



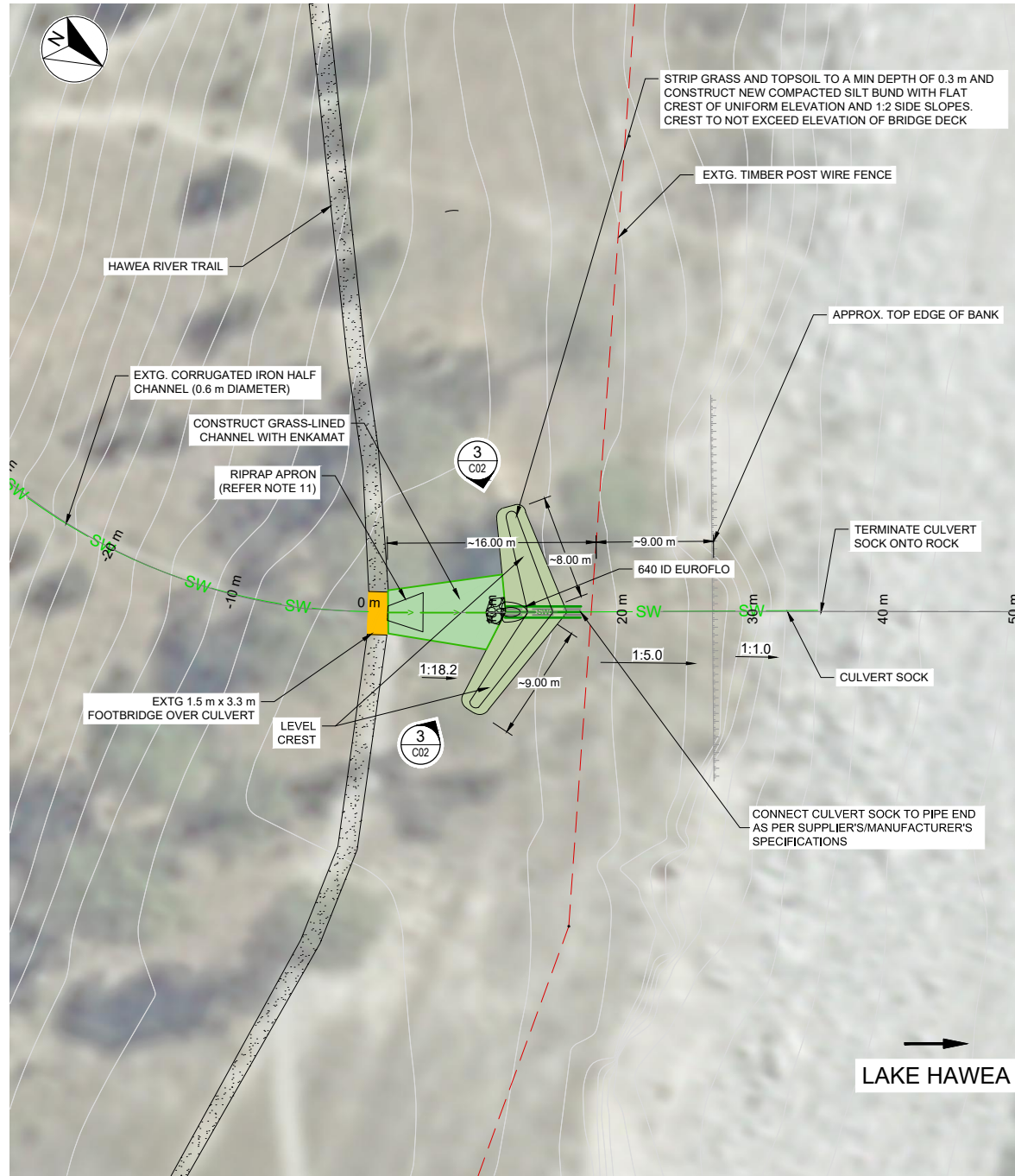
DRAWING SHEET INDEX

<u>SHEET #</u>	<u>Title</u>
C01	LAYOUT PLAN AND LONGITUDINAL SECTION
C02	DETAILS

**QUEENSTOWN LAKES DISTRICT COUNCIL
FLORA DORA PARADE, LAKE HAWEA
FLORA DORA PARADE STORMWATER CULVERT**

**WATER SECTOR
FOR CLIENT COMMENT**

Project No: 6-XQ097.12
Date: 2020-07-23



PLAN VIEW
SCALE 1:250

KEY:

EXISTING POWER	P
EXISTING GAS	G
EXISTING TELECOMS	T
EXISTING FIBRE OPTICS	F
EXISTING SWALE	SW
EXISTING WATER SUPPLY	W
EXISTING SEWER	SS
EXISTING STORMWATER	SW
PARCEL BOUNDARY	---
PROPOSED WATER SUPPLY	W
PROPOSED SEWER	SS
PROPOSED STORMWATER	SW
PROPOSED SUBSOIL	---
PROPOSED DUCT	---

- LEVELS ARE IN TERMS OF METERS ABOVE NZVD2016 DATUM.
- DIMENSIONS / DISTANCE ARE IN METERS UNLESS STATED OTHERWISE.
- WHILST ALL PRACTICAL EFFORT HAS BEEN UNDERTAKEN TO IDENTIFY THE LOCATION OF EXISTING SERVICES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL EXISTING SERVICES PRIOR TO CONSTRUCTION.
- THIS DRAWING TAKES PRECEDENCE OVER ANY ELECTRONIC DRAWING OR SETTING OUT INFORMATION PROVIDED TO THE CONTRACTOR.
- THE INSTALLED PIPE GRADIENT SHALL BE TO THE SLOPE SPECIFIED ON PLAN AND LONGITUDINAL SECTION.
- THE BUND SHALL BE CLEAN SILT MATERIAL FREE FROM ORGANICS AND NOXIOUS WEEDS. COMPACT IN 150 mm LIFTS TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH TNZ F/1.
- WHEN WORKING IN PROXIMITY TO THE SLOPE, CAREFULLY TRIM ANY OVERBURDEN MATERIAL AND INSTALL A DRAPE IF REQUIRED FOR WORKERS DRIVING J-PINS/Y POSTS.
- CULVERT SOCK TO BE PREMIUM PRODUCT WITH DOUBLE HOLD-DOWN TABS AND MINIMUM 20 YEARS UV RESISTANCE.
- HYDROSEED MIX TO INCLUDE LONG LIFE TACKIFIER AND BONDED FIBRE MATRIX. COCONUT/JUTE FIBRE MATTING MUST NOT INCLUDE ANY PLASTIC REINFORCING MESH.
- RE-ESTABLISH GRASS COVER TO ALL DISTURBED AREAS ON COMPLETION OF WORKS.
- CONSTRUCT RIPRAP APRON WITH ANGULAR ROCKS OF D50 = 200 mm, DEPTH 0.4 m, 2.7 m LENGTH, AND TAPERED IN WIDTH FROM 1.1 m TO 3.0 m. LINE WITH GEOTEXTILE FILTER CLOTH AGAINST IN-SITU GROUND.
- ENKAMAT 7018 OR APPROVED EQUIVALENT TO BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION. CONSTRUCT INLET CHANNEL WITH A 1.0 m BASE WIDTH (MINIMUM DEPTH OF 0.3 m BELOW ADJACENT GROUND) AND 1:4 SIDES. GRASS TO BE A DENSE-GROWING MATTED GRASS TO THE APPROVAL OF THE ENGINEER.

- KEY SAFETY IN DESIGN NOTES:**
- CONFIRM THAT LEVEL OF PEDESTRIAN FOOTBRIDGE DECK IS GREATER THAN PROPOSED BUND CREST HEIGHT PRIOR TO CONSTRUCTION
 - TAKE ALL PRACTICABLE STEPS TO MANAGE RISK OF INJURY TO CONSTRUCTION PERSONNEL (E.G. FROM ROCKFALL OR FALLING) AT CLIFF FACE

DATUM R.L. 340.00

DEPTH TO INVERT (FROM EG) (m)	INVERT LEVEL	GROUND LEVEL	DISTANCE (m)	PIPE SIZE, MATERIAL & GRADIENT
0.30	353.43	353.71	0.0	640 ID EUROFLO 1.0% (1:100)
0.60	352.85	353.15	2.0	
0.03	352.99	351.62	4.0	640 ID CULVERT SOCK (FOLLOWING EXISTING GROUND)
		353.51	6.0	
		353.40	8.0	
		352.28	10.0	
		353.15	12.0	
		353.01	14.0	
		352.61	16.0	
		352.20	18.0	
		351.82	20.0	
		351.45	22.0	
		351.09	24.0	
		350.49	26.0	
		349.98	28.0	
		347.77	30.0	
		345.91	32.0	
		345.19	34.0	
		344.60	36.0	
		344.05	38.0	
		343.59	40.0	
		343.10	42.0	
		342.77	44.0	
		342.49	46.0	
		342.20	48.0	
		341.95	50.0	
		341.77	52.0	
		341.59	54.0	
			56.0	

PIPE NETWORK FLORA DORA OUTFALL LONGITUDINAL SECTION
DISTANCE 0.00 TO 56.00

REVISION	AMENDMENT	APPROVED	DATE
A	FOR CLIENT COMMENT	H VAN ZYL	2020-07-23



wsp
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PO Box 1482
Christchurch 8140
New Zealand

WATER SECTOR

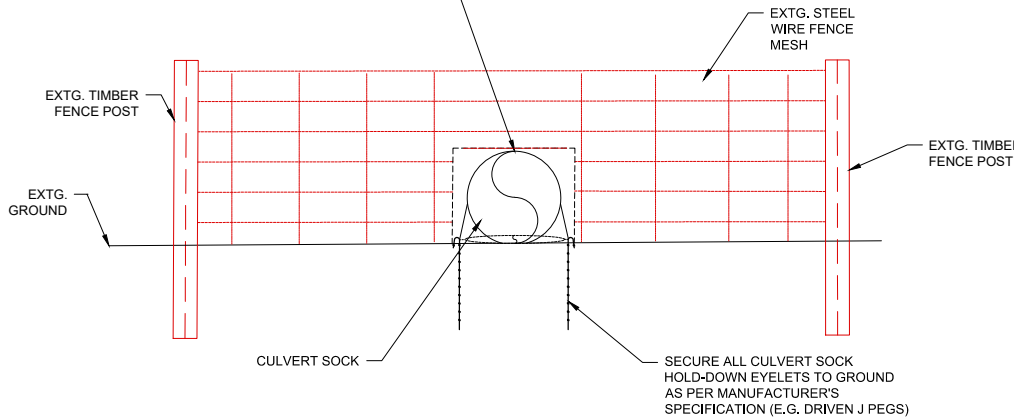
SCALES	ORIGINAL SIZE
AS SHOWN	A1
DRAWN	DESIGNED
S MILLAR	S MILLAR
	APPROVED
	H VAN ZYL
DRAWING VERIFIED	DESIGN VERIFIED
M GROVES	M GROVES
	APPROVED DATE
	2020-07-23

FOR CLIENT COMMENT

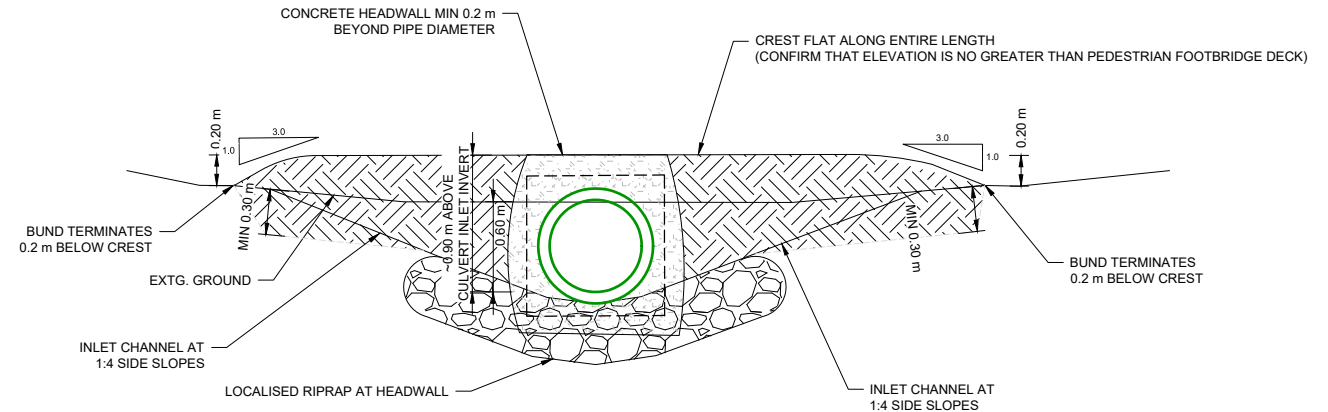
PROJECT	SHEET NO.	REVISION
QUEENSTOWN LAKES DISTRICT COUNCIL HAWEA RIVER TRAIL, LAKE HAWEA FLORA DORA PARADE STORMWATER CULVERT	C01	A
TITLE		
LAYOUT PLAN AND LONGITUDINAL SECTION		
WSP PROJECT NO. (SUB-PROJECT)		
6-XQ097.12		

MODIFY FENCE MESH TO ALLOW FULL FLOW AND DIAMETER AND DEFLATED DIAMETER OF CULVERT SOCK. ENSURE NO SHARP EDGES REMAIN IN VICINITY.

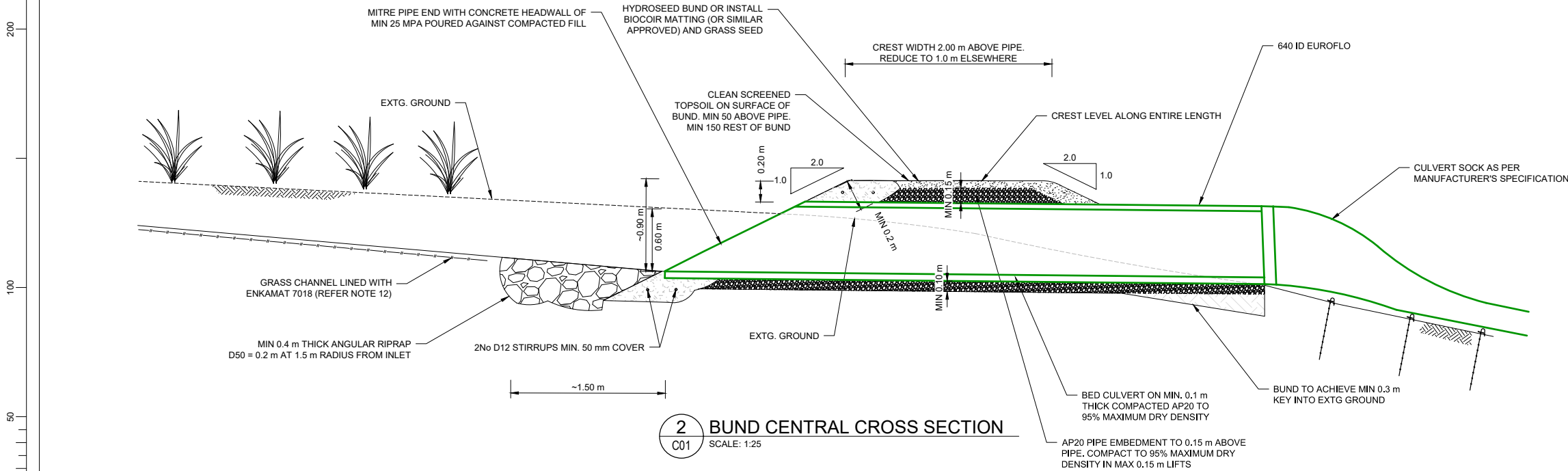
CONFIRM DETAIL OF FENCE REINSTATEMENT ON SITE WITH FENCING CONTRACTOR



1 PROVISIONAL FENCE REINSTATEMENT & CULVERT SOCK CROSS SECTION
C01 SCALE: 1:25



3 BUND INDICATIVE ELEVATION
C01 VERTICAL SCALE: 1:25, HORIZONTAL NTS



2 BUND CENTRAL CROSS SECTION
C01 SCALE: 1:25

KEY:

EXISTING POWER	-P-
EXISTING GAS	-G-
EXISTING TELECOMS	-T-
EXISTING FIBRE OPTICS	-F-
EXISTING SWALE	-S-
EXISTING WATER SUPPLY	-W-
EXISTING SEWER	-SS-
EXISTING STORMWATER	-SW-
PARCEL BOUNDARY	-Dashed Line-
PROPOSED WATER SUPPLY	-W-
PROPOSED SEWER	-SS-
PROPOSED STORMWATER	-SW-
PROPOSED SUBSOIL	-Dotted Line-
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New Zealand

WATER SECTOR

SCALES	DESIGNED	APPROVED
AS SHOWN	S MILLAR	H VAN ZYL
DRAWN	S MILLAR	H VAN ZYL
DRAWING VERIFIED	M GROVES	2020-07-23
DESIGN VERIFIED	M GROVES	2020-07-23

FOR CLIENT COMMENT

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QUEENSTOWN LAKES DISTRICT COUNCIL HAWEA RIVER TRAIL, LAKE HAWEA FLORA DORA PARADE STORMWATER CULVERT	C02	A
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