

Parks Canada  
Agency

L'Agence Parcs  
Canada

# BELLY RIVER GROUP CAMPGROUND CULVERT REPLACEMENT

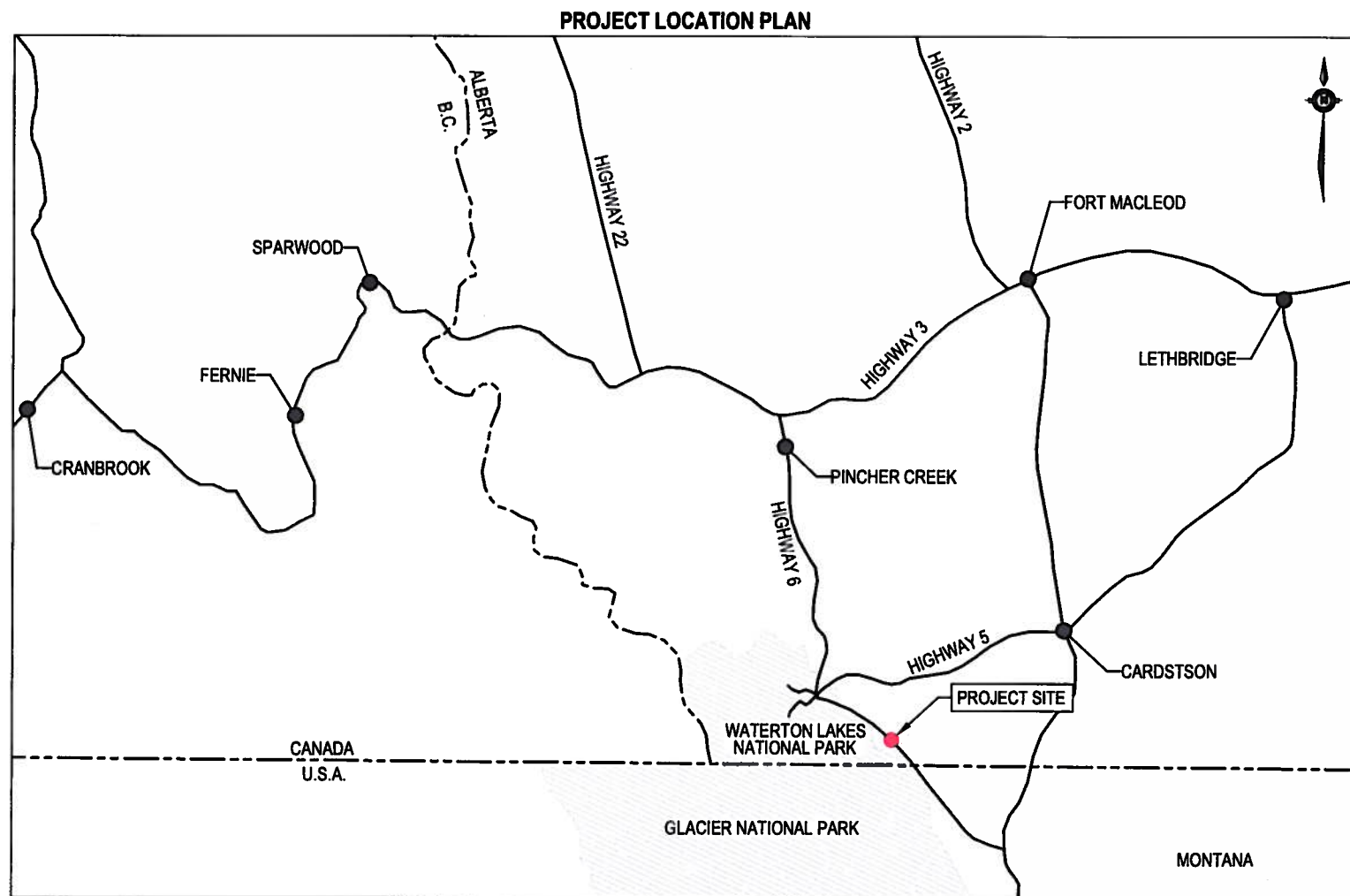
WATERTON LAKES NATIONAL PARK  
ALBERTA

PROJECT No.  
762



ISSUED FOR TENDER  
MAY 2016

C:\Vancouver\Drafting\Transportation\331\3310221-1-01 - Belly River Culvert Crossing Detailed Design\_R1.dwg (302) May 05, 2016 - 8:35:38 am (BY: MANG, JUSTIN)



SCALE: 1: 1 000 000



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INDEX OF DRAWINGS	
DWG No.	DESCRIPTION
G01	COVER SHEET
G02	INDEX OF DRAWINGS, GENERAL NOTES AND SITE LOCATION
C01	SITE PLAN
C02	CULVERT REPLACEMENT PLAN AND PROFILE
C03	ROAD AND CHANNEL PROFILES
C04	SECTIONS AND DETAILS

CONTROL POINTS				
POINT No.	NORTHING	EASTING	ELEVATION	DESCRIPTION
POINT 1	5433449.26	303537.31	997.828 m	SOUTHEAST CORNER OF CONCRETE PAD AT BUILDING ENTRANCE
POINT 2	5433493.90	303580.03	997.920 m	EXISTING CULVERT INLET
POINT 3	5433500.33	303576.20	997.656 m	EXISTING CULVERT OUTLET

NOTE: COORDINATES AND ELEVATIONS ARE RELATIVE TO LOCAL SURVEY.

**LEGEND**

	PROPOSED ASPHALT CONCRETE PAVEMENT		FLOW DIRECTION
	PROPOSED EXCAVATION MATERIAL		PROPOSED EDGE OF ROAD
	PROPOSED FILL/TRANSITION MATERIAL		TOE OF PROPOSED ROAD
	PROPOSED GRAVEL ROAD		
	PROPOSED RIPRAP		
	CHANNEL EXCAVATION LIMITS		
	EXISTING ROAD		

**GENERAL NOTES:**

- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS AND ANY RULES, REGULATIONS, STANDARDS OR SPECIFICATIONS REFERENCED THEREIN. THE PROJECT IS SUBJECT TO INSPECTION BY REPRESENTATIVES OF PARKS CANADA.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING THE SITE TO MATCH PRE-CONSTRUCTION CONDITIONS AND FINISHES FOLLOWING THE COMPLETION OF THE PROJECT.
- CONTRACTOR TO VERIFY LOCATION OF ANY UTILITIES PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY DEPARTMENTAL REPRESENTATIVES OF ANY CONFLICTS.

**ISSUED FOR TENDER**



0	ISSUED FOR TENDER	5/5/16
Revision/Revision	Description/Description	Date/Date

Client/client:



Project title/Titre du projet:

**WATERTON LAKES NATIONAL PARK, AB**

**BELLY RIVER  
GROUP CAMPGROUND  
CULVERT REPLACEMENT**

Approved by/Approuvé par:

**D. JOHNSTON**

Designed by/Concept par:

**H. WANG**

Drawn by/Dessiné par:

**J. MANG**

PCA Project Manager/Administrateur de Projets TPSCC

**C. MARIOTTI**

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**PARKS CANADA AGENCY**

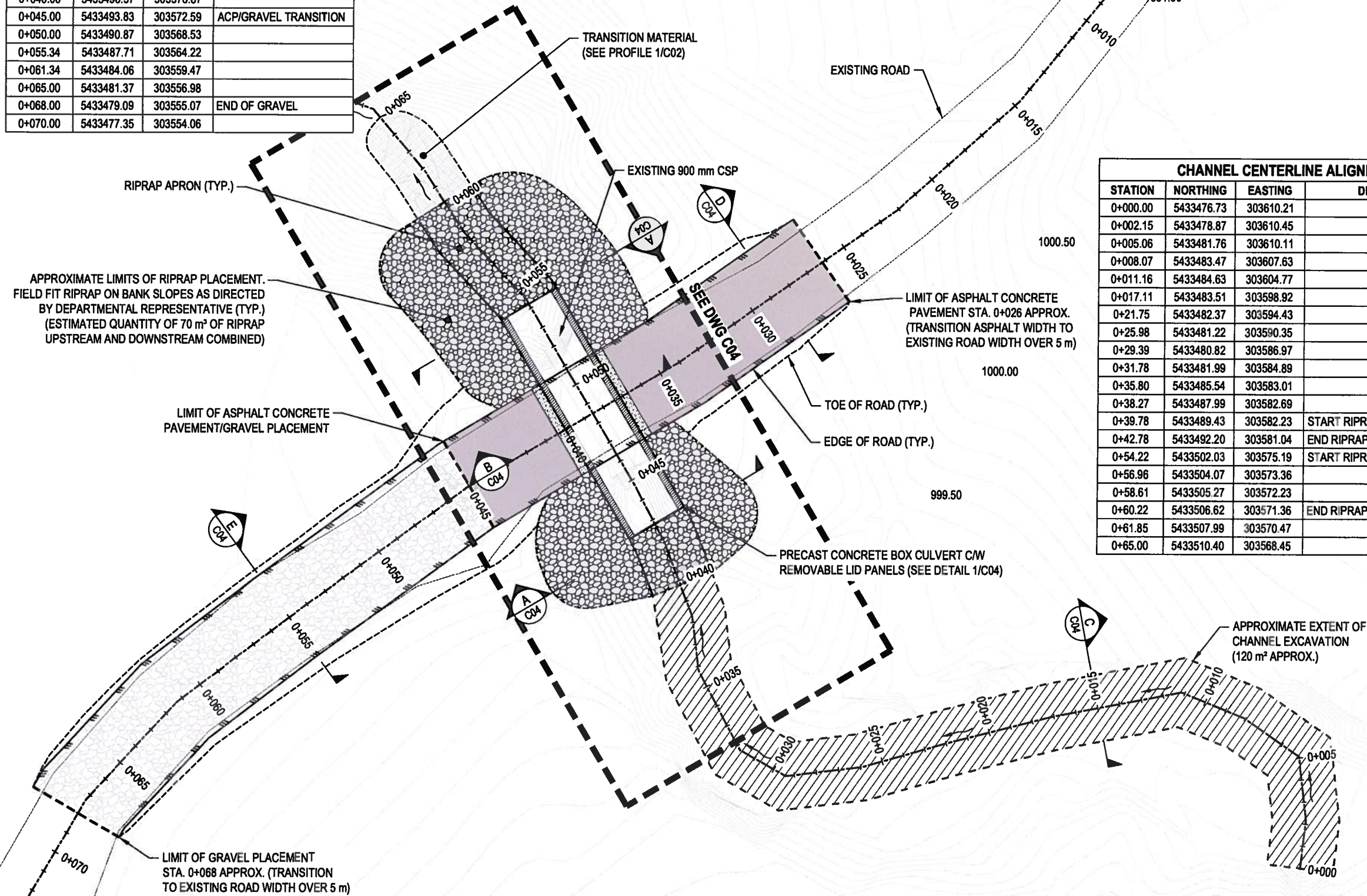
Drawing title/Titre du dessin:

**INDEX OF DRAWINGS, GENERAL  
NOTES AND SITE LOCATION**

Project No./No. du projet	Sheet/Fauille	Revision no./ La Révision no.
<b>762</b>	<b>G02</b>	<b>0</b>



ROAD CENTERLINE ALIGNMENT			
STATION	NORTHING	EASTING	DESCRIPTION
0+000.00	5433523.39	303605.33	
0+006.58	5433517.48	303602.43	
0+010.00	5433514.83	303600.27	
0+014.71	5433511.19	303597.28	
0+020.00	5433507.67	303593.33	
0+026.18	5433503.94	303588.42	START OF ACP
0+030.00	5433501.75	303585.29	
0+034.04	5433499.42	303581.99	
0+040.00	5433496.37	303576.87	
0+045.00	5433493.83	303572.59	ACP/GRAVEL TRANSITION
0+050.00	5433490.87	303568.53	
0+055.34	5433487.71	303564.22	
0+061.34	5433484.06	303559.47	
0+065.00	5433481.37	303556.98	
0+068.00	5433479.09	303555.07	END OF GRAVEL
0+070.00	5433477.35	303554.06	



CHANNEL CENTERLINE ALIGNMENT			
STATION	NORTHING	EASTING	DESCRIPTION
0+000.00	5433476.73	303610.21	
0+002.15	5433478.87	303610.45	
0+005.06	5433481.76	303610.11	
0+008.07	5433483.47	303607.63	
0+011.16	5433484.63	303604.77	
0+017.11	5433483.51	303598.92	
0+21.75	5433482.37	303594.43	
0+25.98	5433481.22	303590.35	
0+29.39	5433480.82	303586.97	
0+31.78	5433481.99	303584.89	
0+35.80	5433485.54	303583.01	
0+38.27	5433487.99	303582.69	
0+39.78	5433489.43	303582.23	START RIPRAP
0+42.78	5433492.20	303581.04	END RIPRAP/CULVERT INLET
0+54.22	5433502.03	303575.19	START RIPRAP/CULVERT OUTLET
0+56.96	5433504.07	303573.36	
0+58.61	5433505.27	303572.23	
0+60.22	5433506.62	303571.36	END RIPRAP
0+61.85	5433507.99	303570.47	
0+65.00	5433510.40	303568.45	

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2 0 2 4 8m

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BELLY RIVER  
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CULVERT REPLACEMENT

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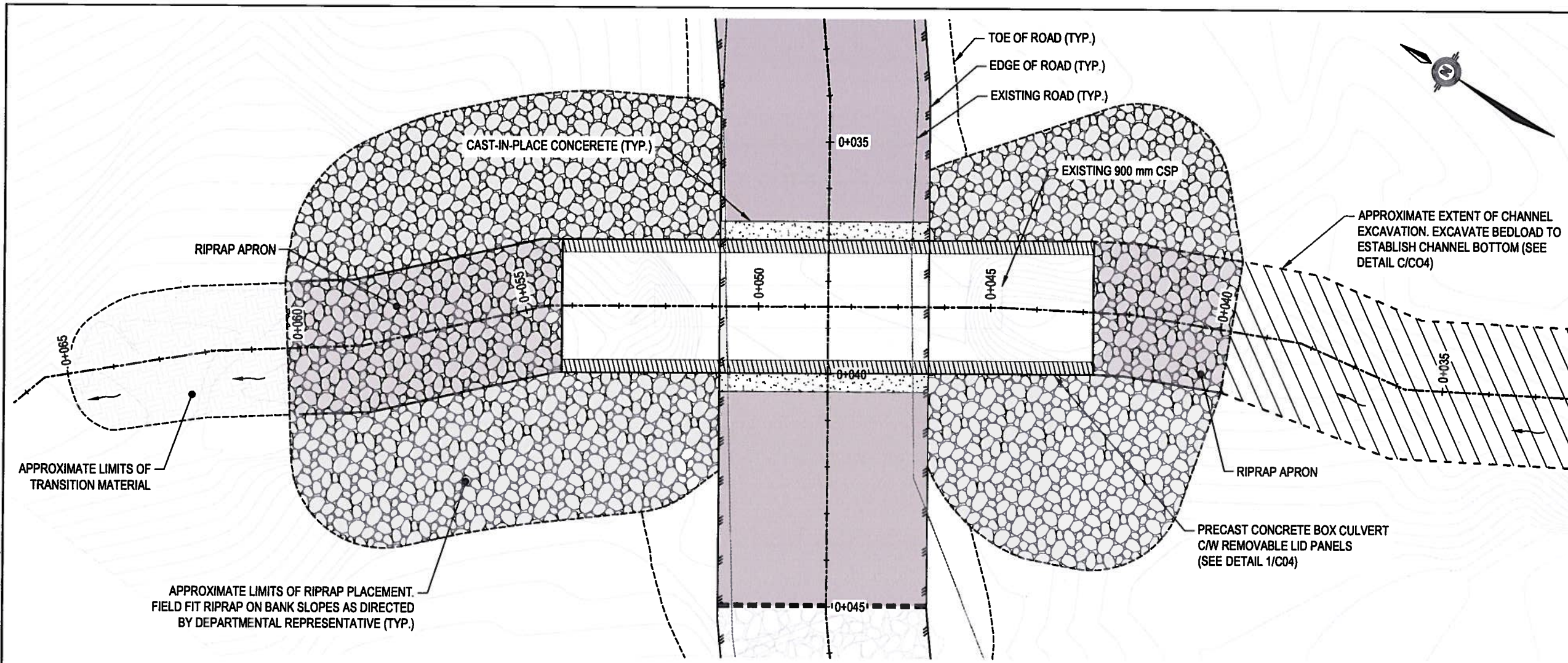
Client/client  
PARKS CANADA AGENCY

Drawing title/Titre du dessin  
SITE PLAN

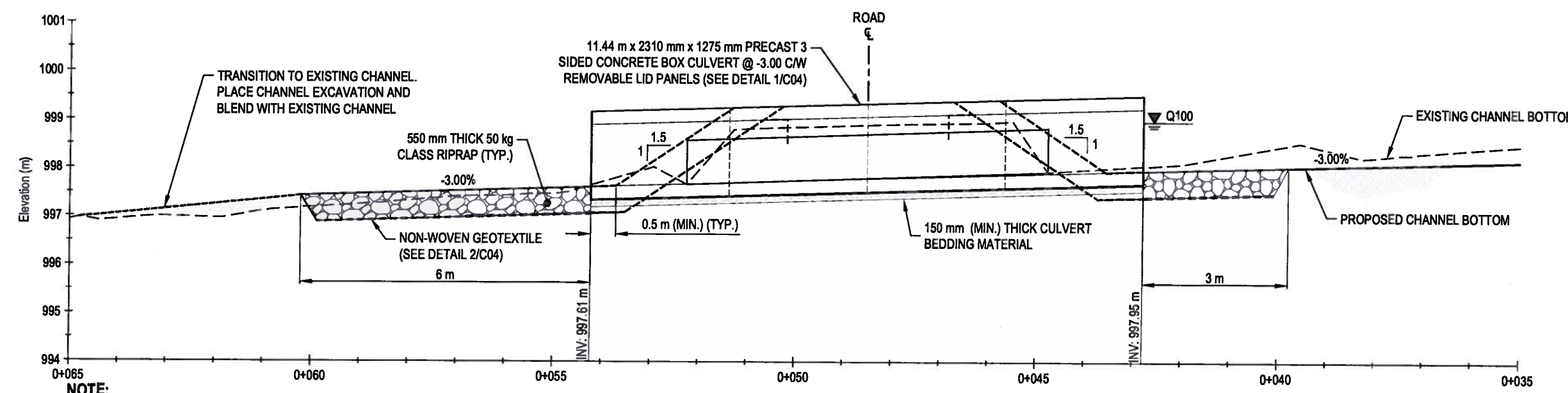
Project No./No. du projet 762	Sheet/Feuille C01	Revision no./ La Révision no. 0
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PLAN  
SCALE: 1:100



NOTE:  
1. CULVERT INVERTS ASSUME 300 mm THICK LIDS.

1 PROPOSED CULVERT PROFILE  
C03 SCALE: 1:100



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2016/05/05

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1 0 1 2 4m

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Revision/Revision	Description/Description	Date/Date



Parks Canada Agency



L'Agence Parcs Canada



Project title/Titre du projet  
WATERTON LAKES NATIONAL PARK, AB  
BELLY RIVER  
GROUP CAMPGROUND  
CULVERT INSTALLATION

Approved by/Approuvé par  
D. JOHNSTON  
Designed by/Concept par  
H. WANG  
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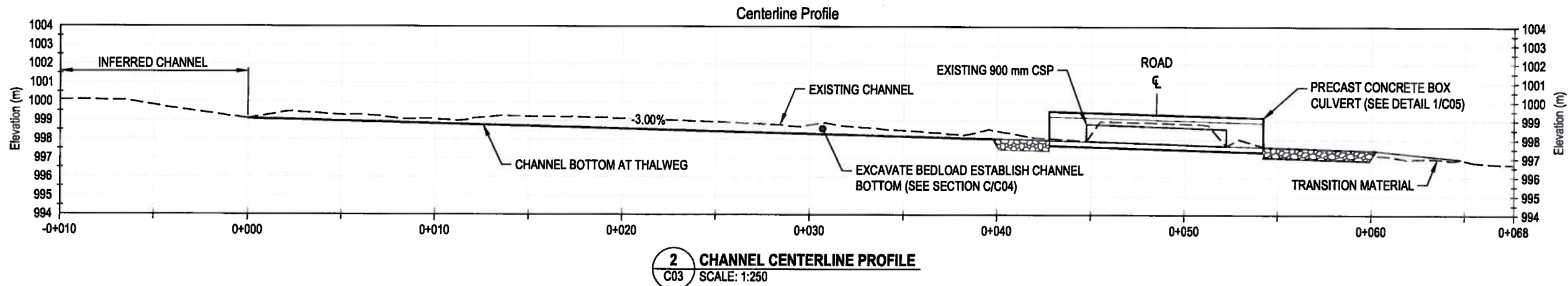
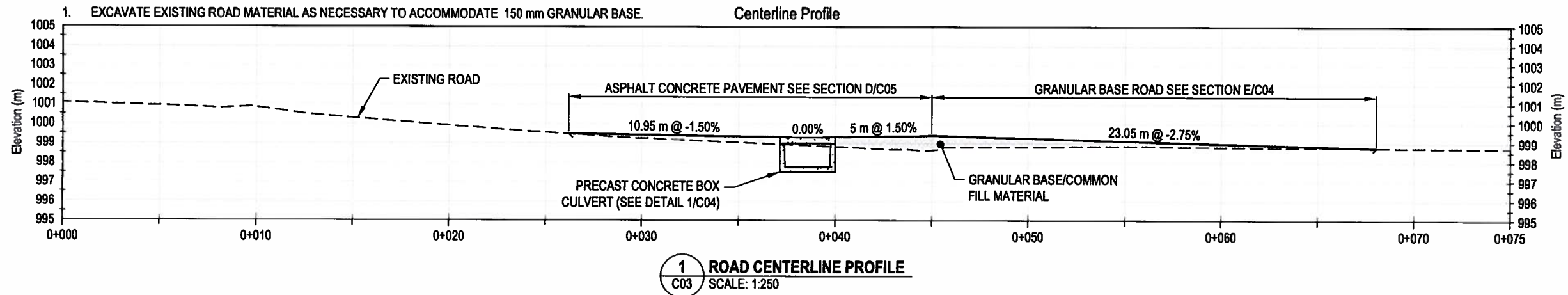
Drawing title/Titre du dessin  
CULVERT REPLACEMENT  
PLAN AND PROFILE

Project No./No. du projet 762	Sheet/Feuille C02	Revision no./ La Révision no. 0
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**NOTE:**

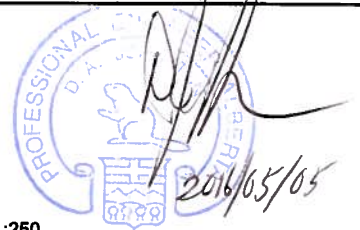
1. EXCAVATE EXISTING ROAD MATERIAL AS NECESSARY TO ACCOMMODATE 150 mm GRANULAR BASE.



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SCALE 1:250



Revision/	Description/Description	Date/Date
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Client/client



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**ROAD AND CHANNEL PROFILES**

Project No./No. du projet

**762**

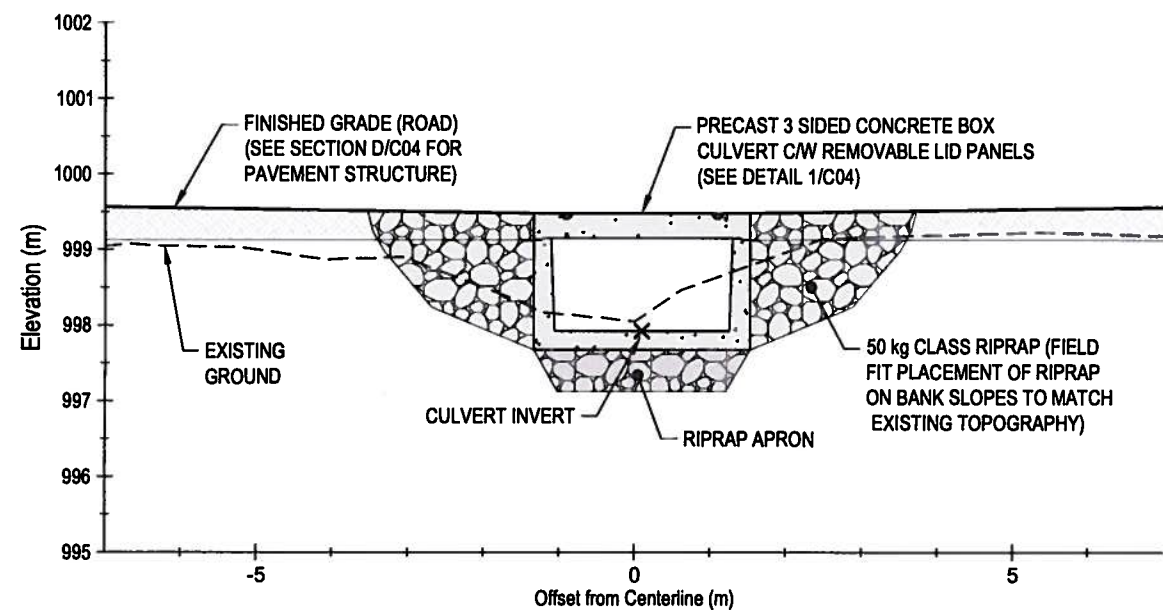
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**C03**

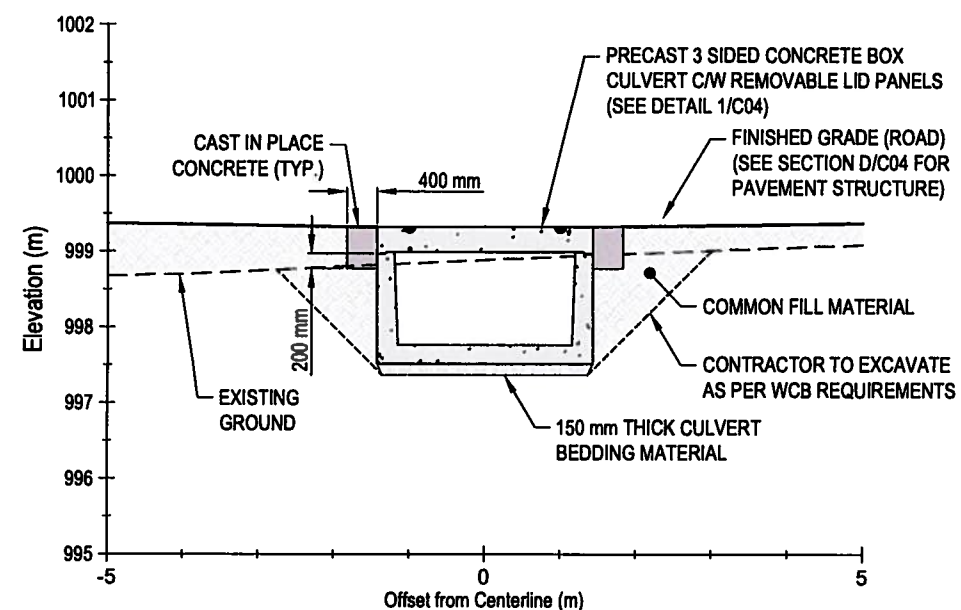
Revision no./  
La Révision no.

**0**

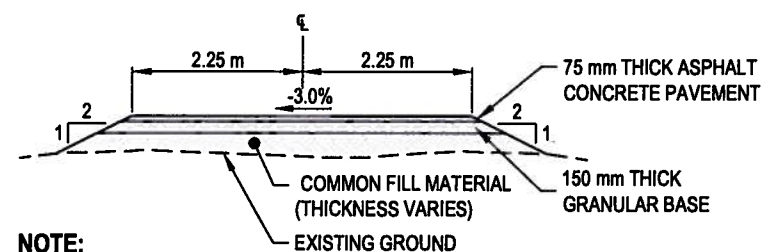




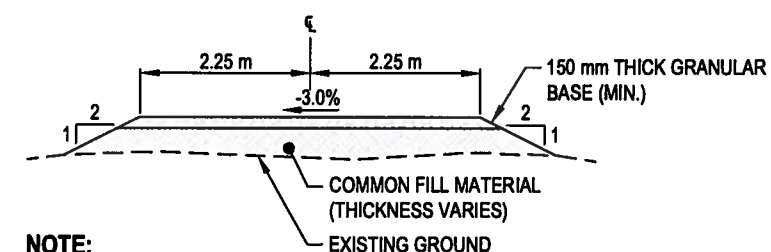
**A** **TYPICAL CULVERT END SECTION**  
C04 SCALE: 1:100



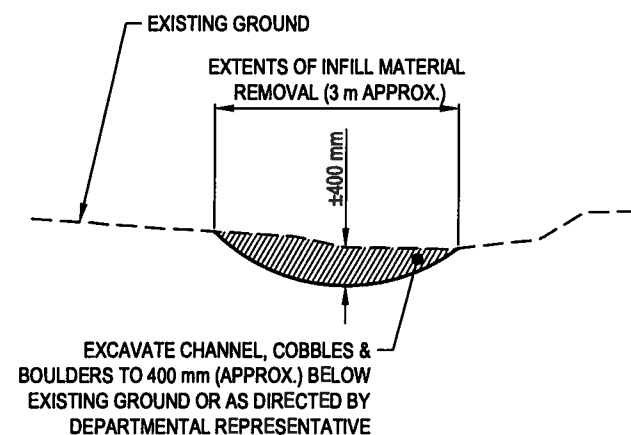
**B CULVERT CROSS SECTION**  
C04 SCALE: 1:100



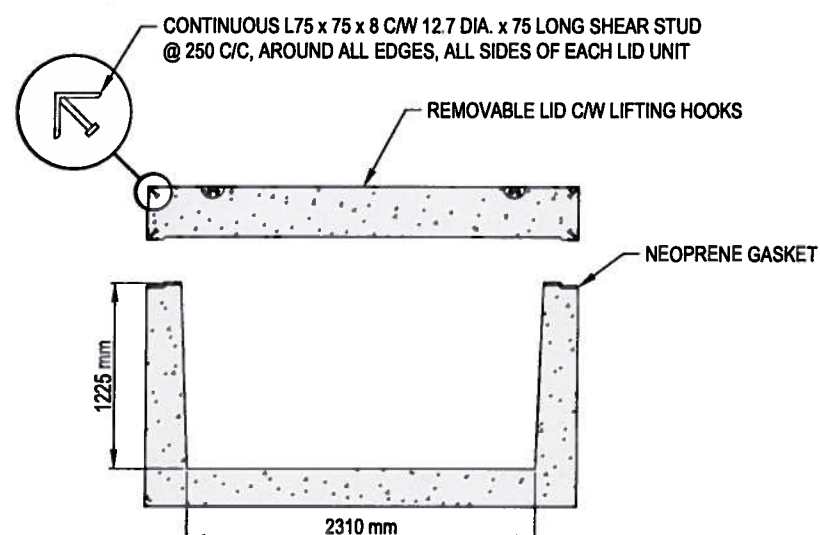
**NOTE:** EXISTING ROAD WIDTH VARIES FROM 3.5 - 4.5 m (APPROX.)



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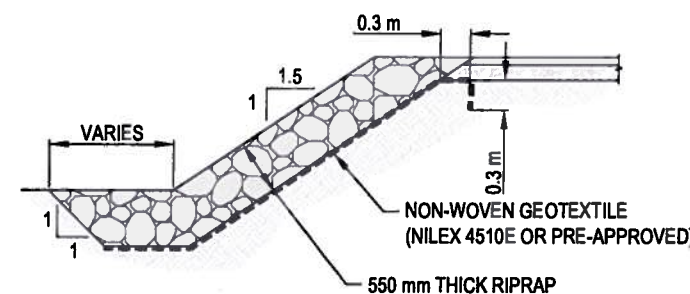
**C** CHANNEL EXCAVATION DETAIL  
C04 SCALE: 1:100



**NOTE:**

1. MANUFACTURED TO DESIGN CULVERT AND LID FOR REQUIRED LOADING.
2. MAX LID WEIGHT: 2.7 TONNES (WIDTH OF LIDS TO SUIT)
3. REQUIRED LOADING: CL-625

**1** **THREE SIDED BOX CULVERT DETAIL**  
C04 SCALE: 1:50



**2 NON-WOVEN GEOTEXTILE KEY-IN DETAIL**  
C04 SCALE: NTS