002	C601	-
	OF	

ISSUED FOR TENDER

- GENERAL NOTES:
1. DIMENSIONS, COORDINATES, ELEVATIONS ARE IN METRES UNLESS NOTED OTHERWISE
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION



Scale: 1:100 (metres)

ISSUED FOR TENDER 20/06/19

PUBLIC SERVICES AND PROCUREMENT CANADA



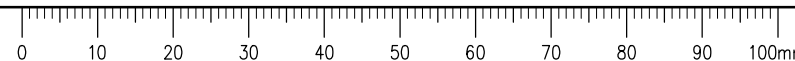
Project title/Titre du projet
**KM 140.3
EAST CACHE CREEK
CULVERT REPLACEMENT
ALASKA HIGHWAY, BC**

Approved by/Approve par
G. WILKINS
Designed by/Concept par
A. HORWOOD / A. DEEPWELL
Drawn by/Dessine par
A. DEEPWELL
PWSC Project Manager/Administrateur de Projets TPSCG
A. TAHERI
PWSC Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, TPSCG

Client/client
Public Services and Procurement Canada

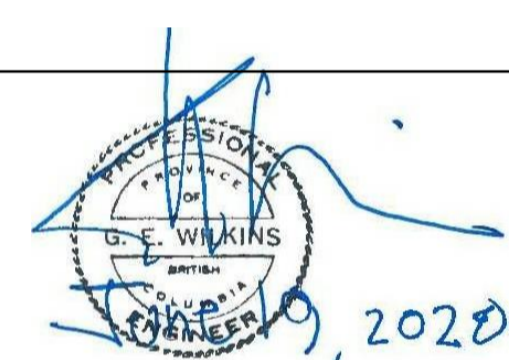
Drawing title/Titre du dessin
**GROSS SECTIONS
(1 OF 3)**

Project No./No. du projet R.109448.002	Sheet/Fauille C701 OF	Revision no./ La Révision no. -
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ISSUED FOR TENDER

- GENERAL NOTES:
1. DIMENSIONS, COORDINATES, ELEVATIONS ARE IN METRES UNLESS NOTED OTHERWISE
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION



Revision/Édition	ISSUED FOR TENDER	20/06/19
Client/Client		

PUBLIC SERVICES AND PROCUREMENT CANADA



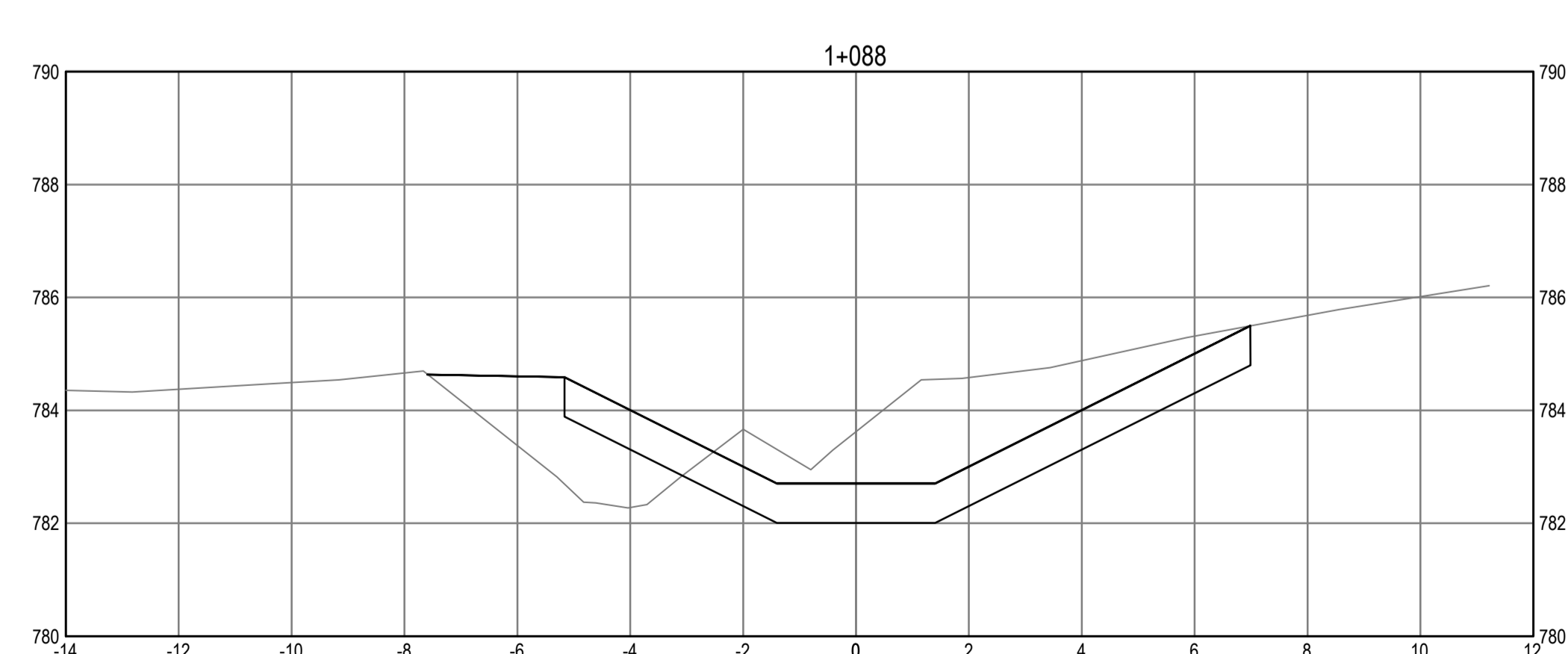
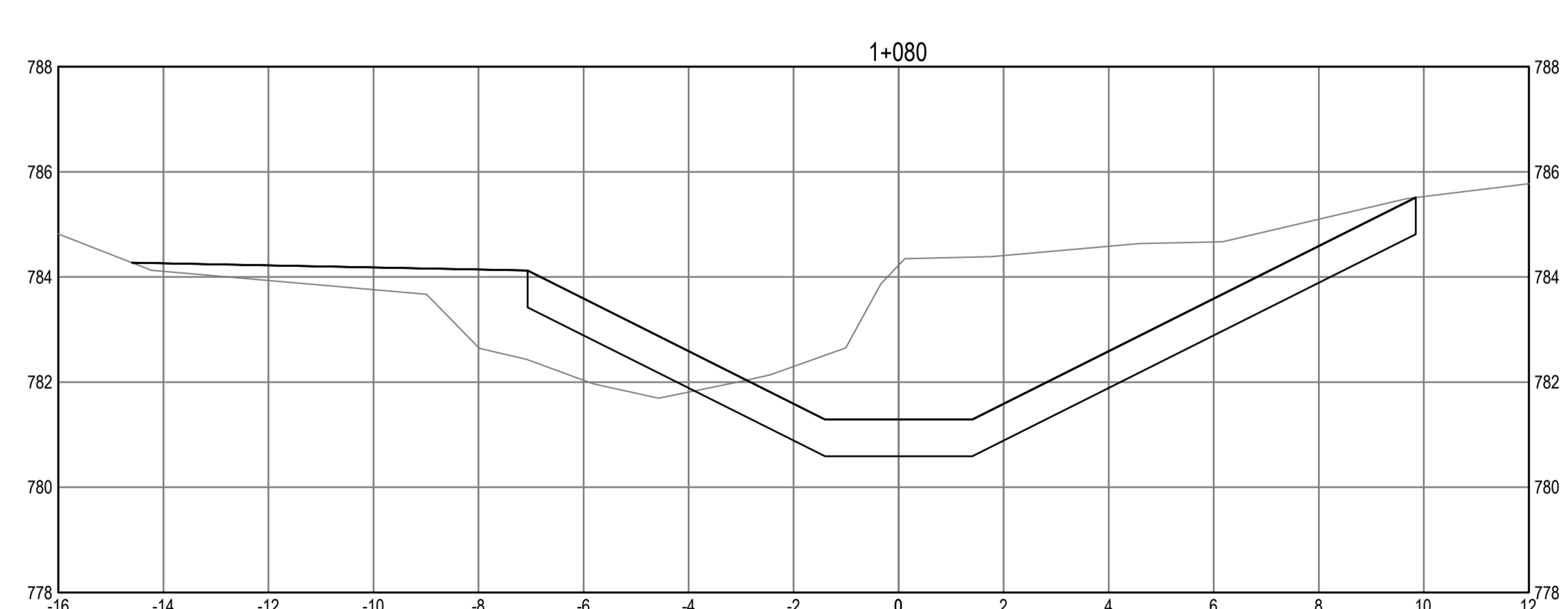
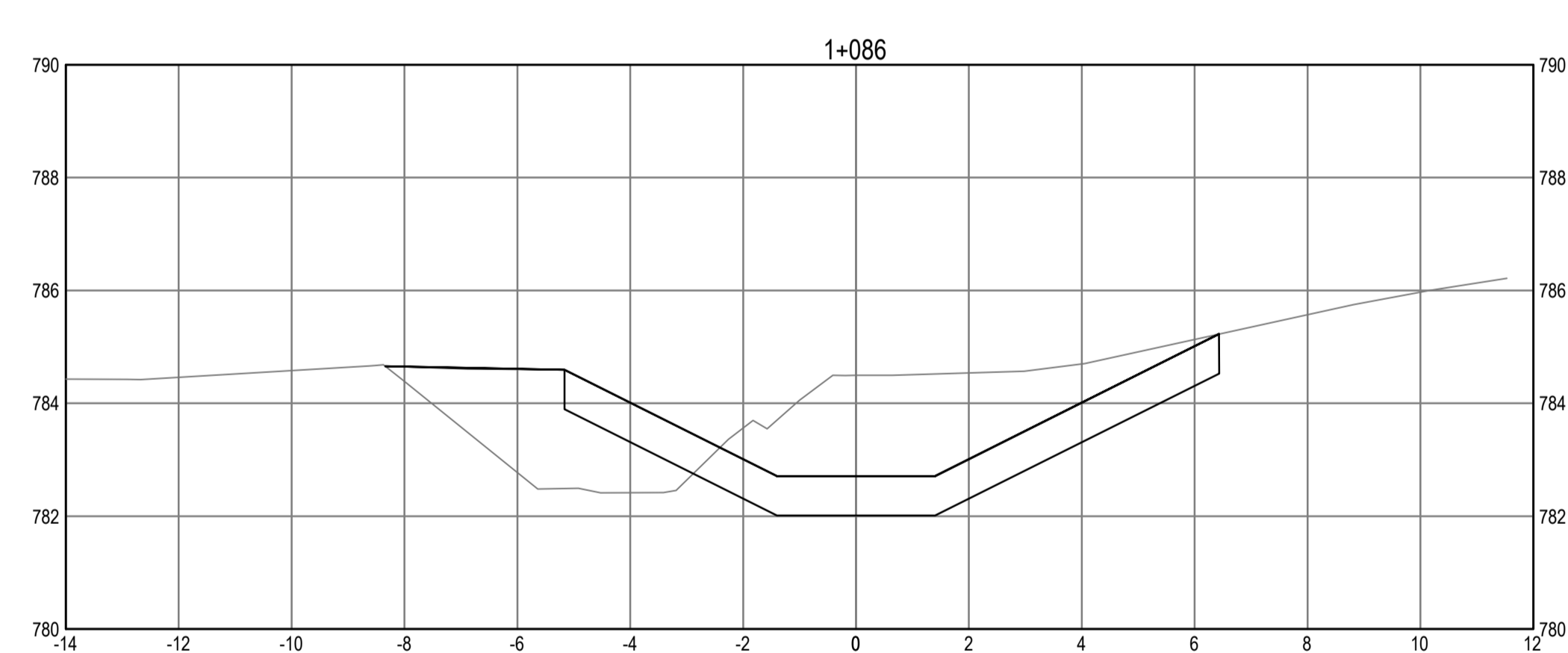
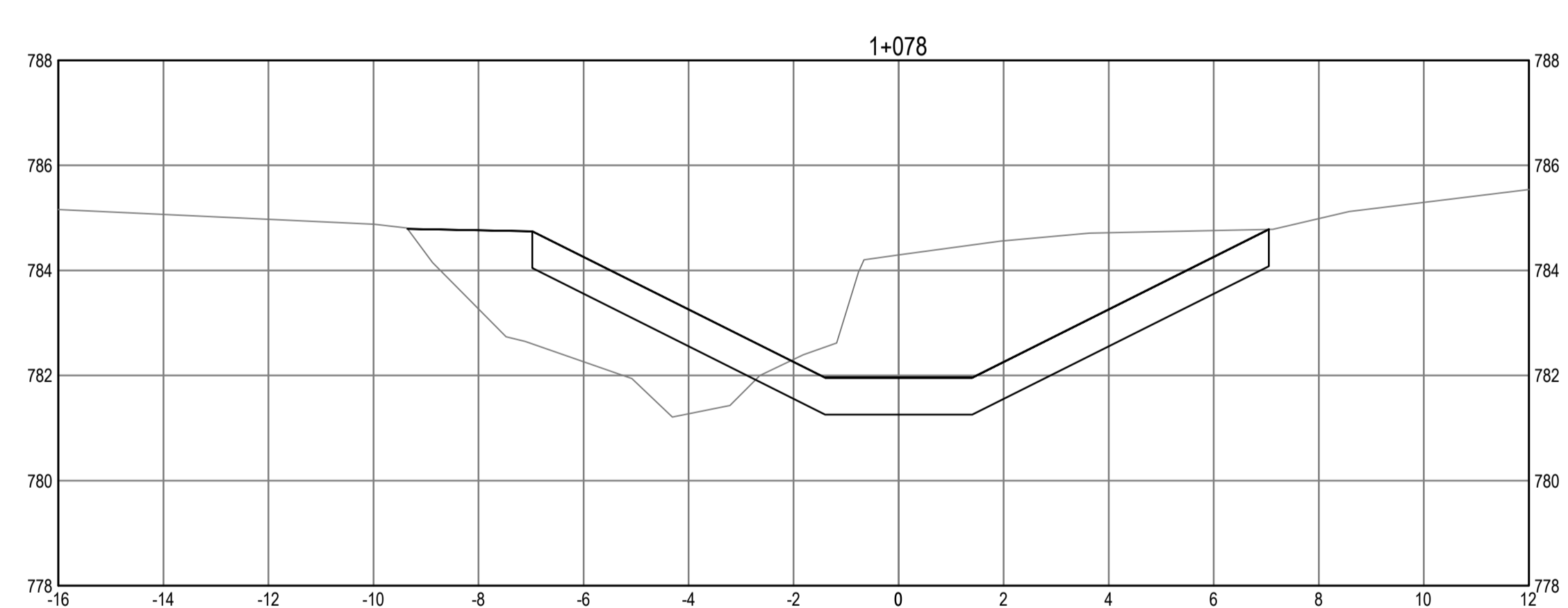
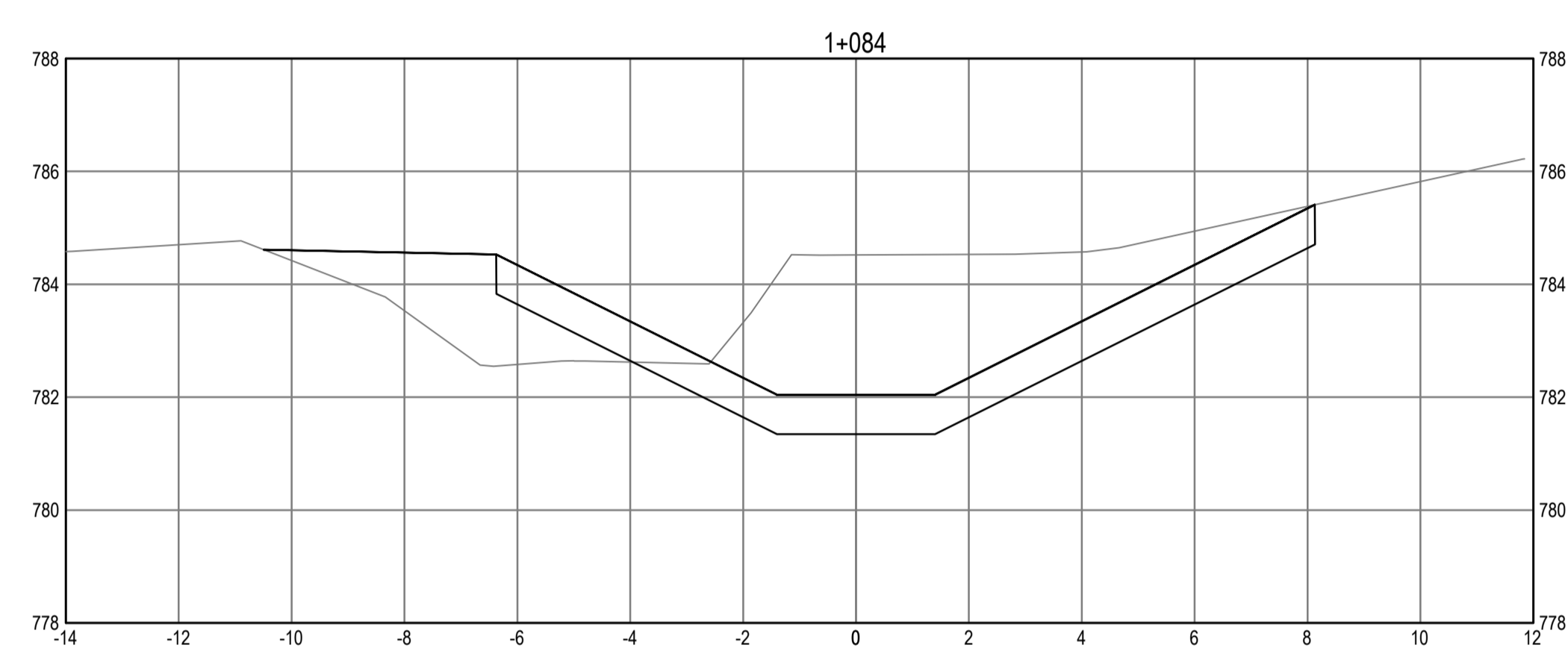
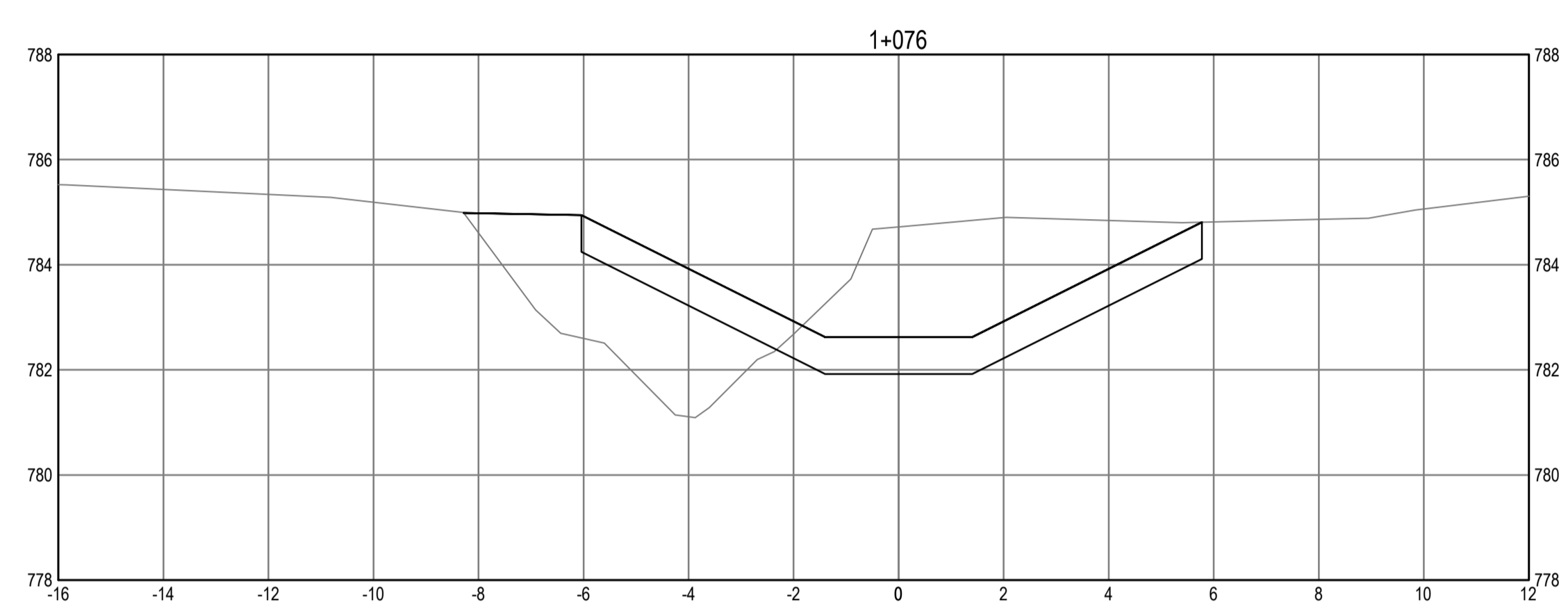
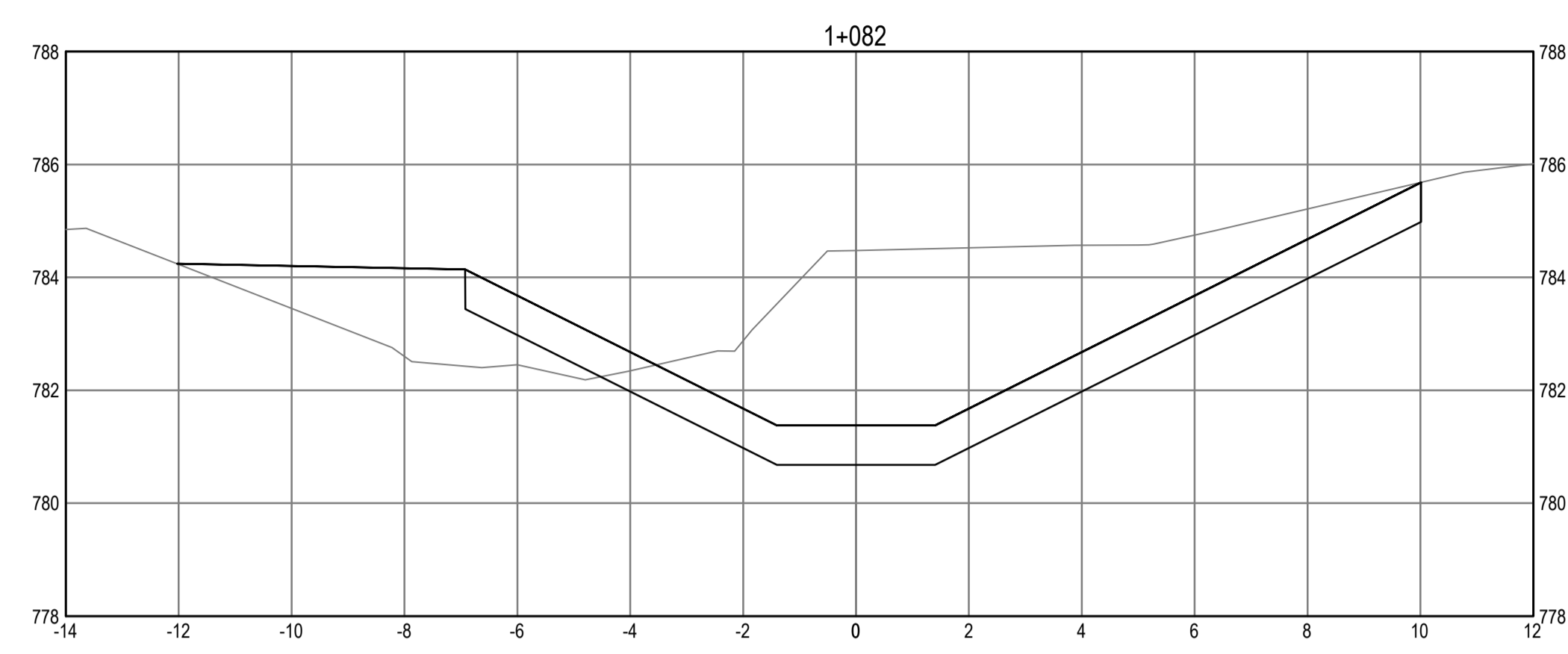
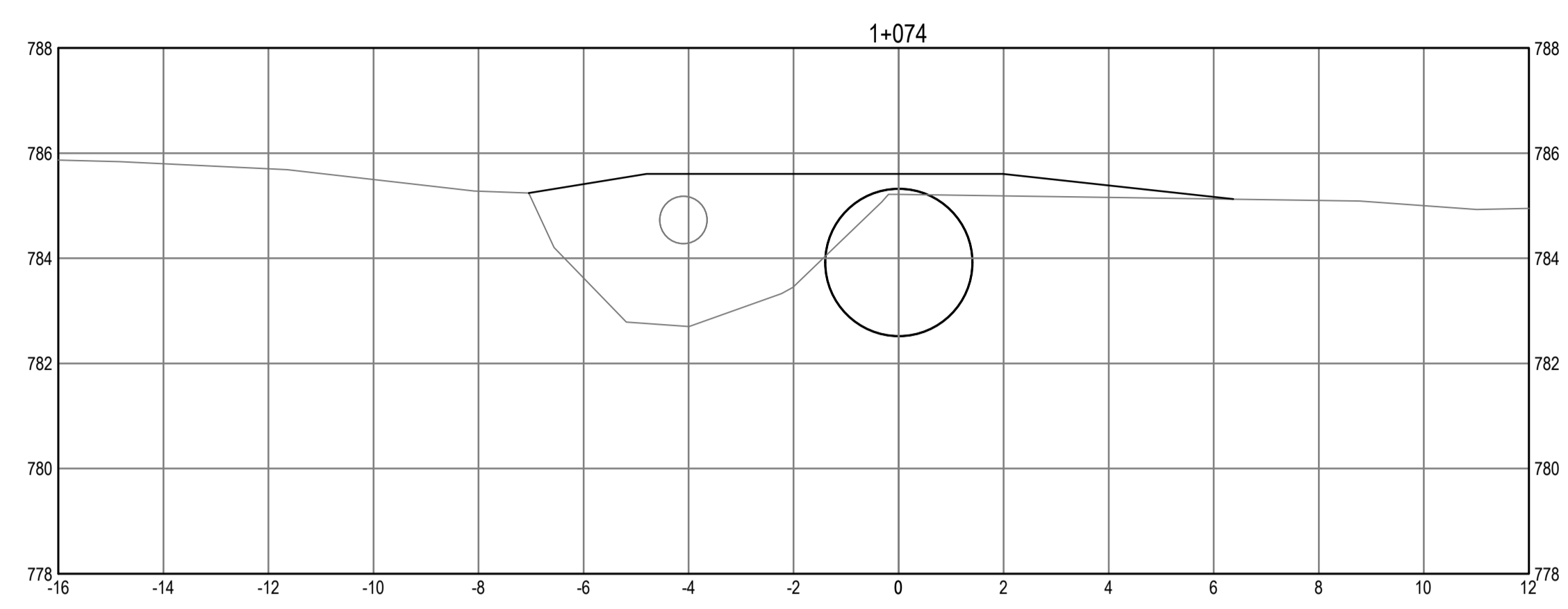
Project title/Titre du projet
**KM 140.3
EAST CACHE CREEK
CULVERT REPLACEMENT
ALASKA HIGHWAY, BC**

Approved by/Approve par
G. WILKINS
Designed by/Concept par
A. HORWOOD / A. DEEPWELL
Drawn by/Dessiné par
A. DEEPWELL
PWSC Project Manager/Administrateur de Projets TPSCG
A. TAHERI
PWSC Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, TPSCG

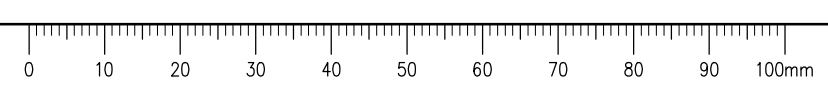
Client/Client
Public Services and Procurement Canada

Drawing title/Titre du dessin
**CROSS SECTIONS
(2 OF 3)**

Project No./No. du projet R.109448.002	Sheet/Fauille C702 OF	Revision no./ La Révision no. -
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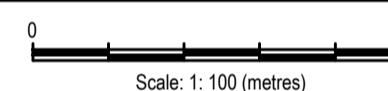
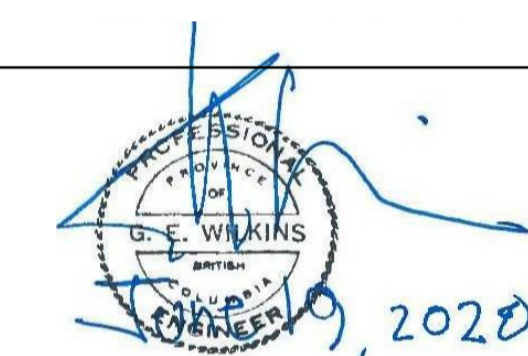
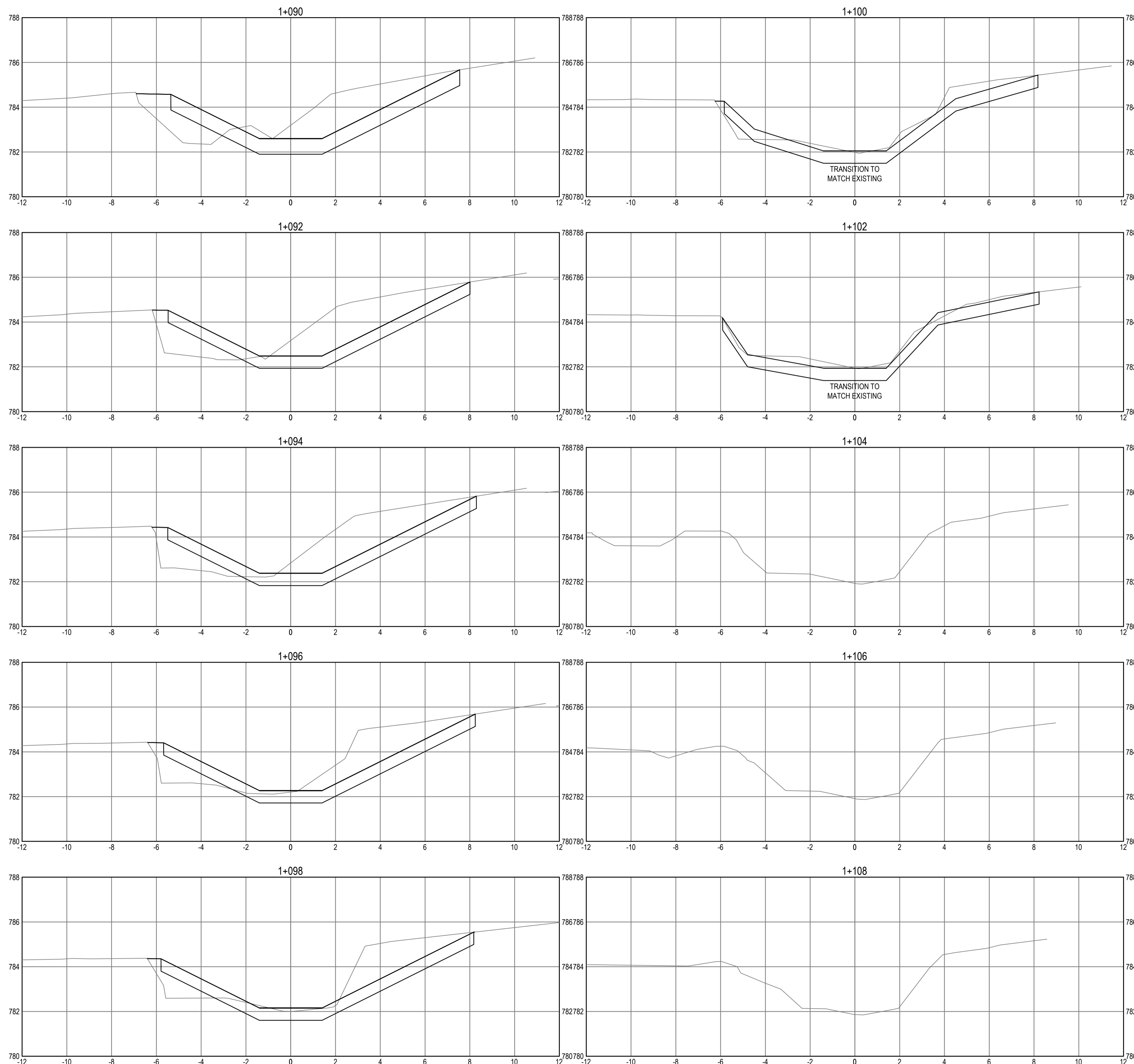


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ISSUED FOR TENDER

- GENERAL NOTES:
1. DIMENSIONS, COORDINATES, ELEVATIONS ARE IN METRES UNLESS NOTED OTHERWISE
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION



Revision/Édition	Description/Description	Date/Date
-	ISSUED FOR TENDER	20/06/19

PUBLIC SERVICES AND PROCUREMENT CANADA



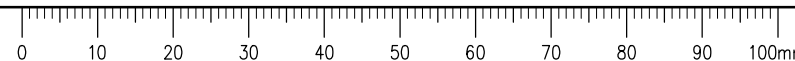
Project title/Titre du projet
**KM 140.3
EAST CACHE CREEK
CULVERT REPLACEMENT
ALASKA HIGHWAY, BC**

Approved by/Approuvé par
G. WILKINS
Designed by/Concept par
A. HORWOOD / A. DEEPWELL
Drawn by/Dessiné par
A. DEEPWELL
PWSC Project Manager/Administrateur de Projets TPSCG
A. TAHERI
PWSC Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, TPSCG

Client/client
Public Services and Procurement Canada

Drawing title/Titre du dessin
**GROSS SECTIONS
(3 OF 3)**

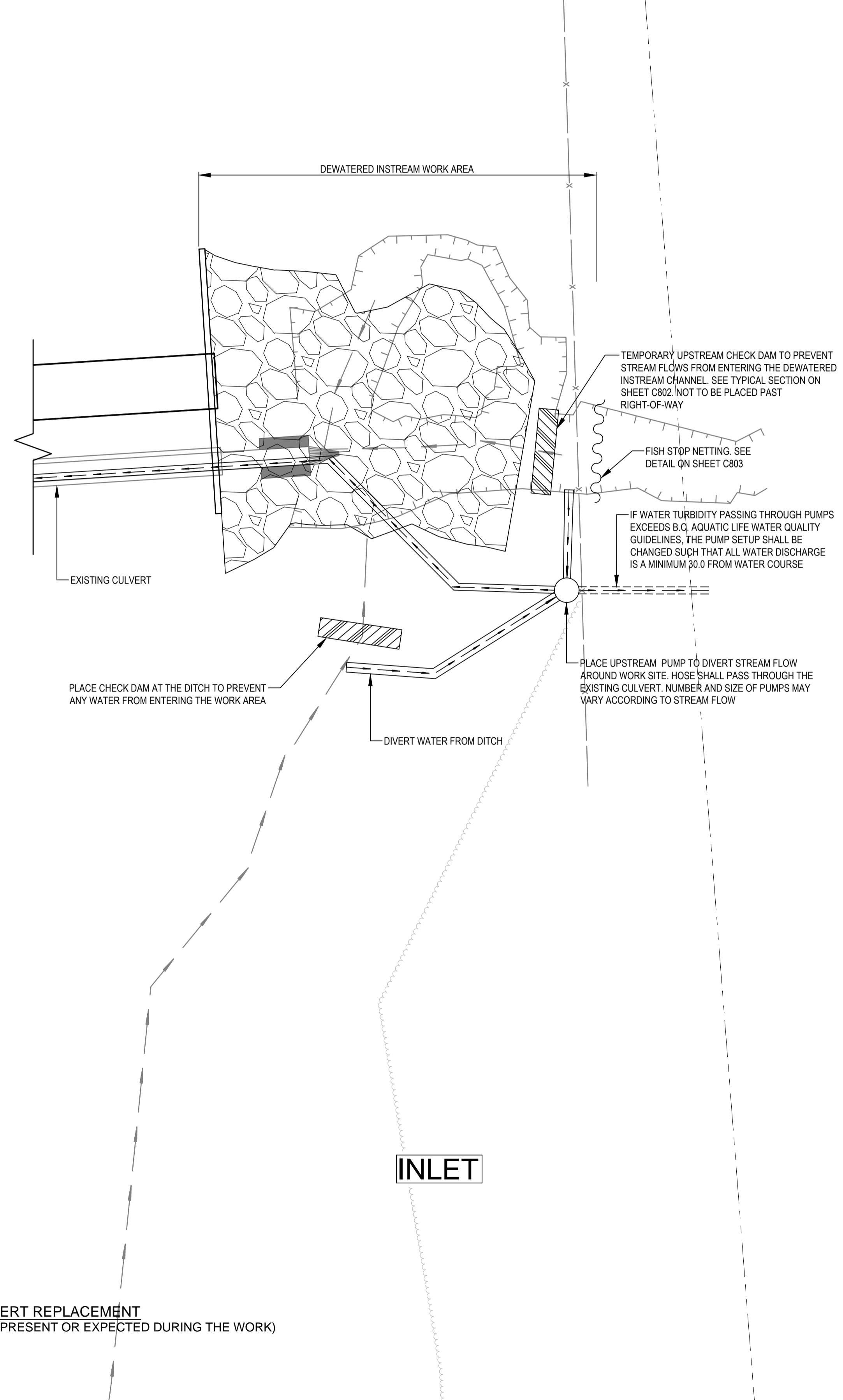
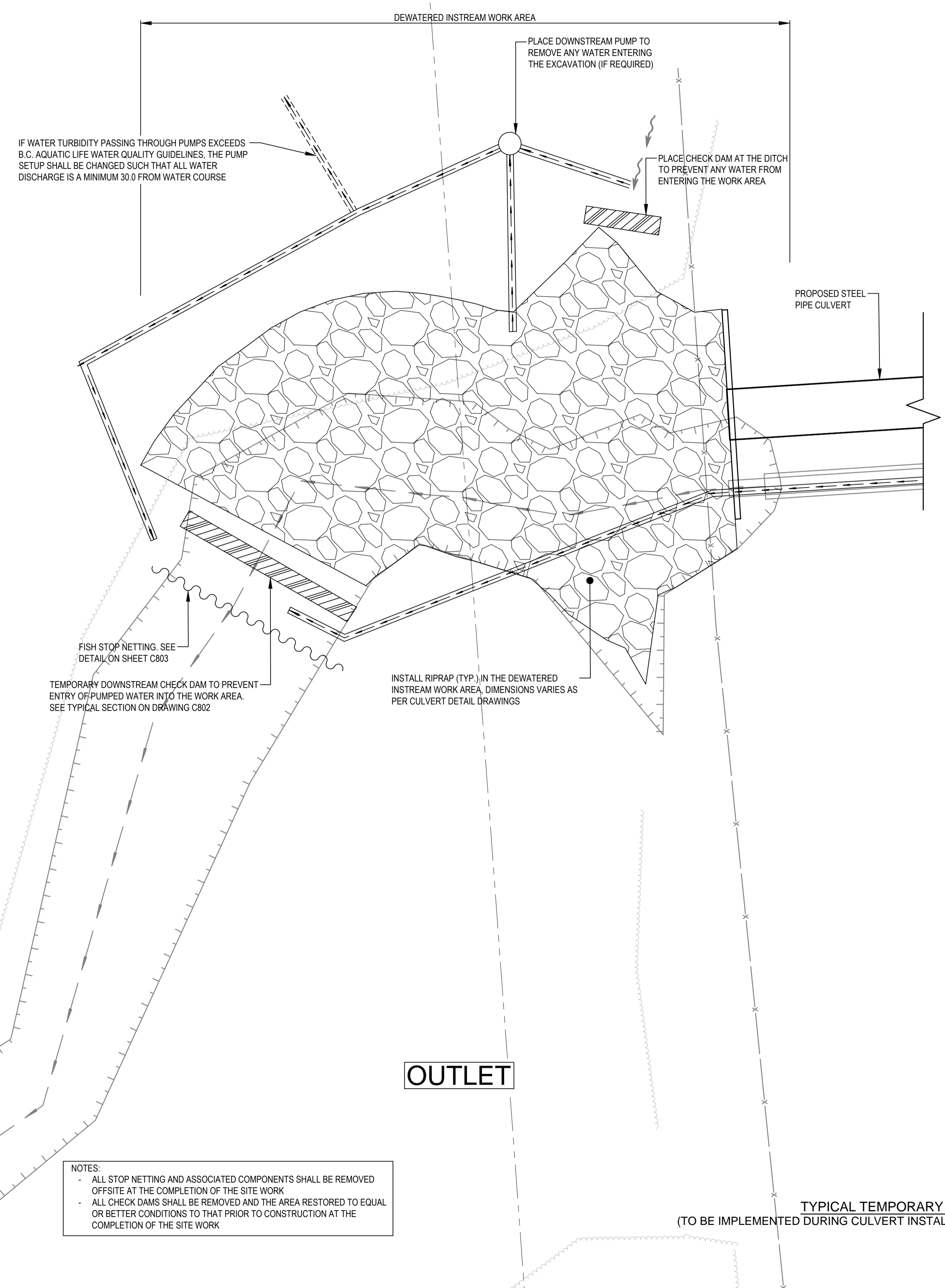
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R.109448.002	C703 OF	-



ISSUED FOR TENDER

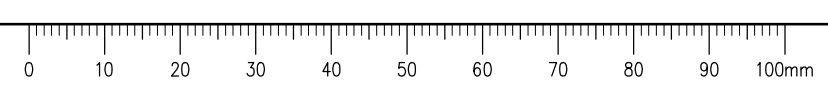
- GENERAL NOTES:
- DIMENSIONS, COORDINATES, ELEVATIONS ARE IN METRES UNLESS NOTED OTHERWISE
 - THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION

- CONSTRUCTION SEQUENCING / STAGING**
- INSTALL FISH STOP NETTING.
 - EXECUTE FISH SALVAGE AT INLET AND OUTLET ISOLATED AREAS.
 - INSTALL UPSTREAM CHECK DAM.
 - INSTALL UPSTREAM PUMP(S), PASS HOSES THROUGH CULVERT AND COMMENCE STREAM FLOW DIVERSION INTO PUMPS.
 - INSTALL DOWNSTREAM CHECK DAMS & PUMP(S).
 - INSTALL NEW CULVERT, CONCRETE HEADWALL AND RIPRAP IN THE DEWATERED INSTREAM WORK AREAS.
 - REMOVE DOWNSTREAM CHECK DAM AND ANY ASSOCIATED MATERIAL.
 - REMOVE DOWNSTREAM PUMP AND ANY ASSOCIATED MATERIAL.
 - REMOVE DOWNSTREAM FISH STOP NET AND ANY ASSOCIATED MATERIAL.
 - REMOVE UPSTREAM CHECK DAM AND ANY ASSOCIATED MATERIAL.
 - REMOVE UPSTREAM PUMP(S) AND ANY ASSOCIATED MATERIAL.
 - REMOVE UPSTREAM FISH STOP NET AND ASSOCIATED MATERIAL.

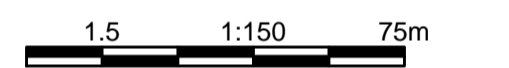


TYPICAL TEMPORARY STREAM DIVERSION FOR CULVERT REPLACEMENT
(TO BE IMPLEMENTED DURING CULVERT INSTALLATION WHEN STREAM FLOWS ARE PRESENT OR EXPECTED DURING THE WORK)

SCALE 1:150



I:\Local\LocalLegacy\Transportation\TRN\VHWY\Projects\TRN\VHWY\03\46_Culvert Replacement\Tender\2\CADD\KM 140.3 ENVIRONMENTAL STAGED CONSTRUCTION.dwg [C801] June 16, 2020 - 9:54:10 am (BY: DEEPWELL, ANDREW)



Revision/Édition	Description/Description	Date/Date
-	ISSUED FOR TENDER	20/06/19

Client/Client
PUBLIC SERVICES AND PROCUREMENT CANADA



Project title/Titre du projet
**KM 140.3
EAST CACHE CREEK
CULVERT REPLACEMENT
ALASKA HIGHWAY, BC**

Approved by/Approuvé par
G. WILKINS

Designed by/Concept par
A. HORWOOD / A. DEEPWELL

Drawn by/Dessiné par
A. DEEPWELL

PWSC Project Manager/Administrateur de Projets TPSCG
A. TAHERI

PWSC Architectural and Engineering Resources Manager/Ressources Architectural et de Directeur d'ingénierie, TPSCG

Client/Client
Public Services and Procurement Canada

Drawing title/Titre du dessin
**ENVIRONMENTAL CONSTRUCTION
STAGING - PLAN VIEW**

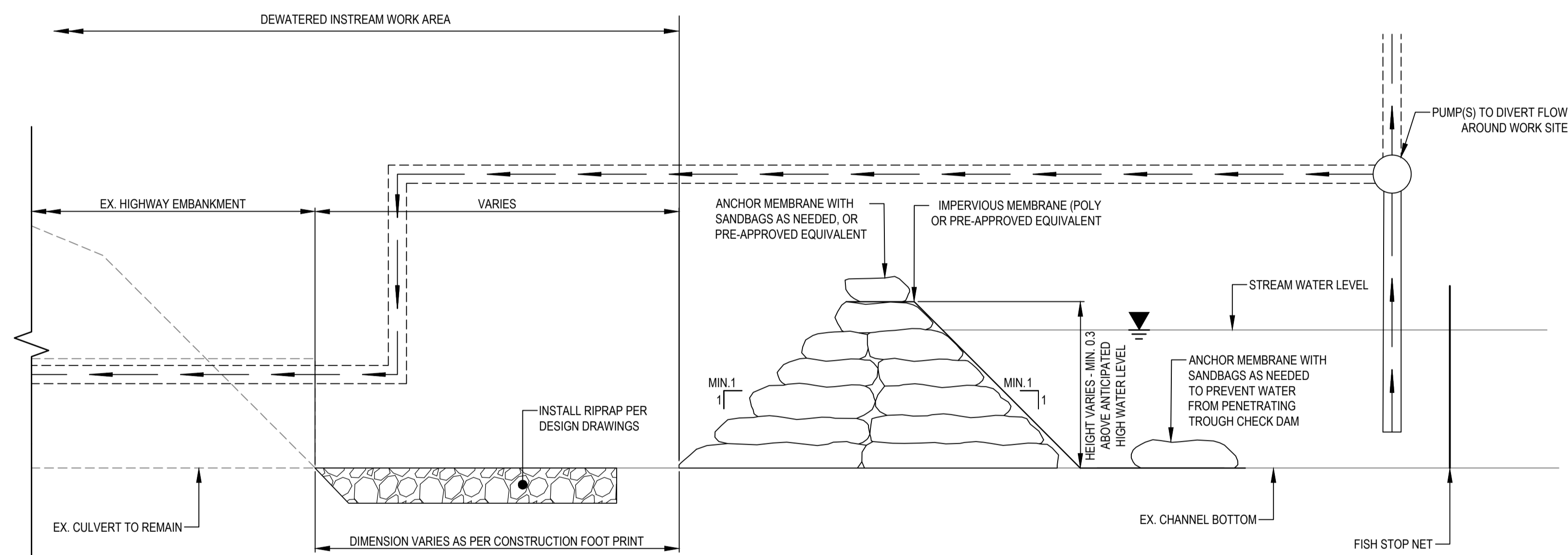
Project No./No. du projet	Sheet/Fauille	Revision no./No. de Révision
R.109448.002	C801	-

OF



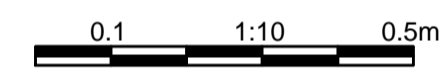
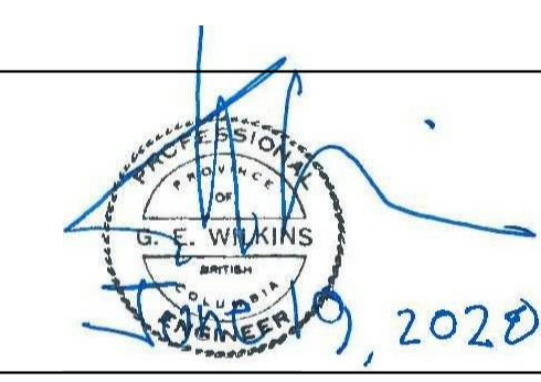
ISSUED FOR TENDER

- GENERAL NOTES:
1. DIMENSIONS, COORDINATES, ELEVATIONS ARE IN METRES UNLESS NOTED OTHERWISE
 2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION



TYPICAL SECTION OF TEMPORARY CHECK DAM USING SANDBAGS
(UPSTREAM CHECK DAM ARRANGEMENT SHOWN, MIRROR ARRANGEMENT FOR DOWNSTREAM CHECK DAM)
SCALE 1:10

NOTES:
1. IF PRE-APPROVED BY THE DEPARTMENTAL REPRESENTATIVE AND THE CONTRACTOR'S ENVIRONMENTAL MONITOR, THE CONTRACTOR MAY UTILIZE EARTH FILL TO CONSTRUCT CHECK DAM. IF AN EARTH FILL CHECK DAM IS UTILIZED, THE TURBIDITY LEVELS SHALL REMAIN WITHIN B.C. AQUATIC LIFE WATER QUALITY GUIDELINES FOR TURBIDITY FOR THE DURATION OF THE EARTH BERM INSTALLATION. THE EARTH MATERIAL USED AND COMPACTION REQUIREMENTS SHALL BE DESIGNED BY THE ENVIRONMENTAL MONITOR.



Revision/Revisión	Description/Description	Date/Date
-	ISSUED FOR TENDER	20/06/19

Client/client
PUBLIC SERVICES AND PROCUREMENT CANADA



Project title/Titre du projet
**KM 140.3
EAST CACHE CREEK
CULVERT REPLACEMENT
ALASKA HIGHWAY, BC**

Approved by/Approve par
G. WILKINS

Designed by/Concept par
A. HORWOOD / A. DEEPWELL

Drawn by/Dessine par
A. DEEPWELL

PWSC Project Manager/Administrateur de Projets TPSCG
A. TAHERI

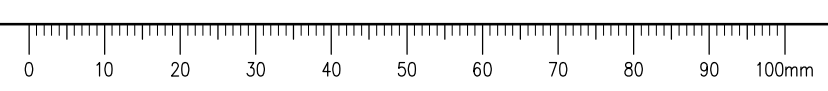
PWSC Architectural and Engineering Resources Manager/Ressources Architectural et de Directeur d'ingénierie, TPSCG

Client/client
Public Services and Procurement Canada

Drawing title/Titre du dessin
**ENVIRONMENTAL CONSTRUCTION
STAGING - CHECK DAMS DETAILS**

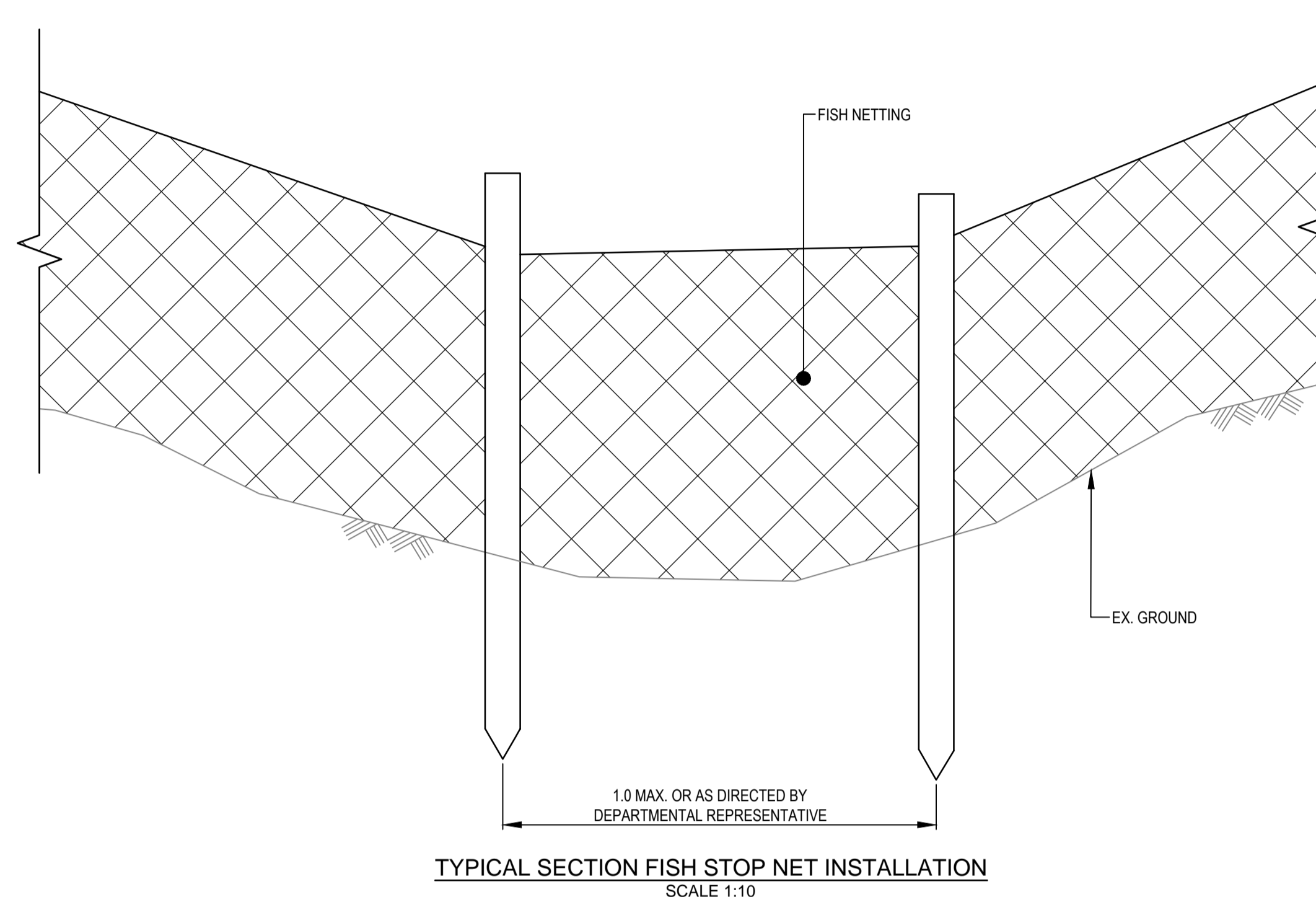
Project No./No. du projet	Sheet/Fauille	Revision no./Lo Révision no.
R.109448.002	C802 OF	-

\\local\lbaal\Legacy\lbaal\Projects\TRN\VHW\03146\Culvert Replacement\Tender\2\CADD\KM 140.3\Environmental Staged Construction.dwg [C802] June 16, 2020 - 9:54:15 am (BY: DEEPWELL, ANDREW)

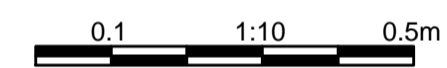
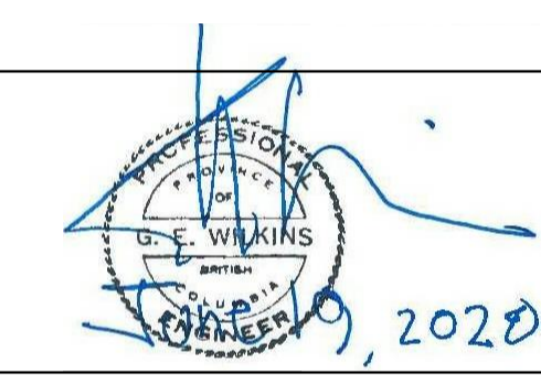


ISSUED FOR TENDER

- GENERAL NOTES:
1. DIMENSIONS, COORDINATES, ELEVATIONS ARE IN METRES UNLESS NOTED OTHERWISE
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TYPICAL SECTION FISH STOP NET INSTALLATION
SCALE 1:10



Revision/Édition	ISSUED FOR TENDER	20/06/19
Description/Description		
Client/Client		

PUBLIC SERVICES AND PROCUREMENT CANADA



Project title/Titre du projet
**KM 140.3
EAST CACHE CREEK
CULVERT REPLACEMENT
ALASKA HIGHWAY, BC**

Approved by/Approuvé par
G. WILKINS

Designed by/Concept par
A. HORWOOD / A. DEEPWELL

Drawn by/Dessiné par
A. DEEPWELL

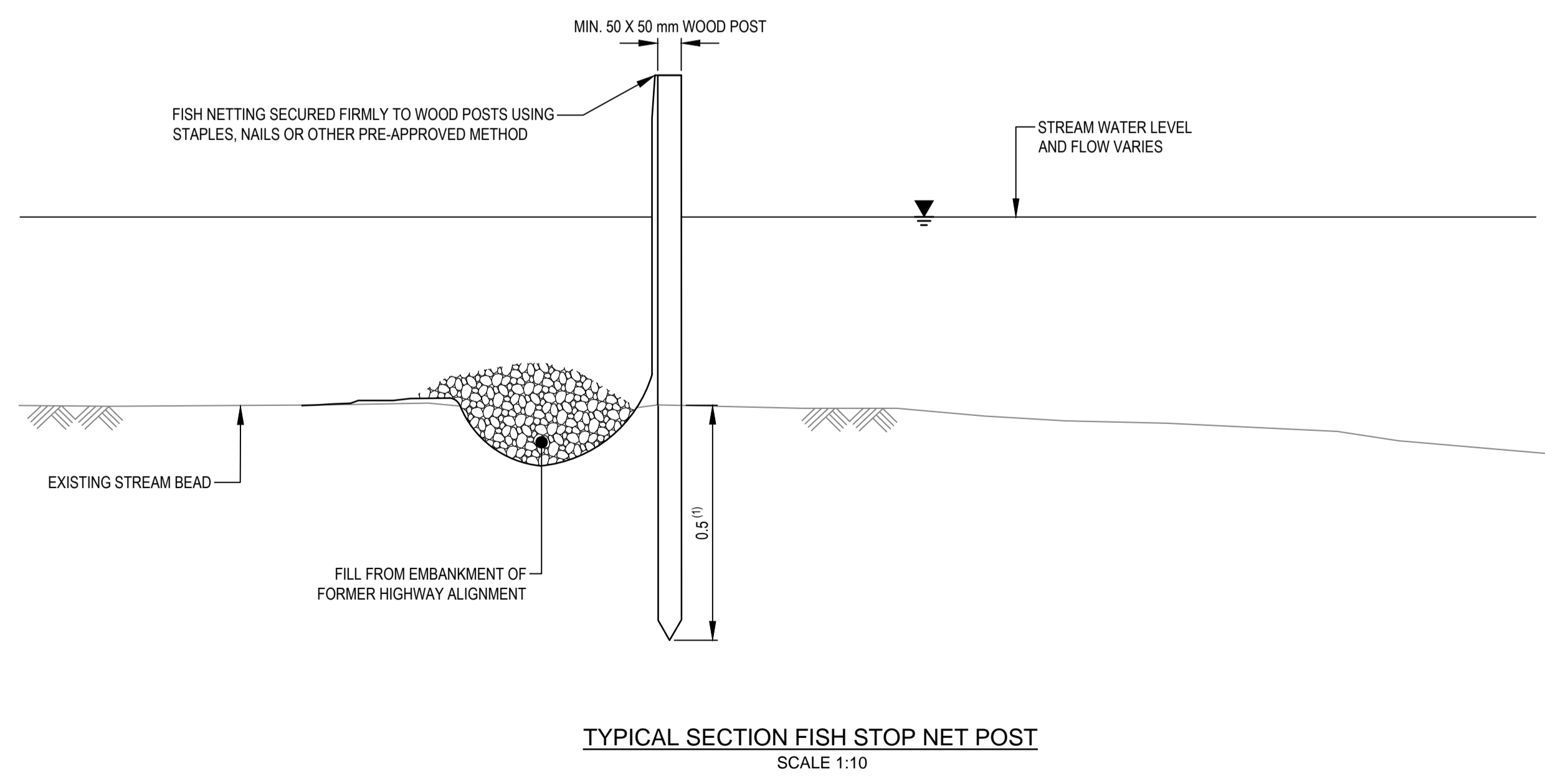
PWSC Project Manager/Administrateur de Projets TPSCG
A. TAHERI

PWSC Architectural and Engineering Resources Manager/Ressources Architectural et de Directeur d'Ingénierie, TPSCG

Client/Client
Public Services and Procurement Canada

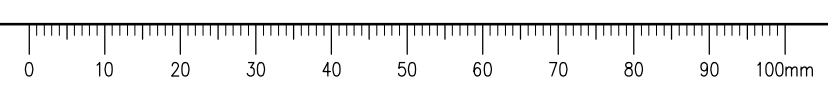
Drawing title/Titre du dessin
**ENVIRONMENTAL CONSTRUCTION
STAGING - FISH STOP NET DETAILS**

Project No./No. du projet	Sheet/Fauille	Revision no./La Révision no.
R.109448.002	C803 OF	-



TYPICAL SECTION FISH STOP NET POST
SCALE 1:10

NOTES:
(1) OR AS DIRECTED BY DEPARTMENTAL REPRESENTATIVE AND ENVIRONMENTAL MONITOR TO SUIT FIELD CONDITIONS



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