





A3 SCALE 1:200  
A1 SCALE 1:100

DESIGNED :	MPD	Oct.12
DRAWN :	DWM	Oct.12
DESIGN CHECKED :		
DRAFTING CHECKED :		
CADFILE :	\\870982.1010-01.dwg	
APPROVED :	<b>NOT FOR CONSTRUCTION</b>	
This drawing is not to be used for construction purposes unless signed as approved		
REVISION DESCRIPTION	BY	DATE
1 Consultation Issue	MPD	Nov.12

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**NOTES :**

- Nelson Circuit (2000) coordinates. Levels to NCC Datum.
- The Contractor shall confirm the location/depth of all services prior to any excavation.
- All works shall comply with the latest version of the NCC Land Development Manual and all amendments.
- Works outside the reconstruction area shall be reinstated as per NCC Land Development Manual.
- Special care shall be taken to ensure there is no damage to fences and gardens on private property. Any damage is to be repaired promptly at the Contractor's cost.
- Property boundaries, services location and culvert location supplied by DOP Ltd.

REFERENCE : LIDAR contours and aerial photos supplied by NCC.

**Tonkin & Taylor**  
Environmental and Engineering Consultants

43 Halifax St, Nelson  
Tel. (03) 546 6339 Fax. (03) 546 7619  
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<b>DRAWING STATUS: TENDER ISSUE</b>	
CLIENT, PROJECT	<b>NELSON CITY COUNCIL</b> CABLE BAY ROAD REMEDIATION
TITLE	GENERAL INFORMATION – SITE 10 Existing Site and Site Investigation Plan
SCALES (AT A1 SIZE)	DWG. No.
1:100	870982.1010-01
REV.	A

**Nelson City Council**  
te kaunihera o whakatū

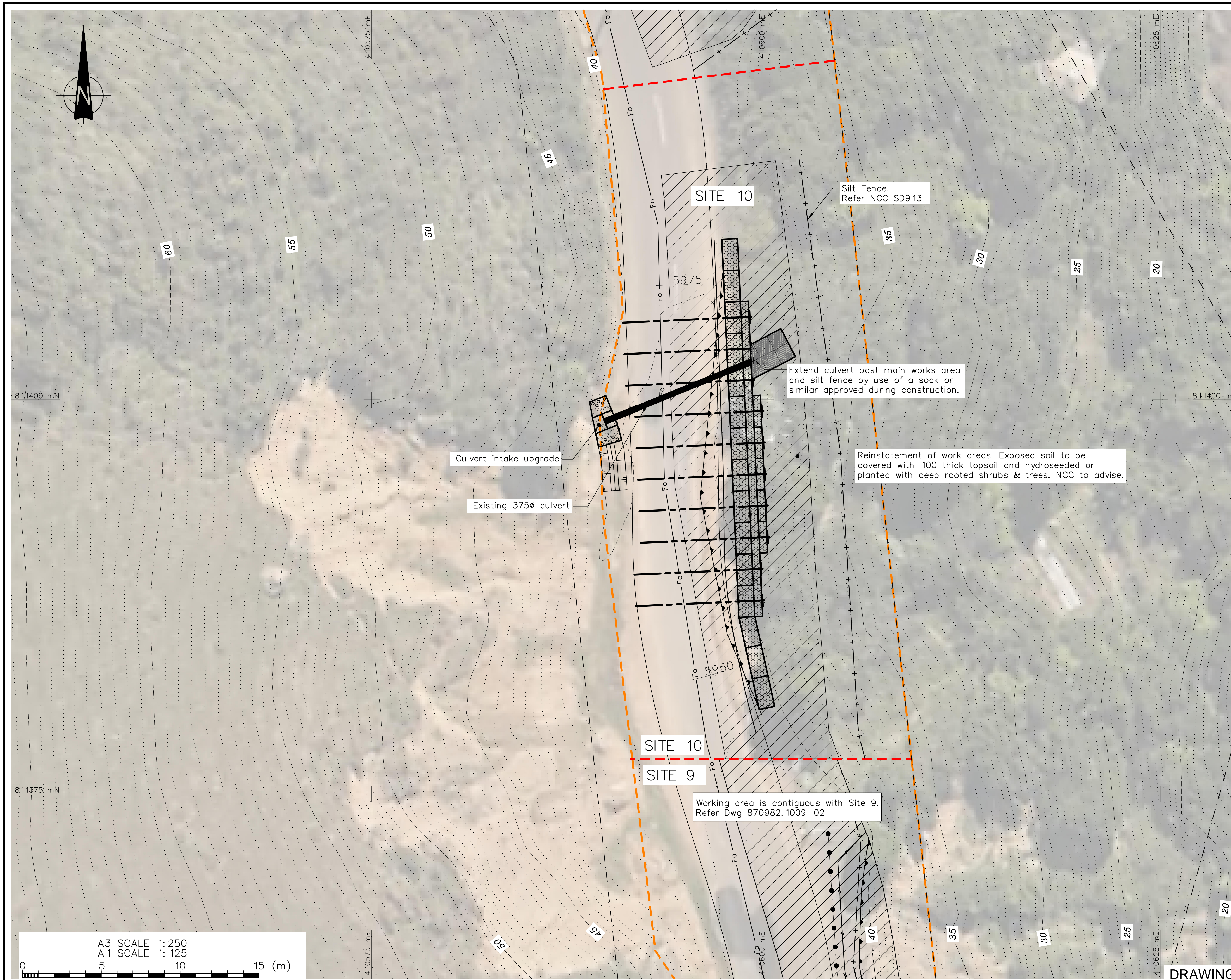
NETWORK SERVICES DEPARTMENT

APPROVED  
EXECUTIVE MANAGER  
NETWORK SERVICES

DATE: 15/4/2013

NCC Plan No. 19-0076

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**LEGEND**

- Approximate edge of seal
- - - Property Boundary
- ▲ Landslip head scarp
- - - 10 Existing contours (5m interval)
- ..... Existing contours (0.5m interval)
- Proposed Catch Fence
- + - + - Proposed Silt Fence
- Fo - Fibre optic cable
- ← Stormwater Flow Path
- ~ Existing Watercourse
- █ Existing Culvert Pipe
- - - Limit of Works Area
- - - Approximate boundary between sites
- ▨ Main Works Area
- ▩ Secondary Works Area
- 1000 Distance along road alignment (From State Highway 6 intersection)

The extent and nature of work areas (within the work area limits) are to be developed and confirmed by the contractor during tender and prior to construction commencing.

A single road lane shall remain open to traffic at all times except for short duration critical activities approved by the Engineer. Contractor to provide traffic management plan.

Erosion and sediment control measures shall conform to NCC standards and resource consent conditions. The extent and nature of these measures shall be developed and confirmed by the Contractor prior to commencing construction.

Total area shown within working area limit is approximately 0.13ha. (Site 9 and Site 10).

Stabilised construction entrances to be installed if vehicles traffic onto disturbed land (Refer NCC SD905).

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NETWORK SERVICES

DATE: 15/4/2013

**NCC Plan No. 19-0076**

**DRAWING STATUS: TENDER ISSUE**

DESIGNED :	MPD	Nov. 12
DRAWN :	DJAA	Nov. 12
DESIGN CHECKED :		
DRAFTING CHECKED :		
CADFILE :	\\870982.1010-02.dwg	
APPROVED :	<b>NOT FOR CONSTRUCTION</b>	
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REVISION DESCRIPTION	BY	DATE
1 Consultation Issue	MRF	5/11/12

**NOTES :**

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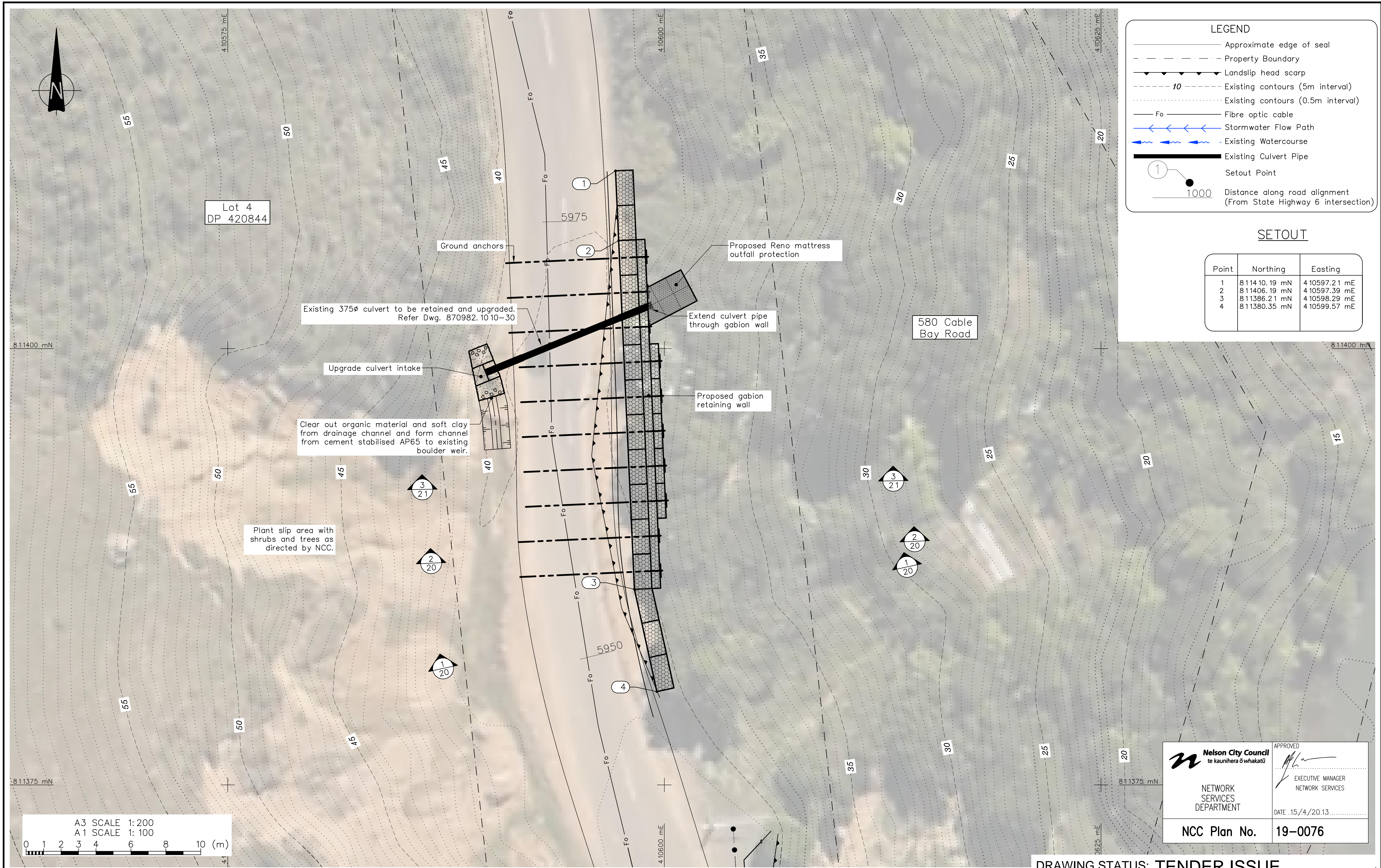
REFERENCE : LIDAR contours and aerial photos supplied by NCC.

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CLIENT, PROJECT	<b>NELSON CITY COUNCIL</b>	
	CABLE BAY ROAD REMEDIATION	
TITLE	GENERAL INFORMATION - SITE 10	
	Working Areas & Erosion Sediment Control Plan	
SCALES (AT A1 SIZE)	DWG. No.	REV.
1: 125	870982.1010-02	A

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**LEGEND**

- Approximate edge of seal
- - - Property Boundary
- ▲ Landslip head scarp
- 10 --- Existing contours (5m interval)
- ..... Existing contours (0.5m interval)
- Fo --- Fibre optic cable
- Stormwater Flow Path
- Existing Watercourse
- Existing Culvert Pipe
- ① --- Setout Point
- 1000 --- Distance along road alignment (From State Highway 6 intersection)

**SETOUT**

Point	Northing	Easting
1	811410.19 mN	410597.21 mE
2	811406.19 mN	410597.39 mE
3	811386.21 mN	410598.29 mE
4	811380.35 mN	410599.57 mE

A3 SCALE 1:200  
A1 SCALE 1:100

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APPROVED

EXECUTIVE MANAGER  
NETWORK SERVICES

DATE: 15/4/2013

**NCC Plan No. 19-0076**

**DRAWING STATUS: TENDER ISSUE**

DESIGNED :	DJA	Jul. 12
DRAWN :	DWM	Jul. 12
DESIGN CHECKED :		
DRAFTING CHECKED :		
CADFILE :	\\870982.10 10-10.dwg	
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**NOTES :**

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CLIENT, PROJECT  
**NELSON CITY COUNCIL**  
CABLE BAY ROAD REMEDIATION

TITLE  
**RETAINING WALL DESIGN – SITE 10**  
General Arrangement

SCALES (AT A1 SIZE)  
1:100

DWG. No.  
870982.10 10-10

REV.  
A

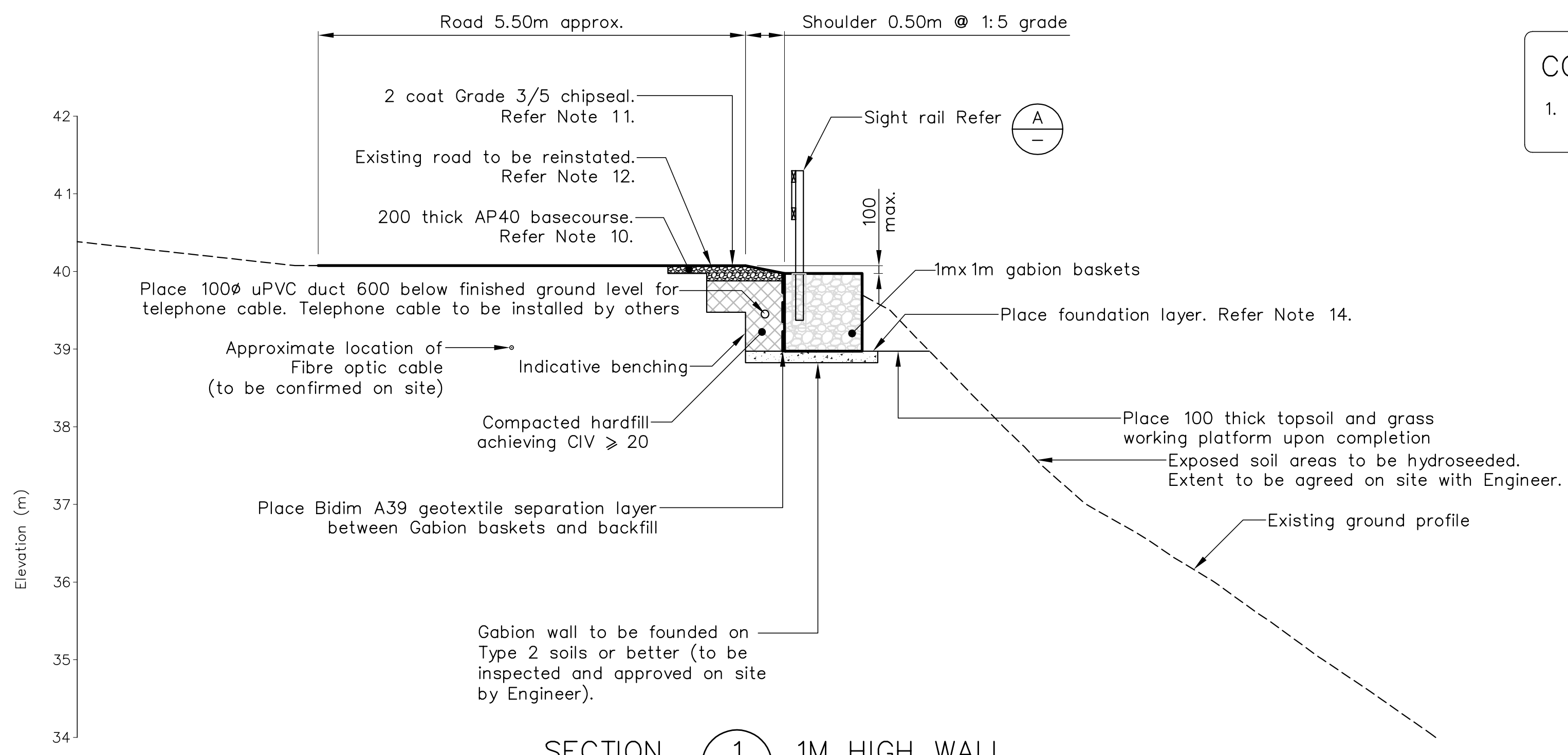
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**CONSTRUCTION NOTES:**

- Type 2 soil has scala blow counts  $\geq 2$  blows / 50mm

**NOTES: (continued):**

- Backfill to be placed and compacted in 150mm thick horizontal layers with a minimum of 4 passes of a pedestrian roller or equivalent vibrating plate compactor or trenching tool (to be approved by the Engineer). Backfill shall be conditioned to appropriate moisture content. Care shall be taken to avoid excessive compaction pressures on the new retaining wall.
- Gabion baskets to consist of wire that is Galvan and PVC coated or similar approved by the Engineer.
- Gabion basket to be constructed in accordance with manufacturers specifications.
- Gabion infill shall consist of 100-250 $\phi$  rock as agreed by Engineer.
- Fill and subbase compaction to be tested in accordance with the Specification prior to placing basecourse and chipseal.
- Extent of chipseal to be agreed on site with the Engineer.
- Existing gradient of carriageway to be established and projected to edge of seal to set level of edge of road. The top of the upper gabion basket is to be a maximum of 100mm below top of seal.
- Contractor to provide As-Built Drawings and PS3 on completion of works.
- Foundations for gabions on Type 1 or Type 2 soils to be min. 150 thick site concrete. All other foundations to be either min. 150 thick site concrete or compacted AP65 + 5% cement blinding layer to form level base. All surfaces to be rough and undulating. Hand form 50 wide shallow drainage channels in surface to fall at 2% toward downslope side at 2m c/c spacing extending under gabion basket.

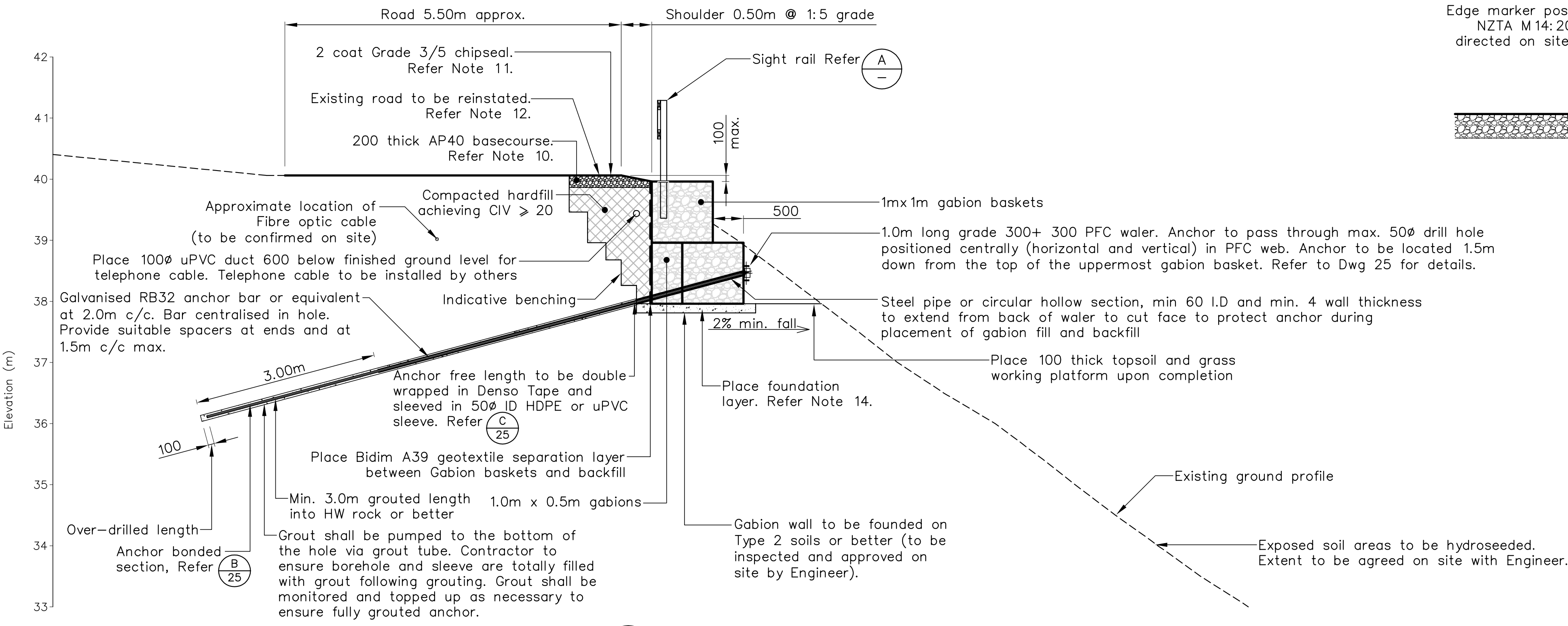


SECTION 1 1M HIGH WALL  
SCALE 1:50

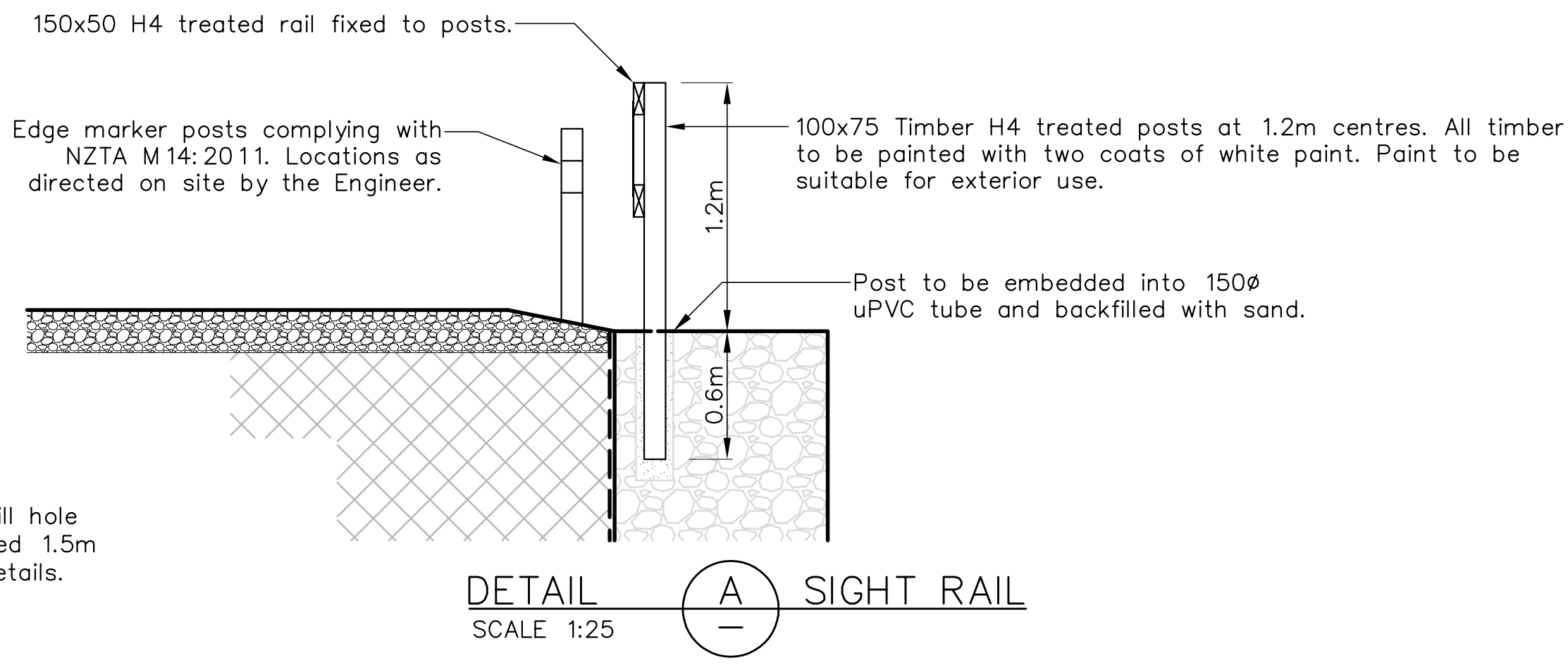
Table 1: Anchor Specifications

Depth of Anchor below top of gabion	1.5m
Bar size	Galvanised RB25
Free length	max. of 3.0m and 1m into HW rock
Bonded length	3.0m
Inclination	15°
Min. hole Diameter	100mm
Static working load	70kN
Seismic load	100kN

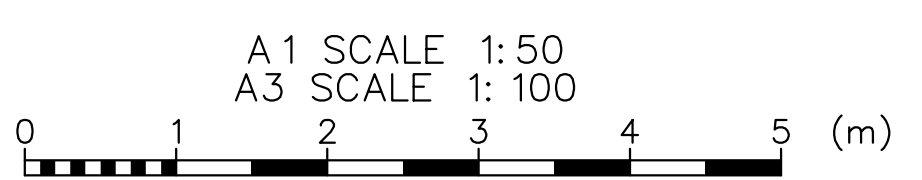
NOTE: Anchors to be tested in accordance with the specification



SECTION 2 2M HIGH WALL  
SCALE 1:50



DETAIL A SIGHT RAIL  
SCALE 1:25



<p>Nelson City Council te kaunihera o whakatū</p> <p>NETWORK SERVICES DEPARTMENT</p>	<p>APPROVED</p> <p>EXECUTIVE MANAGER NETWORK SERVICES</p>
	<p>DATE 15/4/2013</p>
<p>NCC Plan No. 19-0076</p>	

**DRAWING STATUS: TENDER ISSUE**

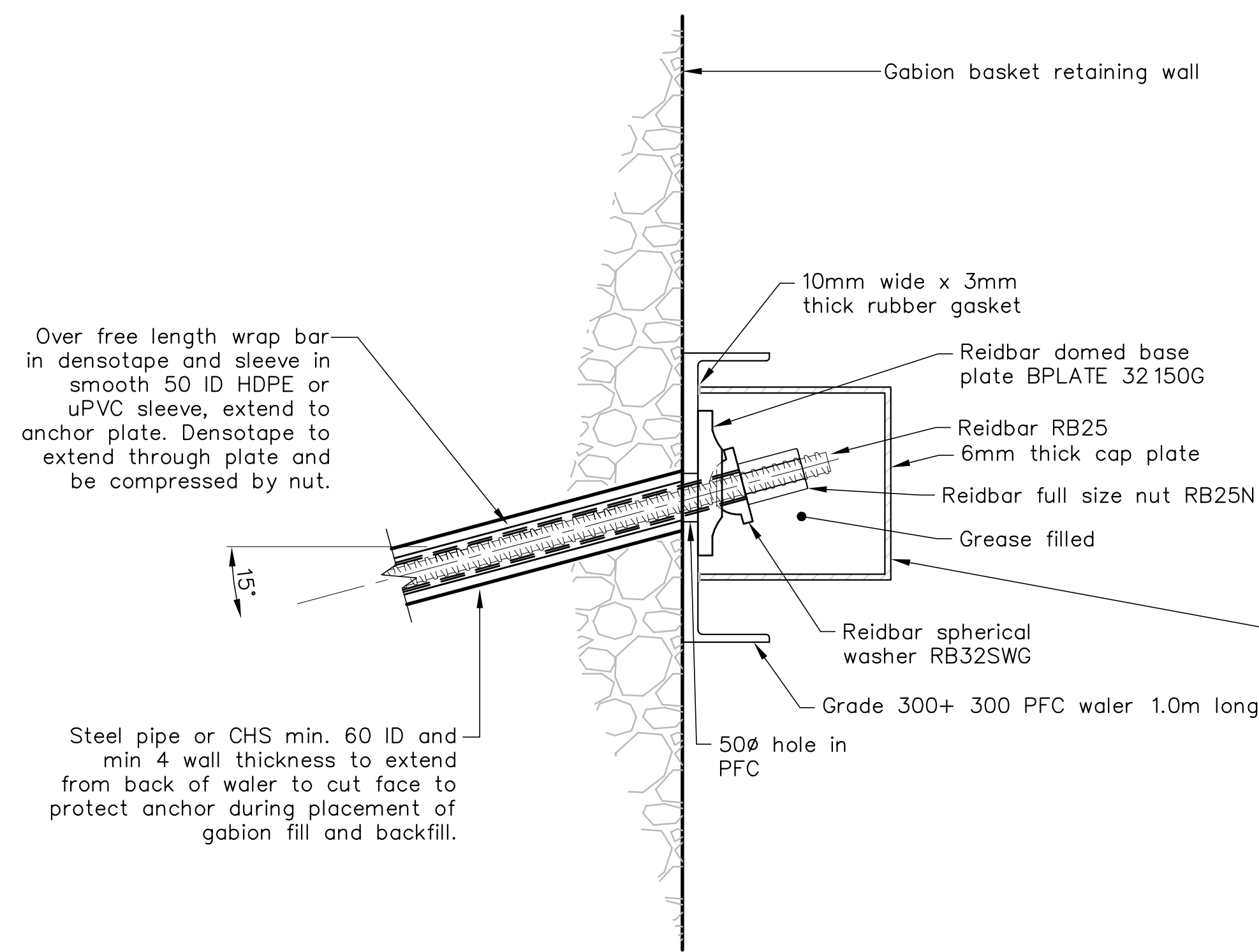
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DRAWN :	DWM	Jul. 12
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CADFILE :	\\870982.1010-20_21.dwg	
APPROVED :	<b>NOT FOR CONSTRUCTION</b>	
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1 Consultation Issue	MPD	Nov. 12

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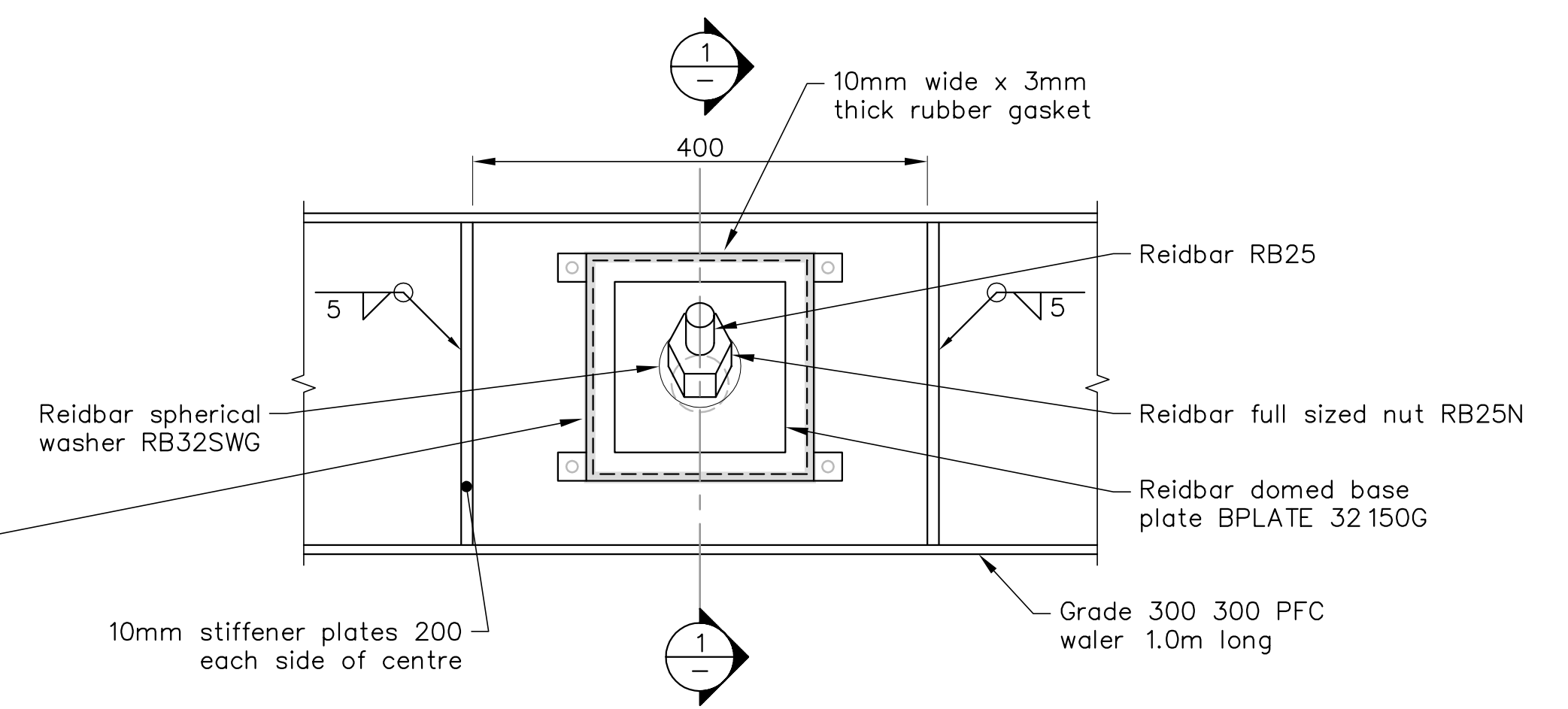
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CLIENT, PROJECT	NELSON CITY COUNCIL CABLE BAY ROAD REMEDIATION	
TITLE	RETAINING WALL DESIGN - SITE 10	
Section	AS SHOWN	
SCALES (AT A1 SIZE)	DWG. No.	REV.
870982.1010-20	870982.1010-20	A

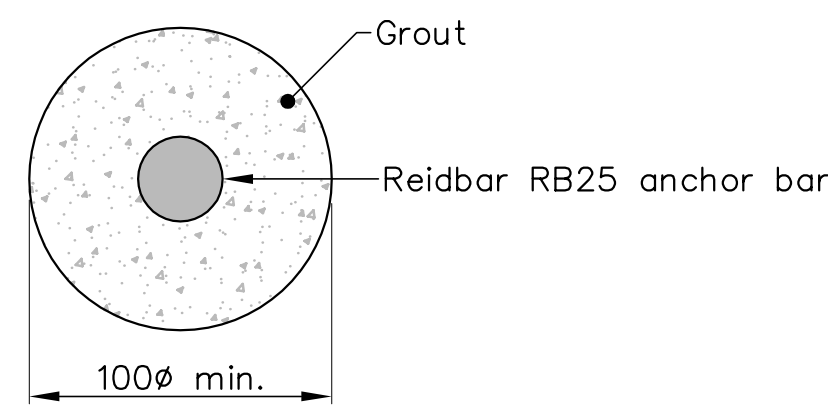




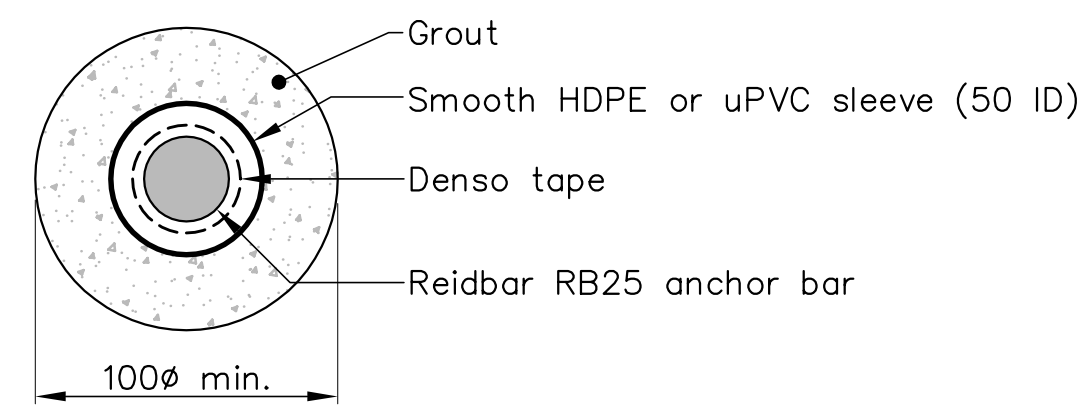
SECTION 1 ANCHOR HEAD DETAIL  
SCALE 1:5



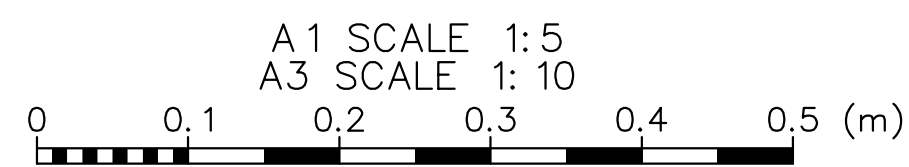
DETAIL A ANCHOR HEAD DETAIL  
SCALE 1:5



DETAIL B ANCHOR BONDED LENGTH  
SCALE 1:NTS



DETAIL C ANCHOR FREE LENGTH  
SCALE 1:NTS



NOTES CONTINUED:  
7. All steel work to be hot dip galvanised H.D.G 600 or materials sprayed with TSZ 150 including drill hole surface areas.  
8. All dimensions are in millimetres unless stated otherwise.

NOTES:  
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6. Property boundaries, services location and culvert location supplied by DOP Ltd.  
REFERENCE : LiDAR contours and aerial photos supplied by NCC.

<p>Nelson City Council te kaunihera o whakatū</p> <p>NETWORK SERVICES DEPARTMENT</p>	<p>APPROVED</p> <p>EXECUTIVE MANAGER NETWORK SERVICES</p>
	<p>DATE: 15/4/2013</p>
<p>NCC Plan No. 19-0076</p>	

DRAWING STATUS: TENDER ISSUE

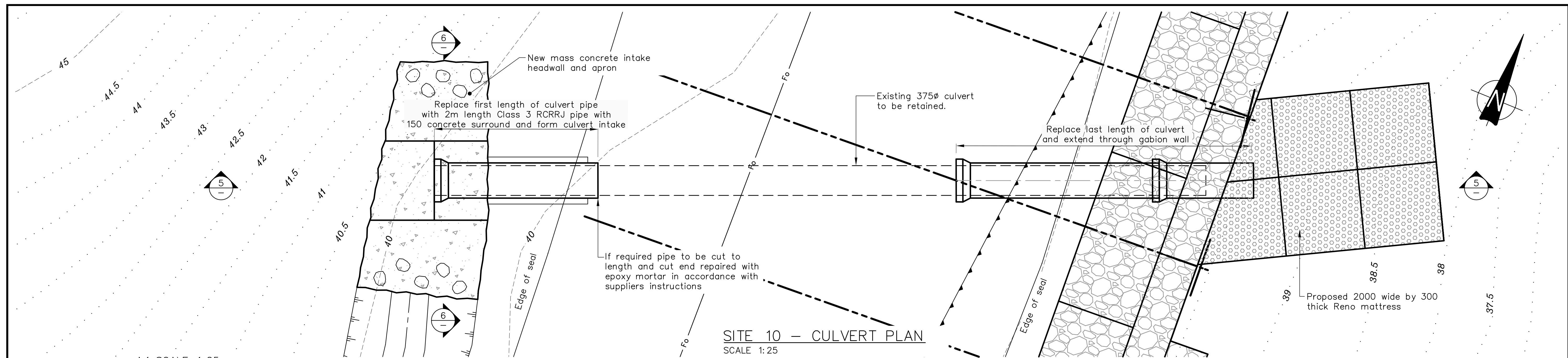
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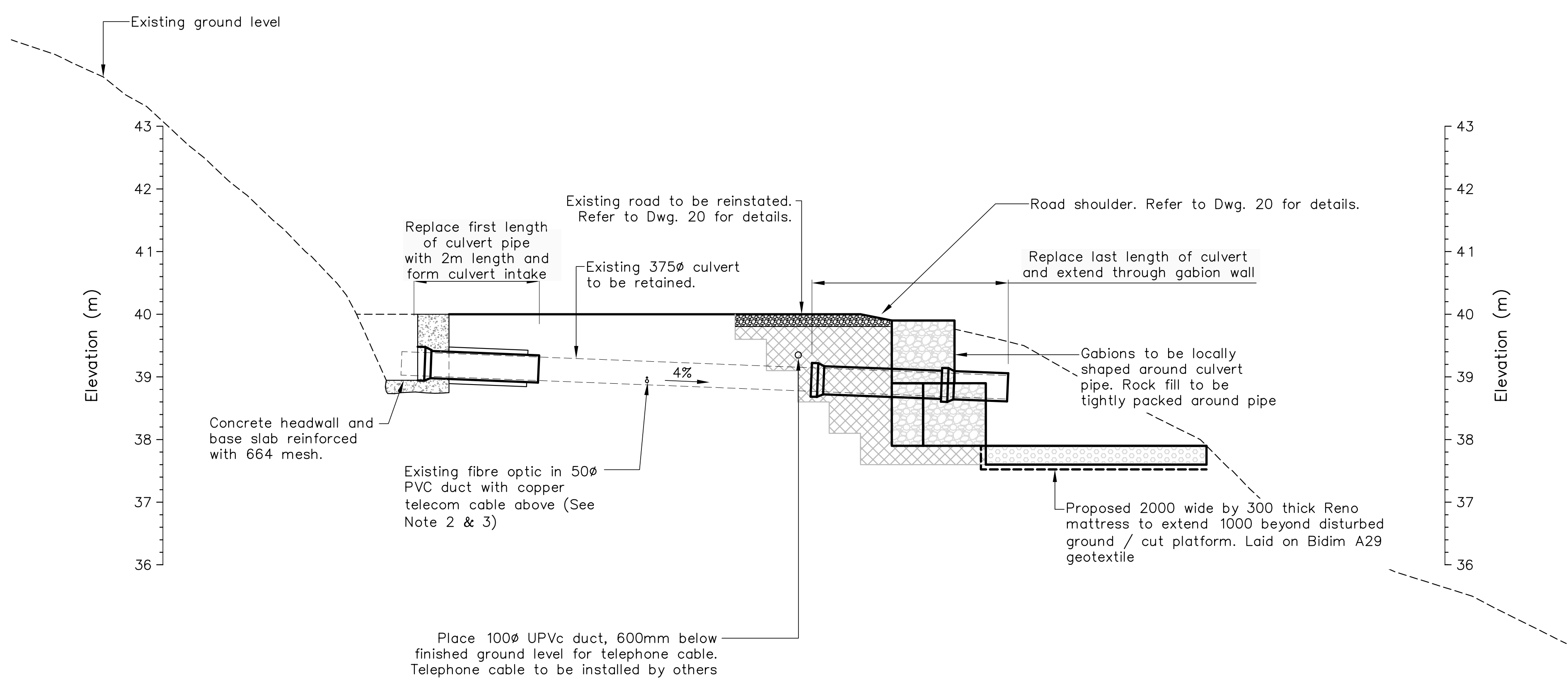
CLIENT, PROJECT	NELSON CITY COUNCIL CABLE BAY ROAD REMEDIATION	
TITLE	RETAINING WALL DESIGN - SITE 10 Anchor Head Detail	
SCALES (AT A1 SIZE)	DWG. No.	REV.
AS SHOWN	870982.1010-25	A

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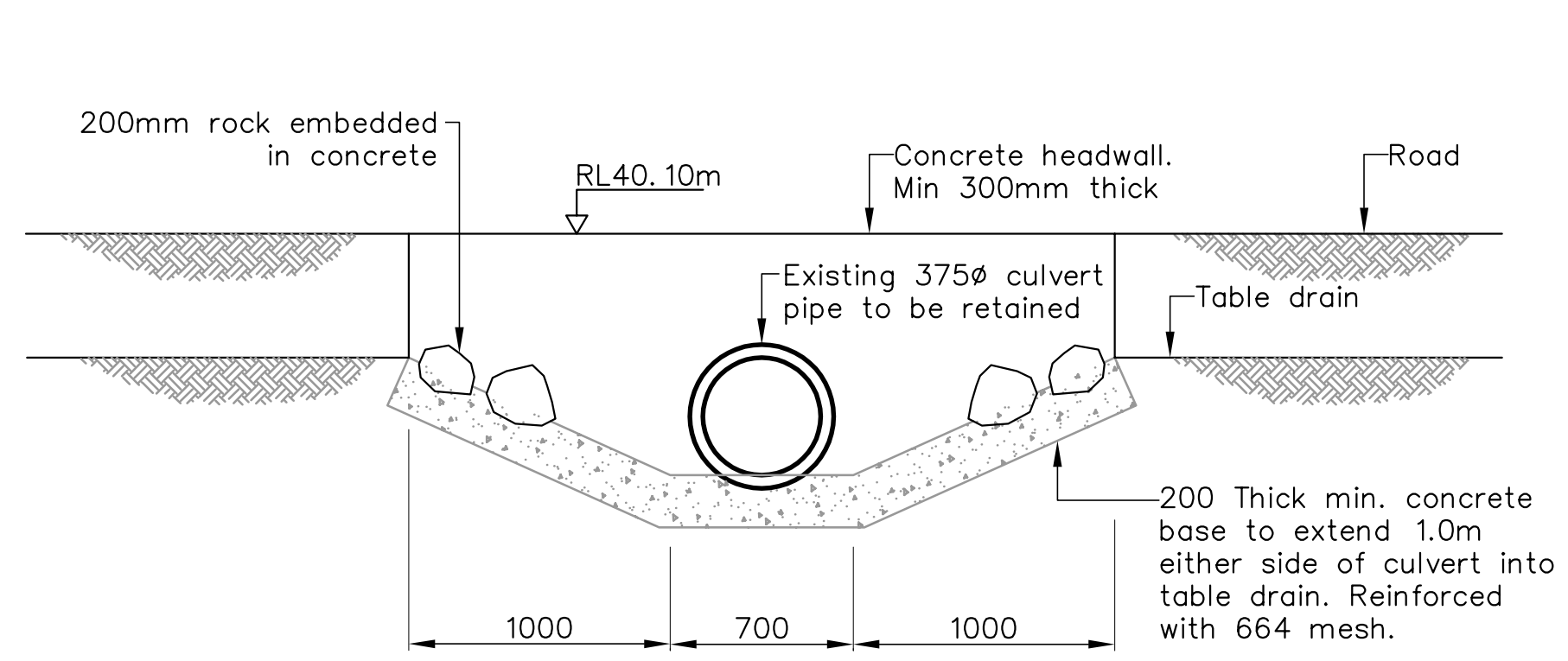
A1 SCALE 1:25  
A3 SCALE 1:50

**SITE 10 – CULVERT PLAN**  
SCALE 1:25



**SECTION 5**  
SCALE 1:50

A1 SCALE 1:50  
A3 SCALE 1:100



**SECTION 6**  
SCALE 1:25

<p><b>Nelson City Council</b> te kaunihera o whakatū</p> <p>NETWORK SERVICES DEPARTMENT</p>	<p>APPROVED</p> <p>EXECUTIVE MANAGER NETWORK SERVICES</p>
	<p>DATE: 15/4/2013</p>
<p><b>NCC Plan No. 19-0076</b></p>	

**DRAWING STATUS: TENDER ISSUE**

DESIGNED :	NML	Oct. 12
DRAWN :	JATG	Oct. 12
DESIGN CHECKED :		
DRAFTING CHECKED :		
CADFILE :	\\870982.1010-30.dwg	
APPROVED :	<b>NOT FOR CONSTRUCTION</b>	
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REVISION DESCRIPTION	BY	DATE
1 Consultation Issue	MPD	Nov. 12

NOTES :

- All dimensions are in millimetres unless noted otherwise.
- Services and service locations shown on this plan are indicative only. Other services may be present but not shown on this plan. The Contractor shall be responsible for notifying, locating, protecting and relocating all services on the site.
- Prior to commencing any excavation work the Contractor shall provide a method statement detailing their proposed method of construction to ensure the fibre optic cable is to be protected at all times. The method statement is to be approved by the Engineer and Transfield prior to commencement of work on the site.

REFERENCE :

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CLIENT, PROJECT	<b>NELSON CITY COUNCIL</b>	
	CABLE BAY ROAD REMEDIATION	
TITLE	CULVERT UPGRADE DESIGN – SITE 10	
	Culvert – Section and Detail	
SCALES (AT A1 SIZE)	DWG. No.	REV.
AS SHOWN	870982.1010-30	A

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