

NELSON CITY COUNCIL

Cable Bay Road Remediation, Contract No: EC 3424

Tender Issue

DRAWING Rev Title

GENERAL INFORMATION - SITE 11

- 870982.1011-00 A Location Plan and Drawing List
- 870982.1011-01 A Existing Site and Site Investigation Plan
- 870982.1011-02 A Working Areas & Erosion Sediment Control Plan

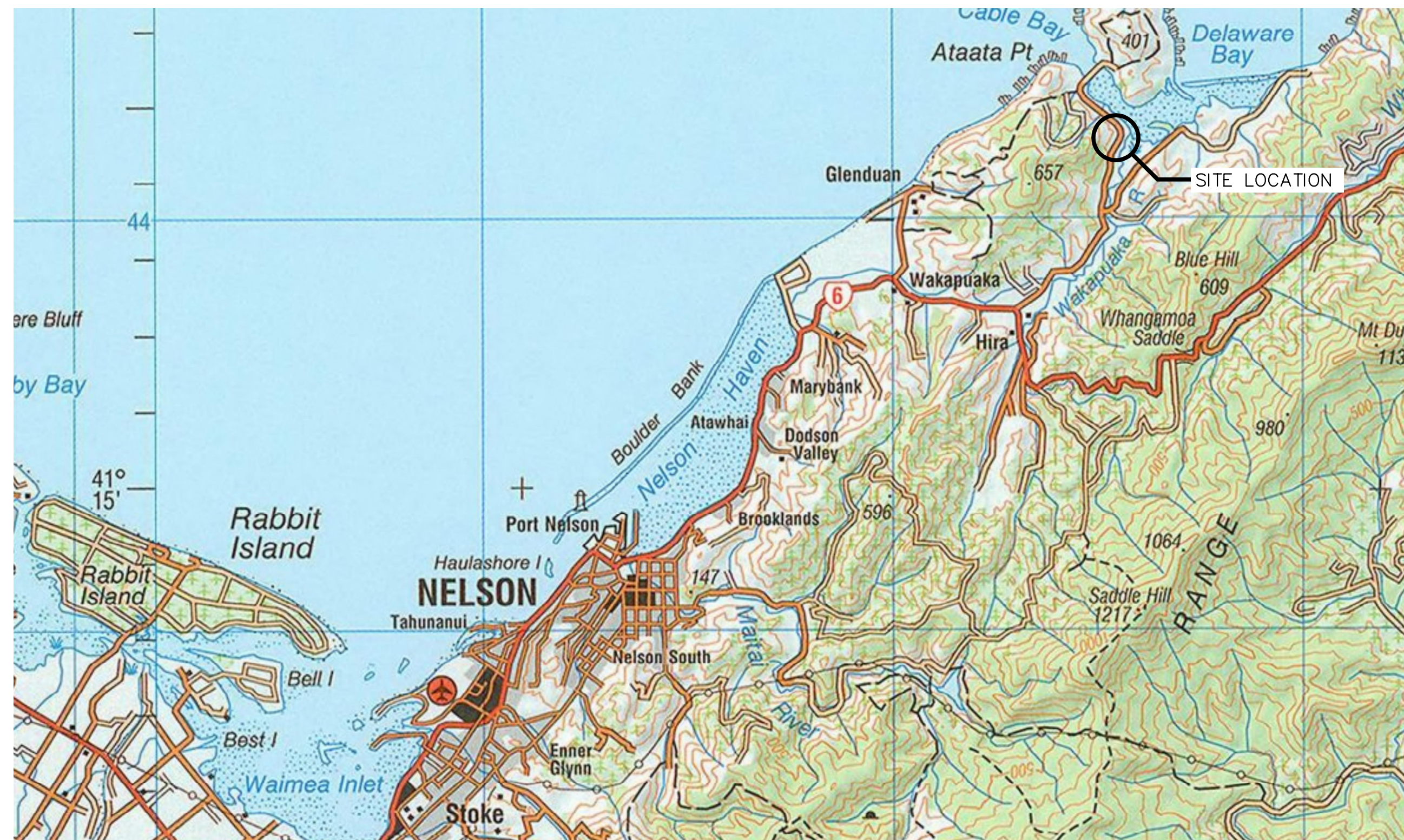
RETAINING WALL DESIGN - SITE 11

- 870982.1011-10 A General Arrangement
- 870982.1011-20 A Typical Section
- 870982.1011-21 A Front Elevation
- 870982.1011-30 A Timber Pole Anchor Details
- 870982.1011-40 A Anchor and Waler Details

CULVERT UPGRADE DESIGN - SITE 11

- 870982.1011-50 A Culvert - Section and Detail

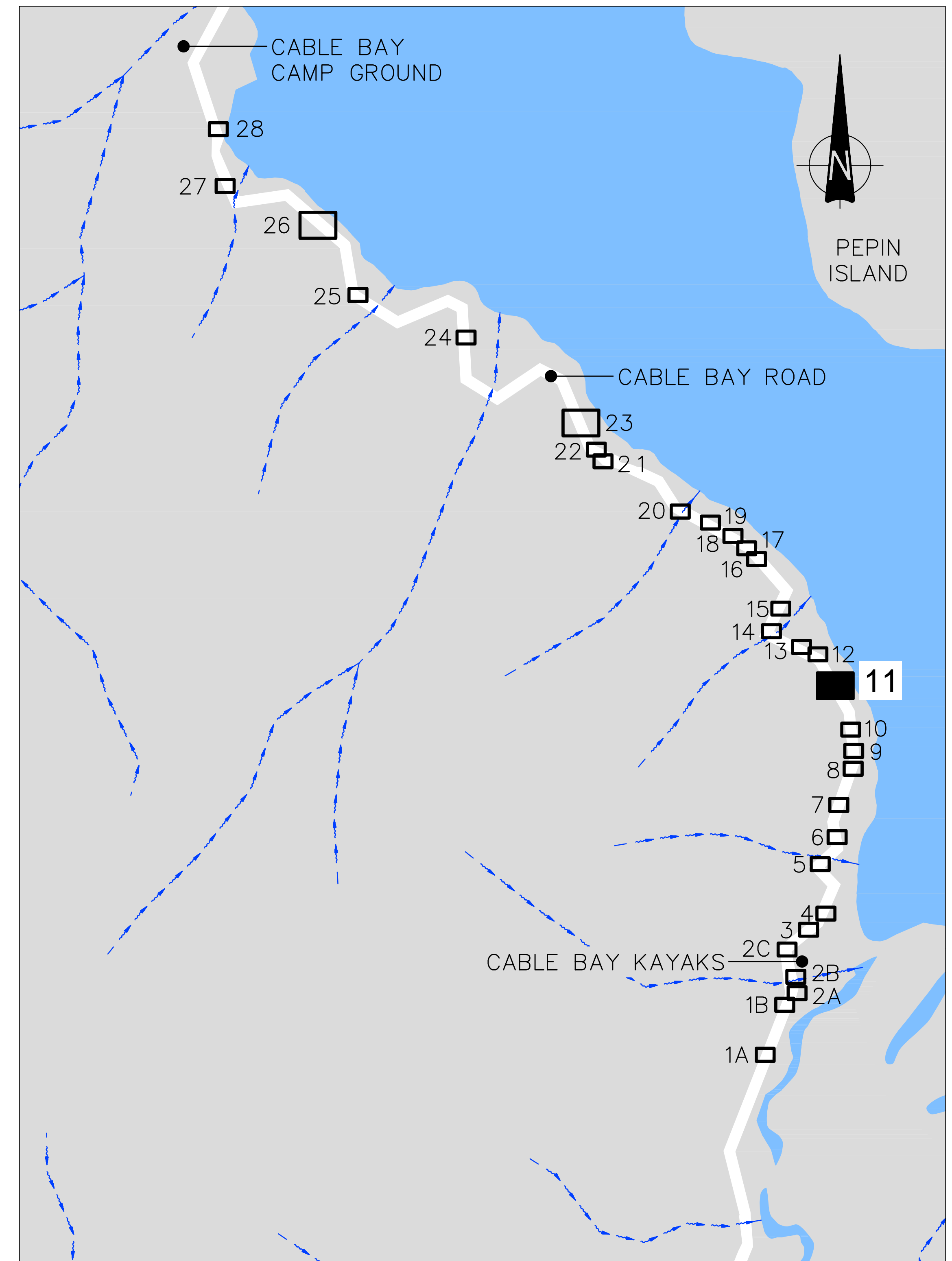
• Denotes drawing this issue: 08/05/2013



Topomap sourced from Land Information New Zealand data (Crown Copyright Reserved).

LOCALITY MAP

SCALE 1: 100,000



SITE LOCATION PLAN

SCALE 1:5,000

<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

DESIGNED :	DJA	Jul. 12	NOTES :
DRAWN :	DWM	Jan. 13	
DESIGN CHECKED :			
DRAFTING CHECKED :			
CADFILE :	\\870982.1011-00.dwg		
APPROVED :			REFERENCE :
<p>NOT FOR CONSTRUCTION</p> <p>This drawing is not to be used for construction purposes unless signed as approved</p> <p>COPYRIGHT ON THIS DRAWING IS RESERVED</p>			
REVISION DESCRIPTION	BY	DATE	
1 Consultation Issue	MPD	Nov. 12	

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Environmental and Engineering Consultants

43 Halifax St, Nelson
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CLIENT, PROJECT	NELSON CITY COUNCIL	
TITLE	CABLE BAY ROAD REMEDIATION	
TITLE	GENERAL INFORMATION - SITE 11	
TITLE	Location Plan and Drawing List	
SCALES (AT 1/4 SIZE)	DWG. No.	REV.
AS SHOWN	870982.1011-00	A



Nelson City Council
te kaunihera o whakatū

APPROVED

EXECUTIVE MANAGER
NETWORK SERVICES

DATE: 15/4/2013

NCC Plan No. 19-0076

DRAWING STATUS: TENDER ISSUE

DESIGNED :	MPD	Oct. 12
DRAWN :	DWM	Jan. 13
DESIGN CHECKED :		
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CADFILE :	\\870982.1011-01.dwg	
APPROVED :	NOT FOR CONSTRUCTION	
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REVISION DESCRIPTION	BY	DATE
1 Consultation Issue	MPD	Nov. 12

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.

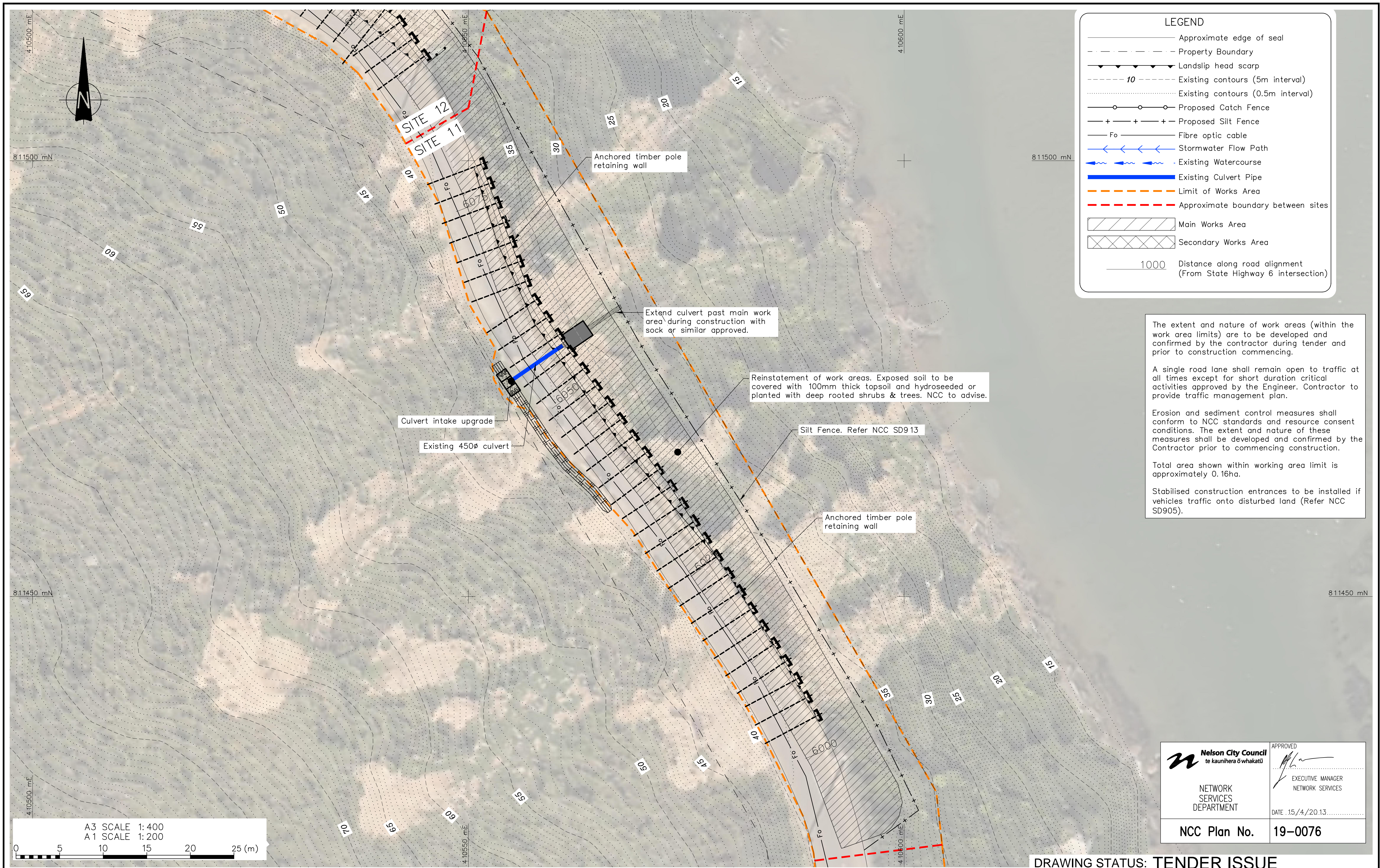
REFERENCE : LIDAR contours and aerial photos supplied by NCC.

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CLIENT, PROJECT	NELSON CITY COUNCIL CABLE BAY ROAD REMEDIATION	
TITLE	GENERAL INFORMATION - SITE 11 Existing Site and Site Investigation Plan	
SCALES (AT A1 SIZE)	DWG. No.	REV.
1:200	870982.1011-01	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)
- 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 0.16ha.

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

A3 SCALE 1: 400
A1 SCALE 1: 200

0 5 10 15 20 25 (m)

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DATE 15/4/2013

NCC Plan No. 19-0076

DRAWING STATUS: TENDER ISSUE

DESIGNED :	MPD	Nov. 12
DRAWN :	DJAA	Jan. 13
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DRAFTING CHECKED :		
CADFILE :	\\870982.1011-02.dwg	
APPROVED :	NOT FOR CONSTRUCTION	
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REVISION DESCRIPTION	BY	DATE
1 Consultation Issue	MRF	Nov. 12

NOTES :

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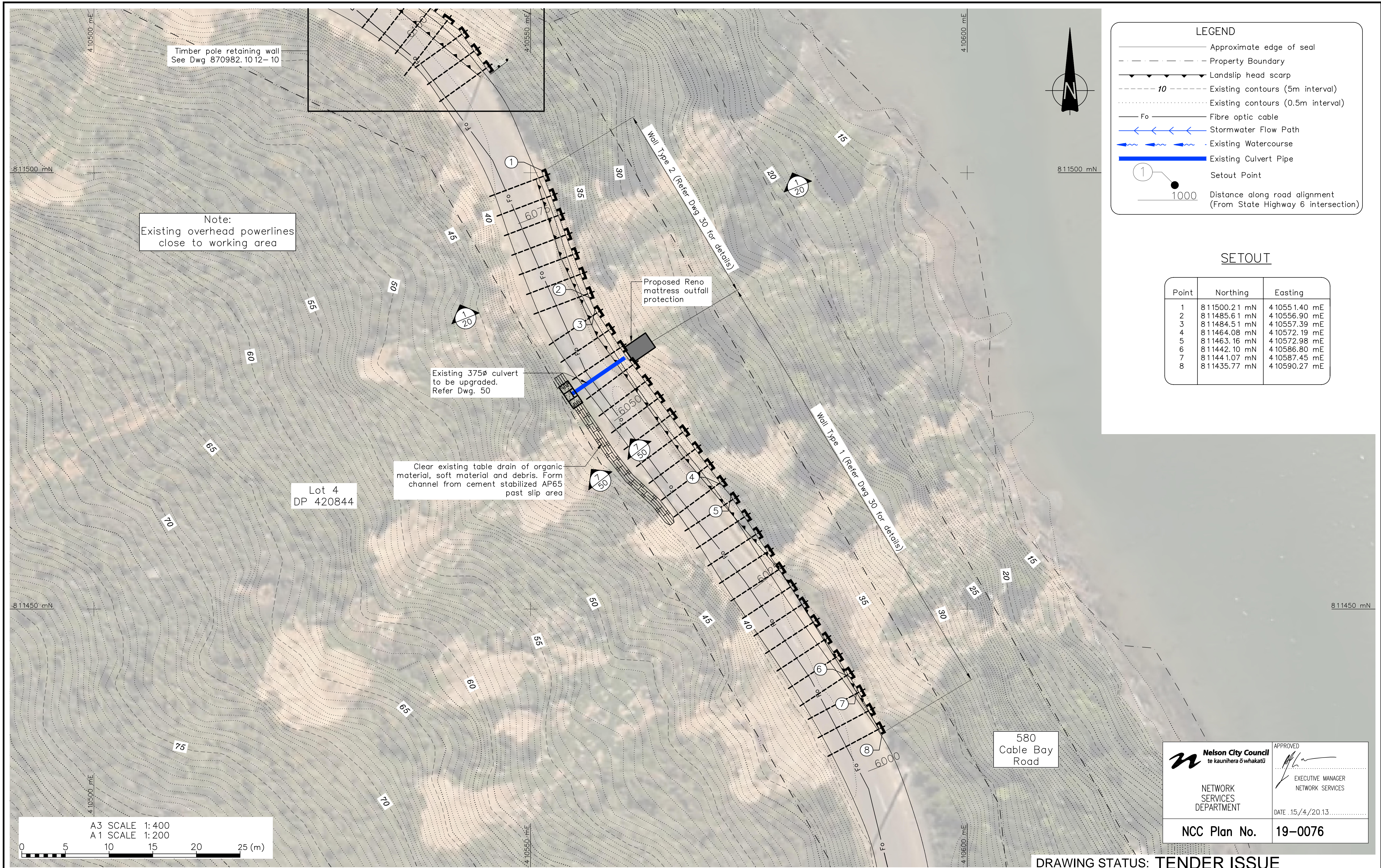
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CLIENT, PROJECT	NELSON CITY COUNCIL	
	CABLE BAY ROAD REMEDIATION	
TITLE	GENERAL INFORMATION - SITE 11	
	Working Areas & Erosion Sediment Control Plan	
SCALES (AT A1 SIZE)	DWG. No.	REV.
1: 200	870982.1011-02	A

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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	8 11500.21 mN	4 10551.40 mE
2	8 11485.61 mN	4 10556.90 mE
3	8 11484.51 mN	4 10557.39 mE
4	8 11464.08 mN	4 10572.19 mE
5	8 11463.16 mN	4 10572.98 mE
6	8 11442.10 mN	4 10586.80 mE
7	8 11441.07 mN	4 10587.45 mE
8	8 11435.77 mN	4 10590.27 mE

Nelson City Council
te kaunihera o whakatū

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EXECUTIVE MANAGER
NETWORK SERVICES

DATE: 15/4/2013

NCC Plan No. 19-0076

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DESIGNED :	DJA	Jan. 13
DRAWN :	DWM	Jan. 13
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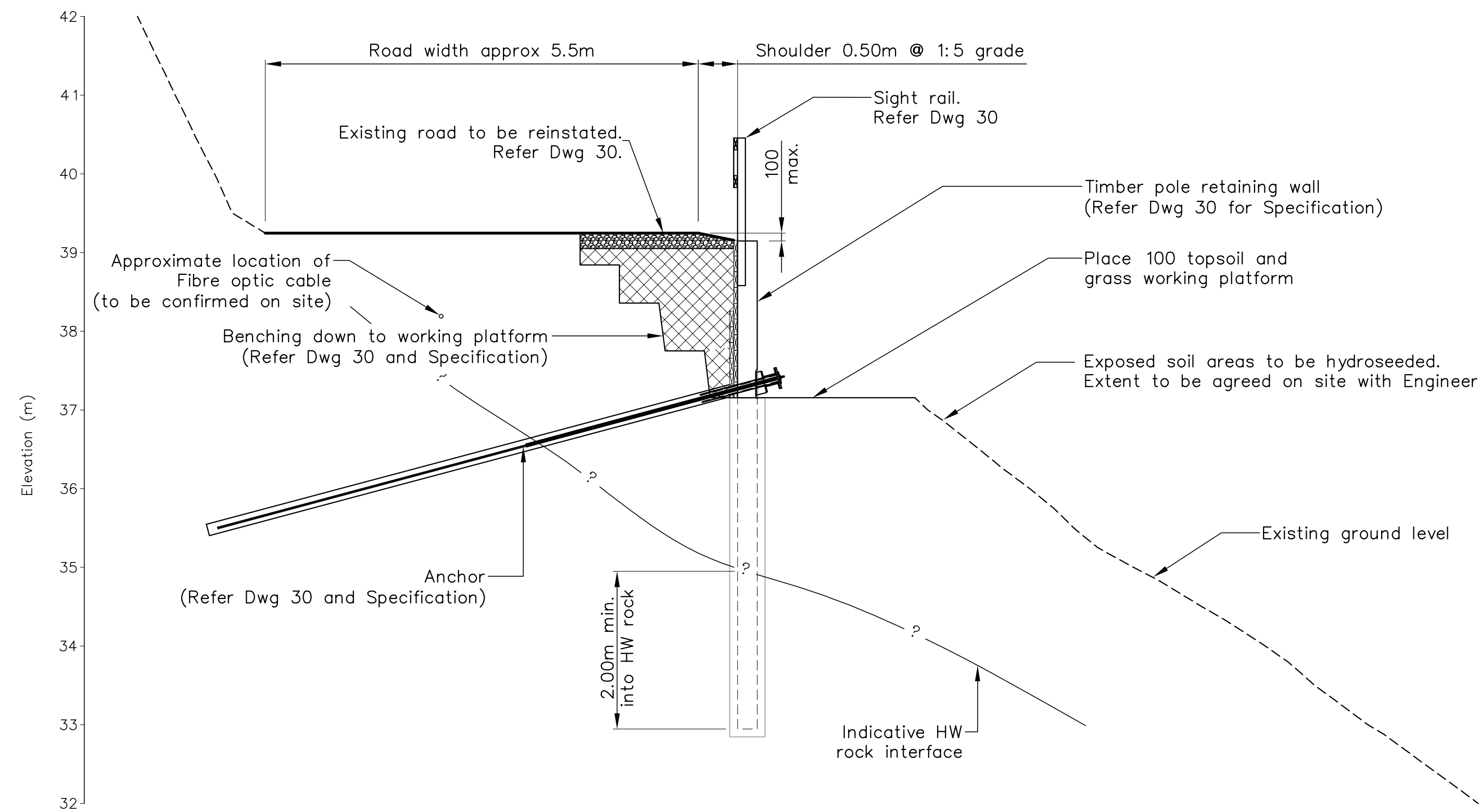
REFERENCE : LiDAR contours and aerial photos supplied by NCC.

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CLIENT, PROJECT	NELSON CITY COUNCIL	
TITLE	CABLE BAY ROAD REMEDIATION	
TITLE	RETAINING WALL DESIGN – SITE 11	
TITLE	General Arrangement	
SCALES (AT A1 SIZE)	DWG. No.	REV.
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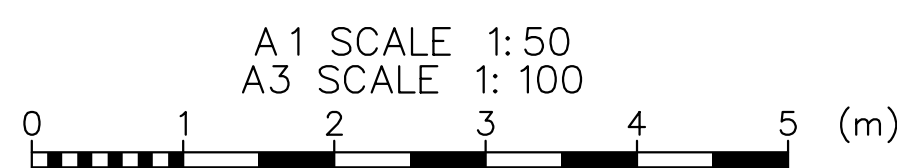
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SECTION 1 ANCHORED TIMBER POLE WALL
SCALE 1:50

NOTES (cont):

7. No soil to be stockpiled on site during periods of wet weather
8. No soil to be stockpiled overnight on slopes steeper than 2H: 1V
9. Pile embedment to be confirmed on site by the Engineer
10. The termination of the retaining structures to be agreed with Engineer on site prior to construction



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

DRAWING STATUS: TENDER ISSUE

DESIGNED :	DJA	Jul. 12
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APPROVED :	NOT FOR CONSTRUCTION	
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REVISION DESCRIPTION	BY	DATE
1 Consultation Issue	MPD	Nov. 12

NOTES :

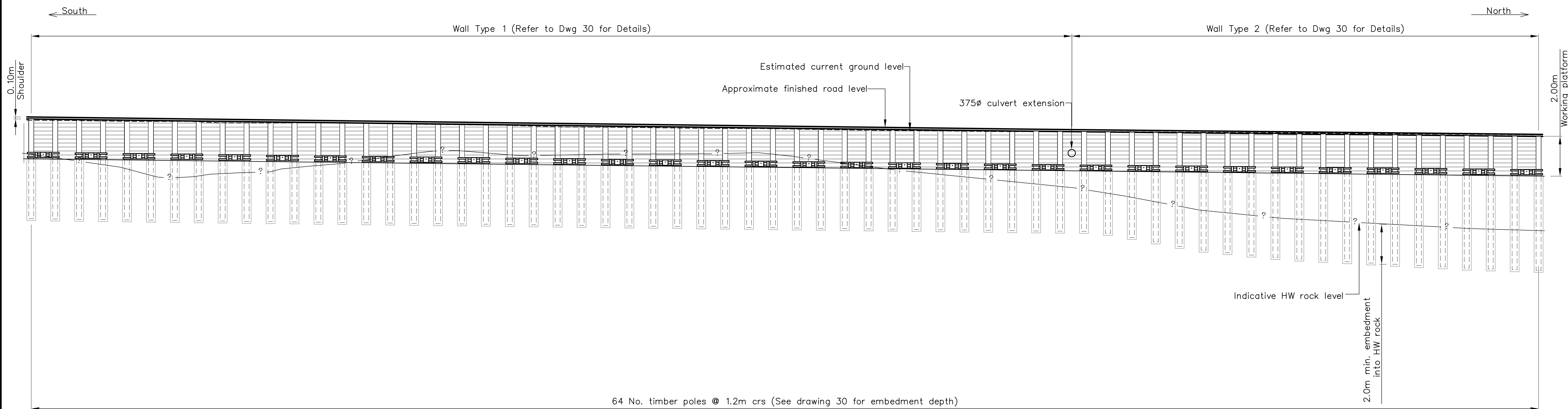
1. All dimensions are in millimetres unless noted otherwise
2. Contractor to set out wall as per coordinates shown on sheet 10, Engineer and Client to verify wall location prior to commencement of augering of pole holes.
3. All cut faces of poles and lagging shall be coated with two layers of Enselve preservative paint or Engineer-approved similar.
4. Contractor is fully responsible for the location of all services prior to commencement of works.
5. Contractor to provide As-Built Drawings and PS3 on completion of works.
6. All works are to be inspected and approved by the Engineer

REFERENCE :

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CLIENT, PROJECT	NELSON CITY COUNCIL CABLE BAY ROAD REMEDIATION	
TITLE	RETAINING WALL DESIGN – SITE 11 Typical Section	
SCALES (AT A1 SIZE)	1:50	DWG. No. 870982.1011-20
REV.	A	

NOTE :
Extent of Wall Type 1 and Wall Type 2 to be confirmed on site following confirmation of rock level.



64 No. timber poles @ 1.2m crs (See drawing 30 for embedment depth)

SITE 11 – FRONT ELEVATION
SCALE 1: 100

NOTES (cont):

7. No soil to be stockpiled on site during periods of wet weather
8. No soil to be stockpiled overnight on slopes steeper than 2H: 1V
9. Pile embedment to be confirmed on site by the Engineer
10. The termination of the retaining structures to be agreed with Engineer on site prior to construction

A3 SCALE 1:200
A1 SCALE 1: 100



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

DRAWING STATUS: TENDER ISSUE

DESIGNED :	DJA	Jan. 13
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APPROVED :	NOT FOR CONSTRUCTION	
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REVISION DESCRIPTION	BY	DATE
1 Consultation Issue	MPD	Nov. 12

NOTES :

1. All dimensions are in millimetres unless noted otherwise
2. Contractor to set out wall as per coordinates shown on sheet 10, Engineer and Client to verify wall location prior to commencement of augering of pole holes.
3. All cut faces of poles and lagging shall be coated with two layers of Enselve preservative paint or Engineer-approved similar.
4. Contractor is fully responsible for the location of all services prior to commencement of works.
5. Contractor to provide As-Built Drawings and PS3 on completion of works.
6. All works are to be inspected and approved by the Engineer

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CLIENT, PROJECT	NELSON CITY COUNCIL	
TITLE	CABLE BAY ROAD REMEDIATION	
	RETAINING WALL DESIGN – SITE 11	
	Front Elevation	
SCALES (AT A1 SIZE)	DWG. No.	REV.
1: 100	870982.1011-21	A

Min. pole diameter	250 SED (Wall Type 1) 300 SED (Wall Type 2)
Min. pole spacing	1.2m c/c
Minimum Embedment into HW rock	2.0m
Max. pole length	5.5m (Wall Type 1) 7.0m (Wall Type 2)
Depth to working platform below top of poles	2.0m
Assumed depth to ground water	4.5m

Pole length to be determined by minimum embedment into HW rock or max pole length i.e Poles can be cut if minimum embedment into rock is achieved.

Depth of Anchor below top of pole	1.8m
Min. bar diameter	Galvanised RB25 (Wall Type 1) Williams Grade 75 all thread 35Ø (Wall Type 2)
Free Length	Greater of 2.0m or 0.5m into HW rock
Min. bonded Length	5.0m (Wall Type 1) 10.0m (Wall Type 2)
Inclination	15°
Min. hole Diameter	100mm (Wall Type 1) 150mm (Wall Type 2)
Static working load/Seismic load	50kN/90kN (Wall Type 1) 150kN/360kN (Wall Type 2)

Anchor free length to be double wrapped in Denso Tape and sleeved in 50Ø ID uPVC sleeve. Refer (C/40)

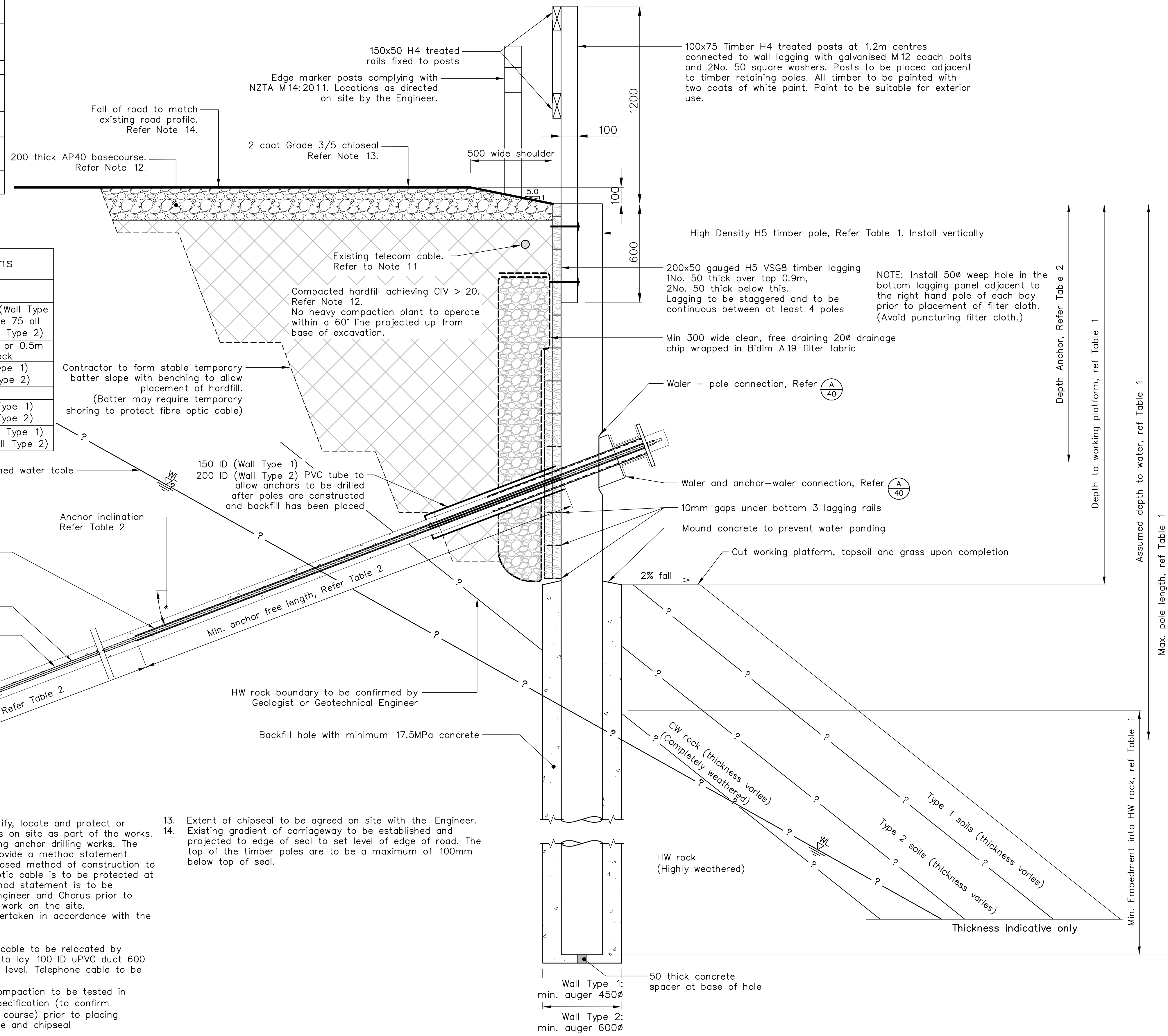
Anchor Bonded Section, Refer (B/40)

Anchor bar, Refer Table 2. Bar to be centralised in hole with proprietary centralisers at 1.5m c/c

NOTES (continued):

- Contractor to identify, locate and protect or relocate all services on site as part of the works. Prior to commencing anchor drilling works. 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 Chorus prior to commencement of work on the site.
- All work to be undertaken in accordance with the specification.
- N/A
- Existing Telephone cable to be relocated by others, Contractor to lay 100 ID uPVC duct 600 below finished road level. Telephone cable to be installed by others.
- Fill and subbase compaction to be tested in accordance with Specification (to confirm thickness of metal course) prior to placing overlying 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 timber poles are to be a maximum of 100mm below top of seal.



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<p>NCC Plan No. 19-0076</p>	

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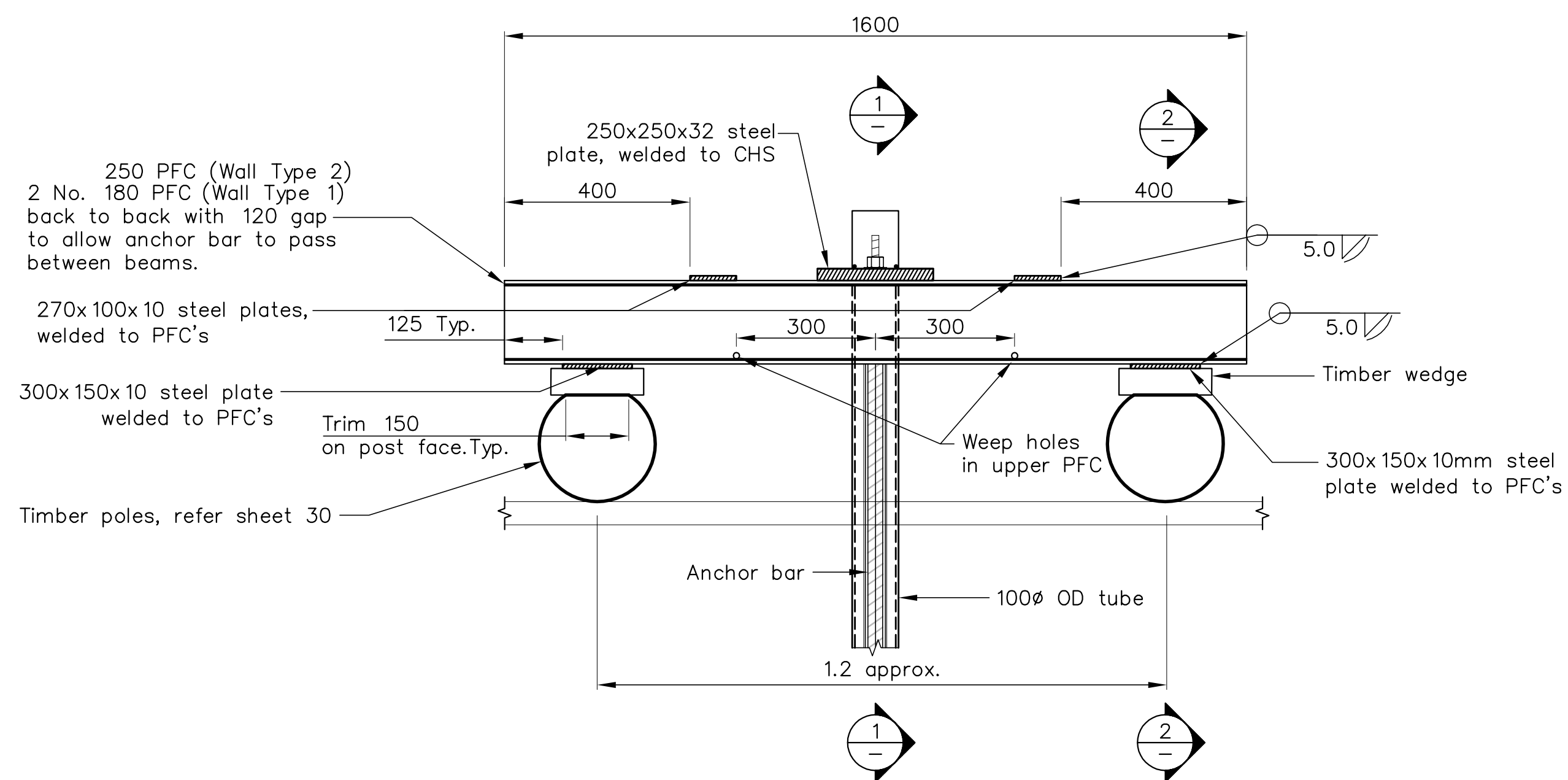
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DRAWN :	DWM	Jan. 13	
DESIGN CHECKED :			
DRAFTING CHECKED :			
CADFILE :	\\870982.1011-30.dwg		
APPROVED :	NOT FOR CONSTRUCTION		
<p>1 Consultation Issue</p>			<p>REFERENCE :</p>
REVISION DESCRIPTION	BY	DATE	

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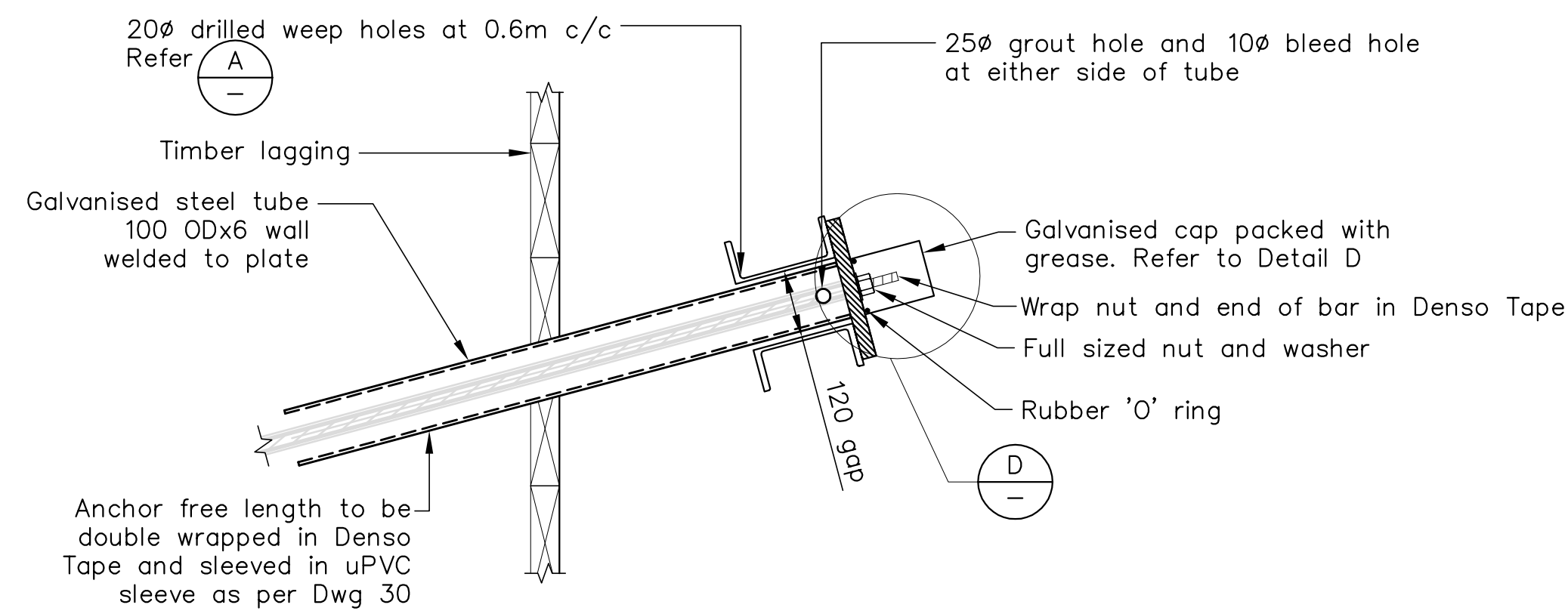
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CLIENT, PROJECT	<p>NELSON CITY COUNCIL CABLE BAY ROAD REMEDIATION</p>	
TITLE	<p>RETAINING WALL DESIGN - SITE 11 Timber Pole Anchor Details</p>	
SCALES (AT A1 SIZE)	DWG. No.	REV.
NTS	870982.1011-30	A

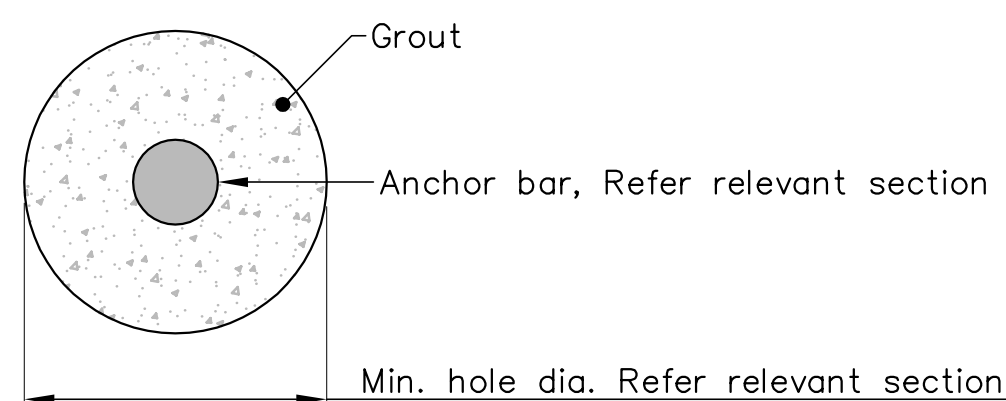
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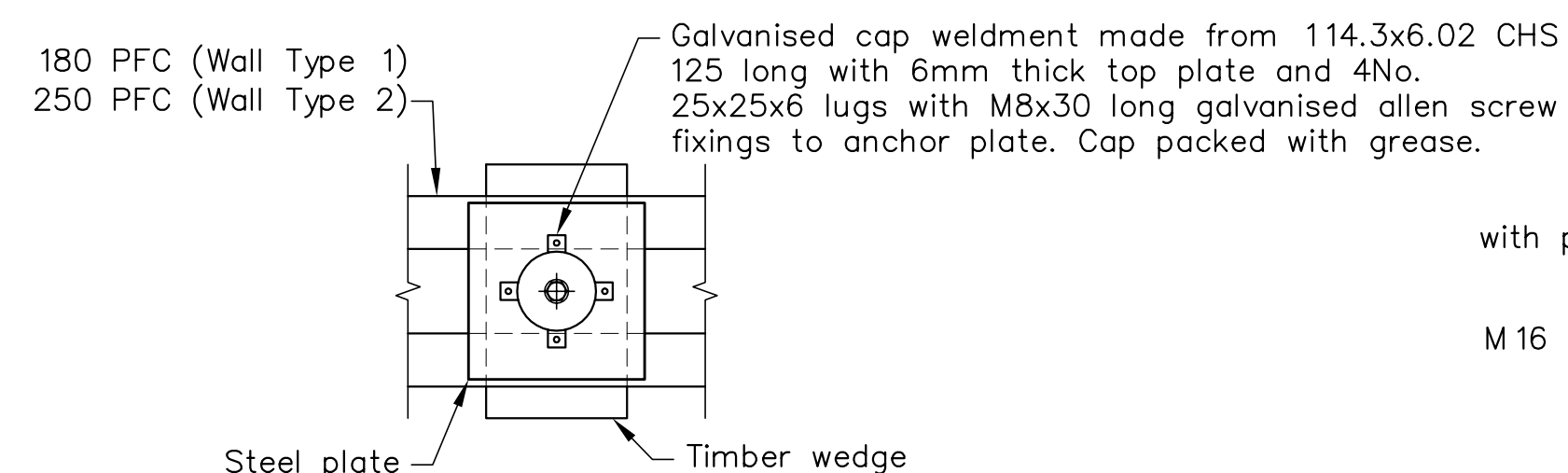
DETAIL **A** PLAN – TYPICAL BACK-TO-BACK PFC WALER
A1 SCALE 1: 10



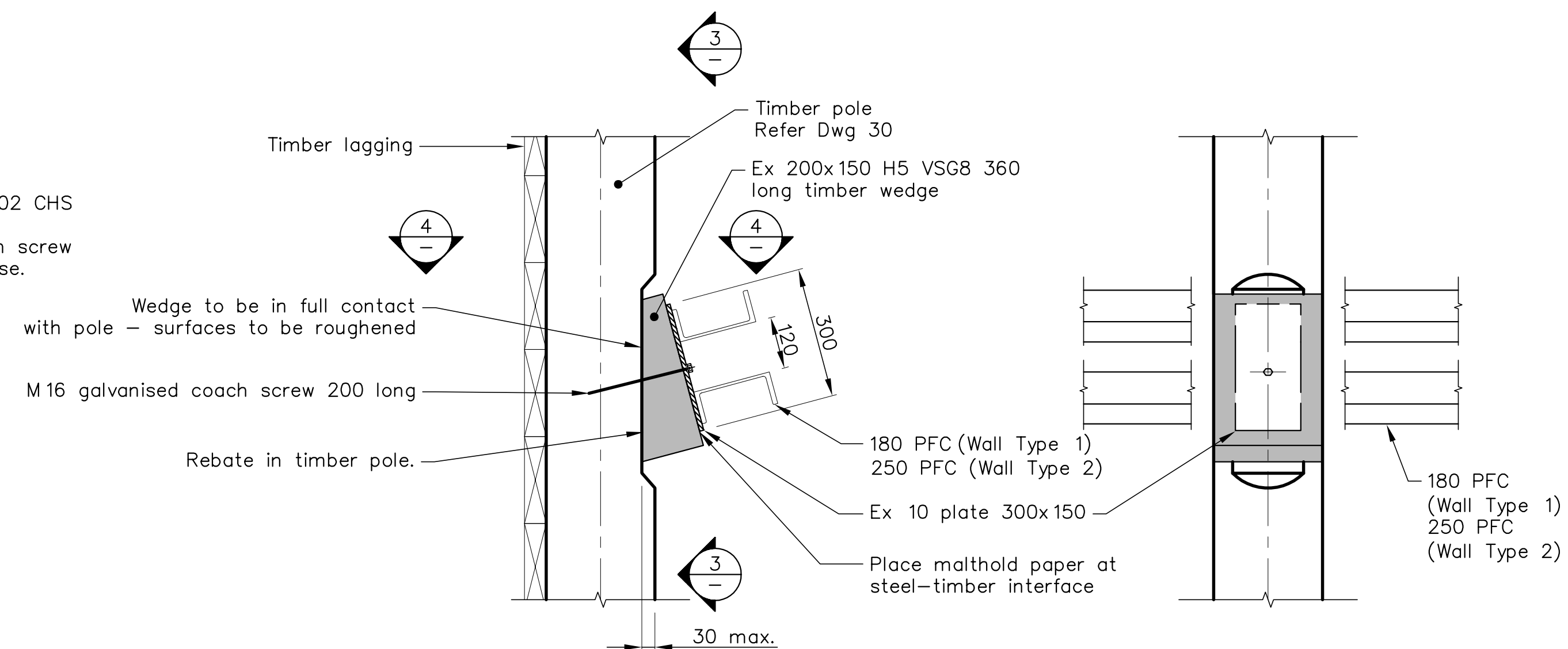
SECTION **1** WALER TO ANCHOR CONNECTION
A1 SCALE 1: 10



DETAIL **B** ANCHOR BONDED LENGTH
SCALE NTS

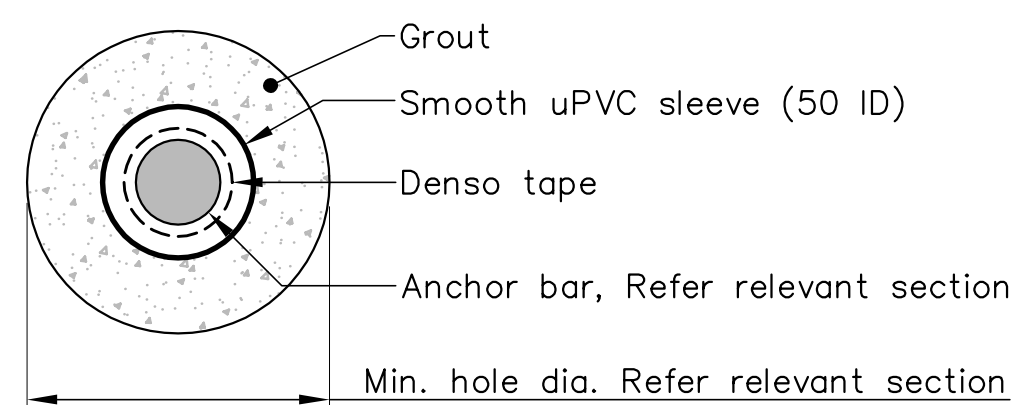


DETAIL **D** STEEL CAP
A1 SCALE 1: 10

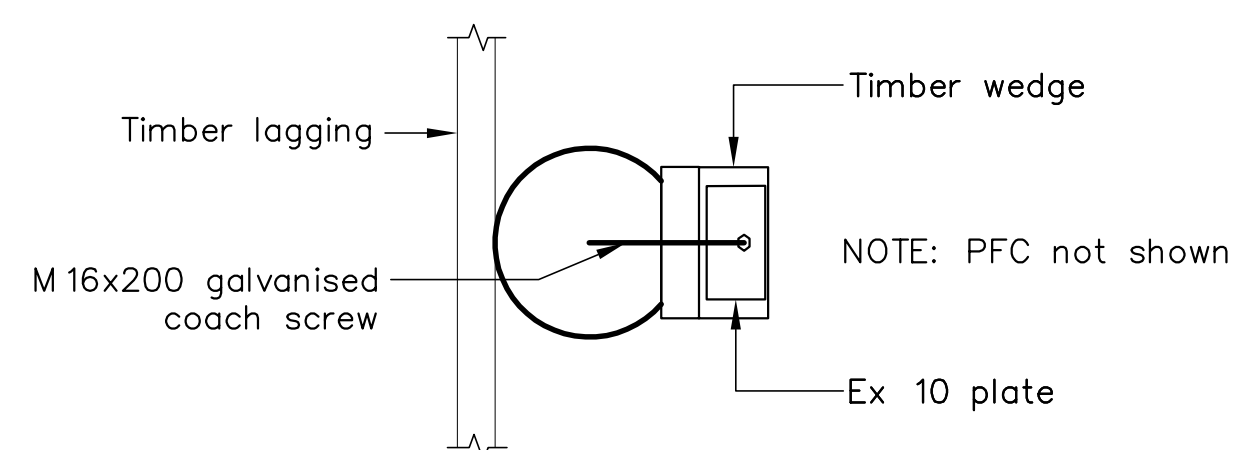


SECTION **2** WALER TO POLE CONNECTION
A1 SCALE 1: 10

SECTION **3**
A1 SCALE 1: 10



DETAIL **C** ANCHOR FREE LENGTH
SCALE NTS

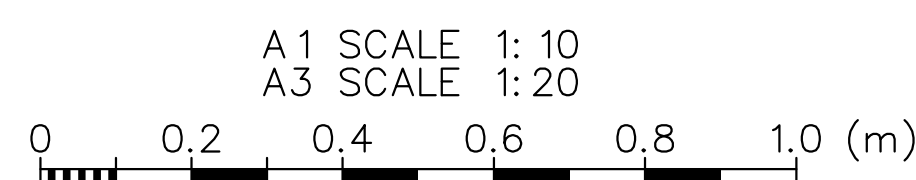


SECTION **4**
A1 SCALE 1: 10

Notes (continued)

- All cuts, scarfs or drilled surfaces in timber to be protected by applying a liberal brush application of 'ensele' or equivalent prior to assembly.
- All work to be undertaken in accordance with the specification.
- All welds shall be GP (General Purpose) fillet welds using E4 1XX electrodes. All welds shall comply with NZS470.1.
- All bolts shall be grade 8.8/5 in accordance with AS 1252.
- All structural steelwork to comply with NZS3404.
- All bolts, nuts and washers shall be hot dip galvanised. Washers shall be used at all bolted connections.
- Grout in steel tube to be cementitious grout complying with BS808 1: 1989. The grout shall have a 28 day strength of 30N/mm² and a water cement ratio of between 0.35 and 0.45.

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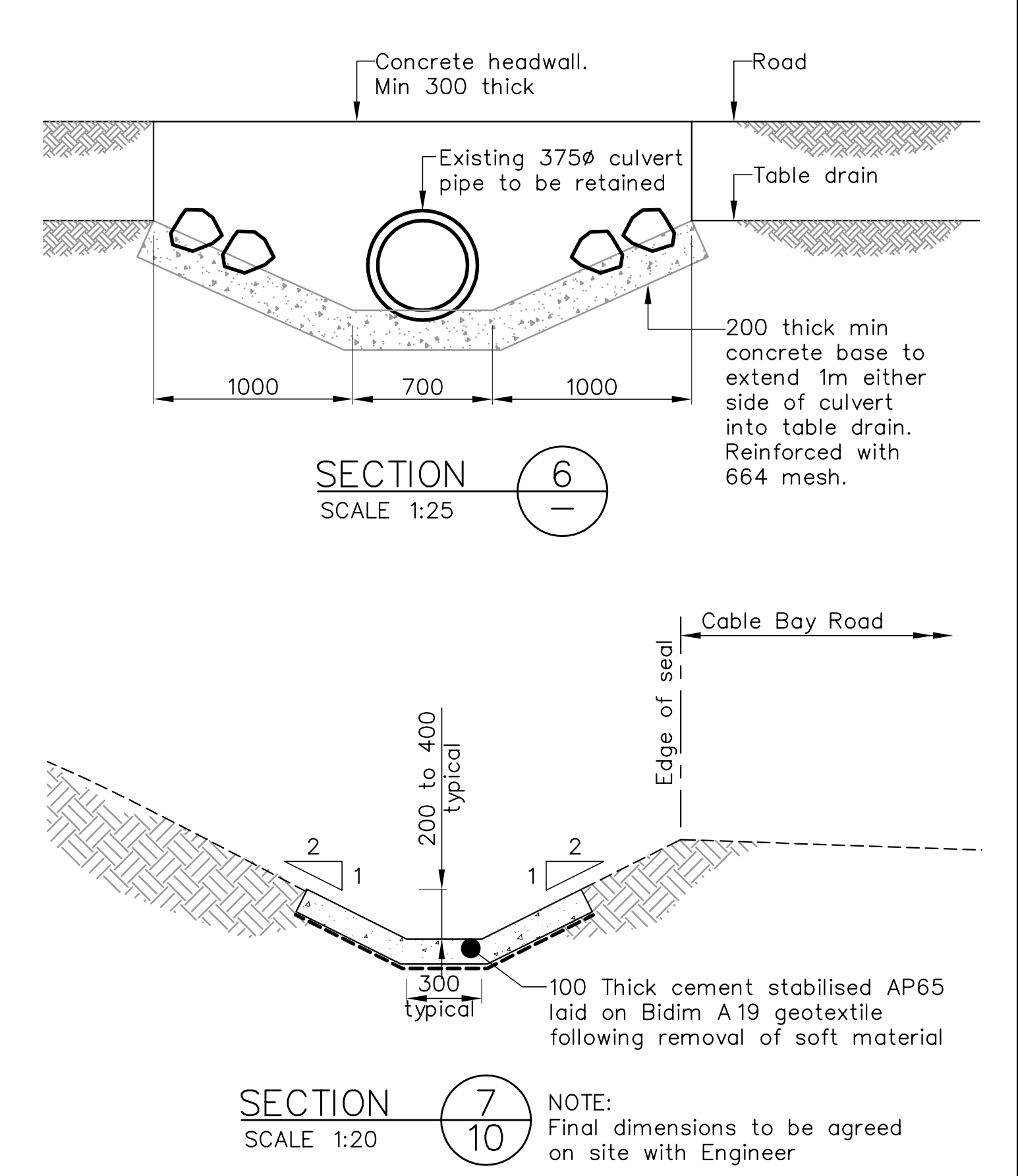
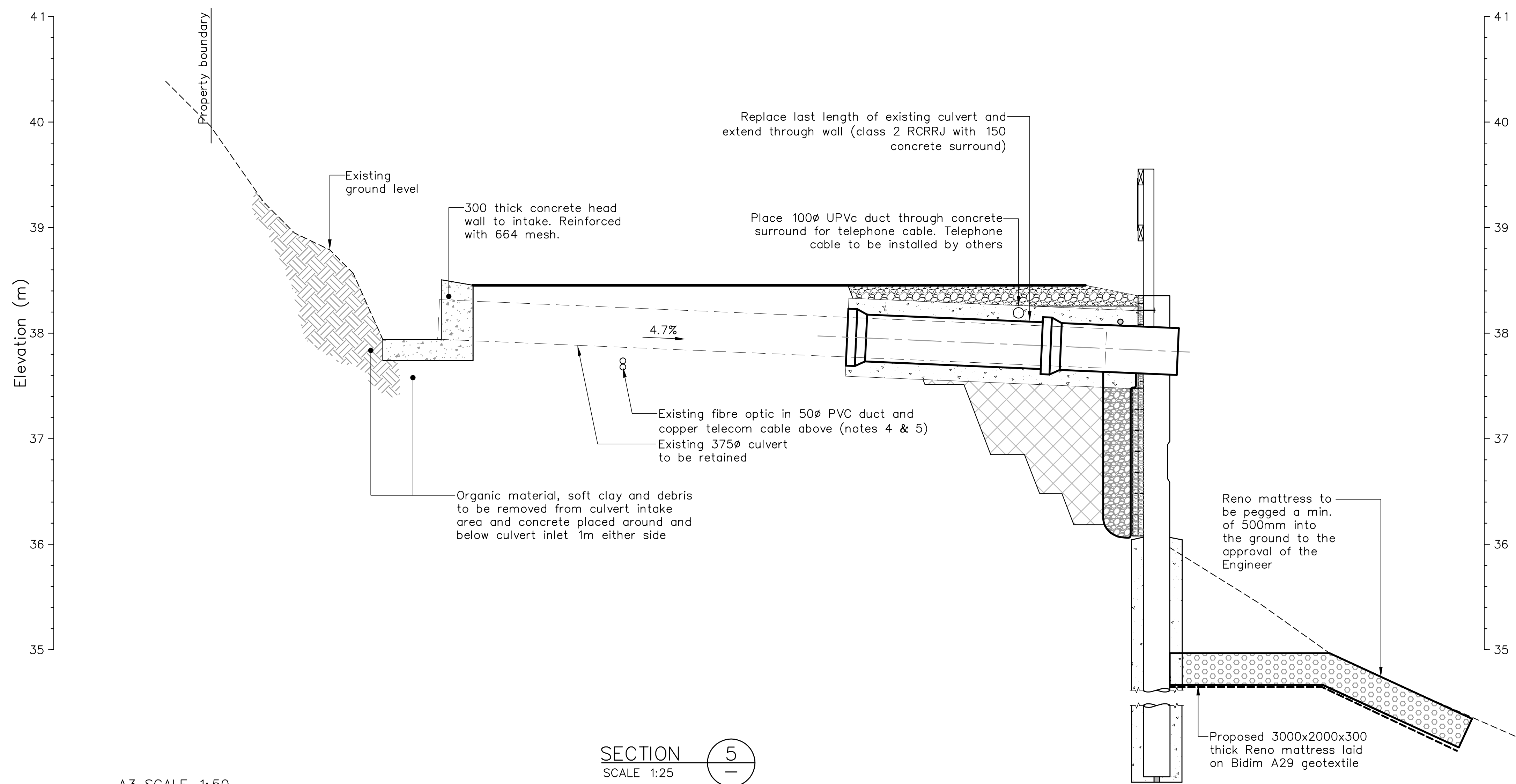
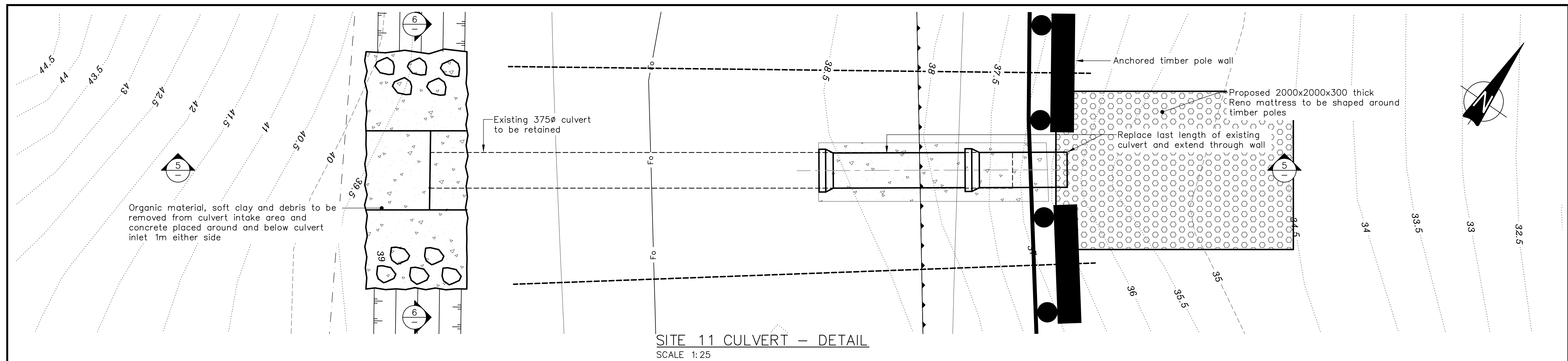
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DRAWN :	AMC	Jan. 13
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DRAFTING CHECKED :		
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CLIENT, PROJECT	NELSON CITY COUNCIL CABLE BAY ROAD REMEDIATION
TITLE	RETAINING WALL DESIGN – SITE 11 Anchor and Waler Details
SCALES (AT A1 SIZE)	AS SHOWN
DWG. No.	870982.1011-40
REV.	A



A3 SCALE 1:50
A1 SCALE 1:25

DESIGNED :	DJA	Jul. 12
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CLIENT, PROJECT
NELSON CITY COUNCIL
CABLE BAY ROAD REMEDIATION

TITLE
CULVERT UPGRADE DESIGN
Culvert - Section and Detail

SCALES (AT A1 SIZE)
AS SHOWN

DWG. No.
870982.1011-50

REV.
A

Nelson City Council
te kaunihera o whakatū

APPROVED
[Signature]
EXECUTIVE MANAGER
NETWORK SERVICES

DATE 15/4/2013

NCC Plan No. 19-0076

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