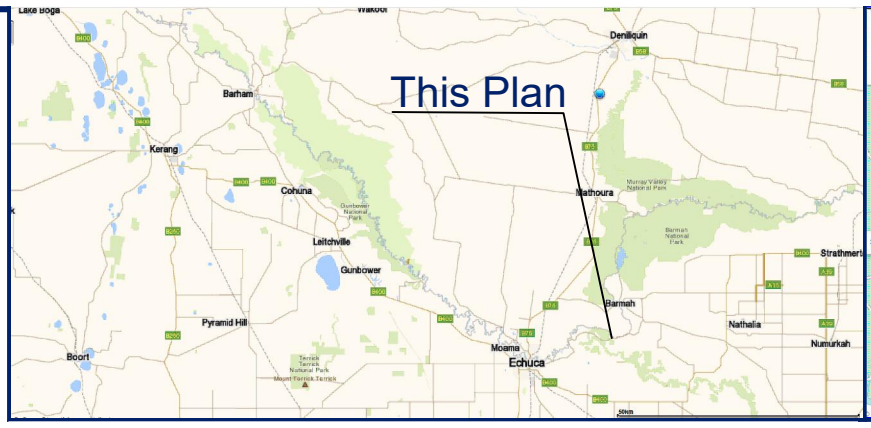
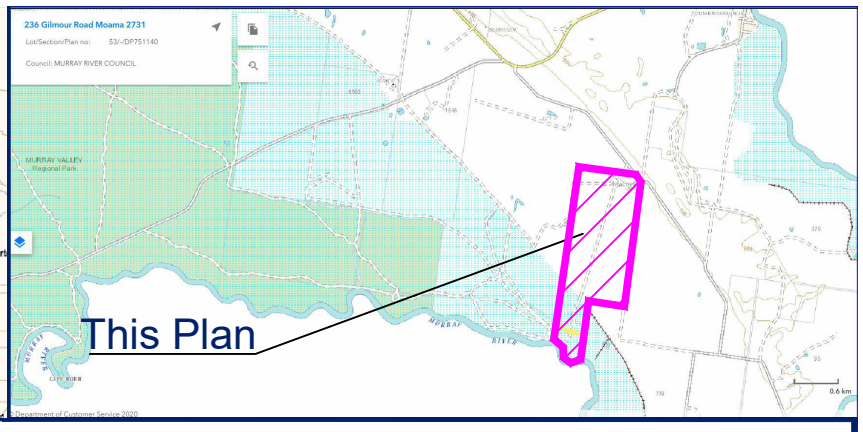
Legend

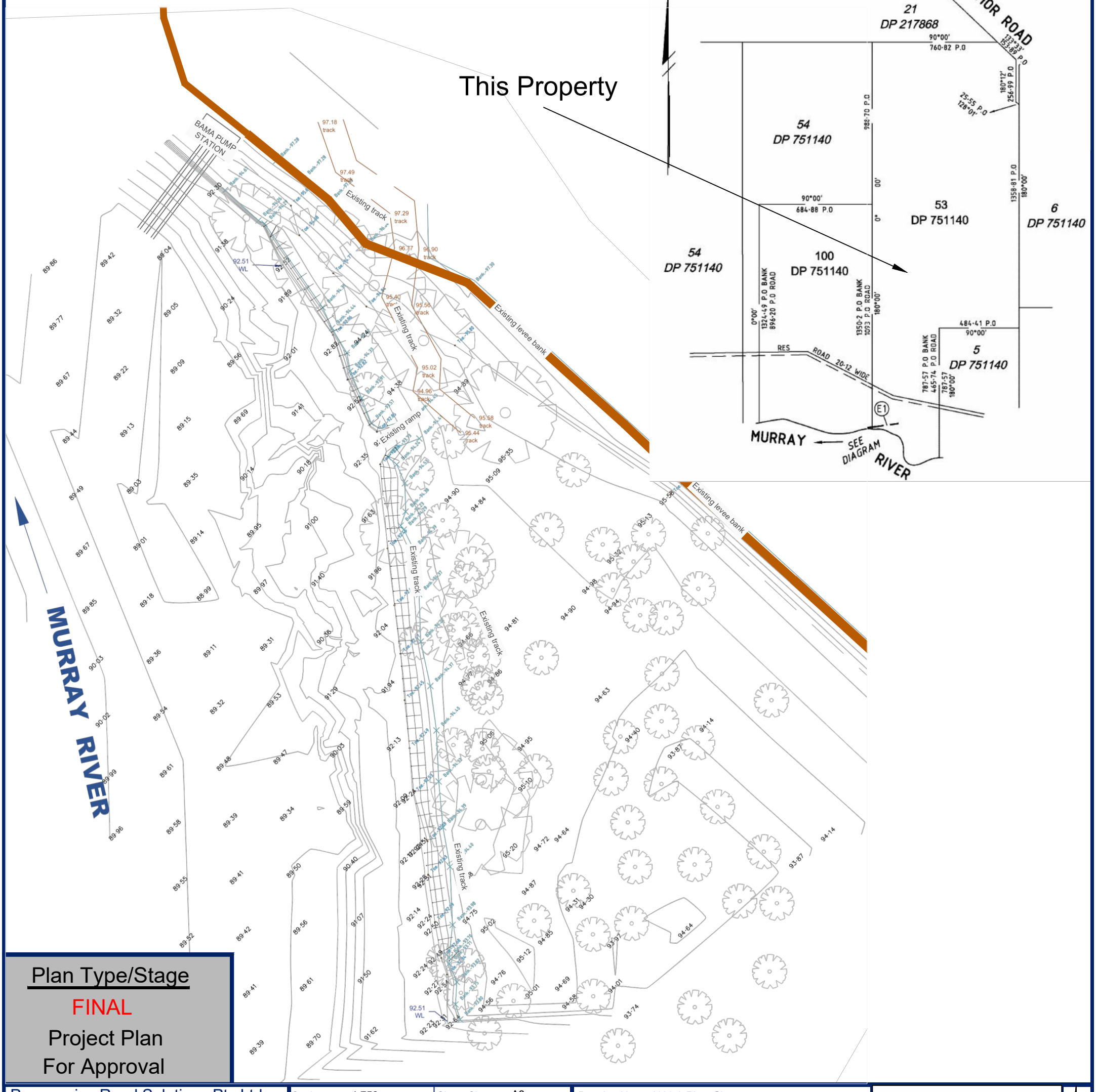
- Existing Channel
- Existing Drain
- Existing Track
- Existing Pipe
- Boundary Fence
- Internal Fence
- Check Banks
- Field Direction
- Waterway
- Top of Bank
- Powerline
- Tree
- External Road — ROAD



Locality Plan



Locality Plan



Plan Type/Stage

FINAL

Project Plan

For Approval

Progressive Rural Solutions Pty Ltd
PO Box 74, DENILIQUIN NSW 2710
Ph. 0408577248 ACN: 634 646 825 ABN: 58 634 646 825
Email: admin@prsltd.com.au Web: www.prsltd.com.au

Scale:	1:750	Sheet Size:	A3
Date:	20/03/2022		
Client:	C.S Muir (C.M. Pastoral Co)		
Property:	'Pine View' Gilmour Rd Moama		
Project:	Erosion control (wall) on Murray River bank		
Plan Type:	Site Plan Lot 53 DP751140		

Plan Description:
Plan showing existing site proposed for erosion control in the form of a retaining wall in NSW Murray River

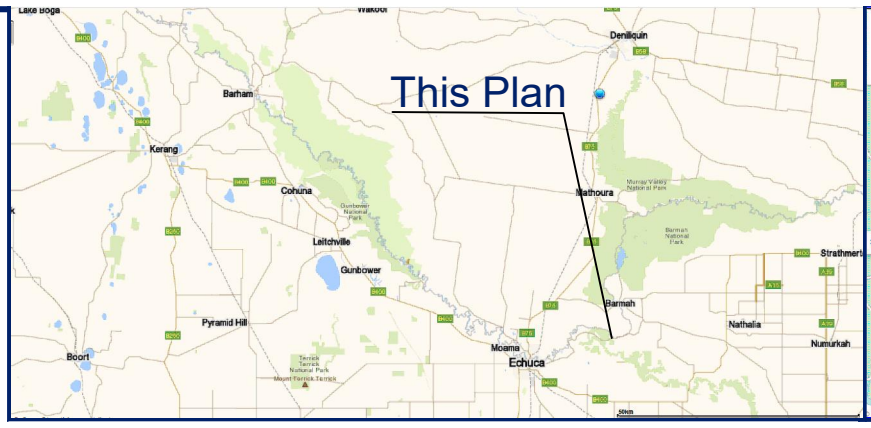
Drawing No.- J122.2-Plan_Site-

Version	Date	Amendment
V1R1	30/12/21	Initial Plan
V1R2	01/03/22	Draft for internal review
V1R3	07/03/22	Final Draft for review
V1R4	20/03/22	Final for lodgement

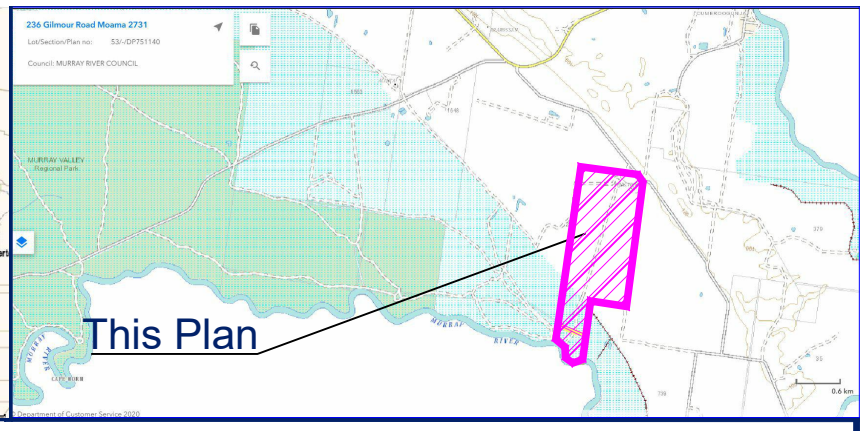
PROGRESSIVE RURAL SOLUTIONS

Legend

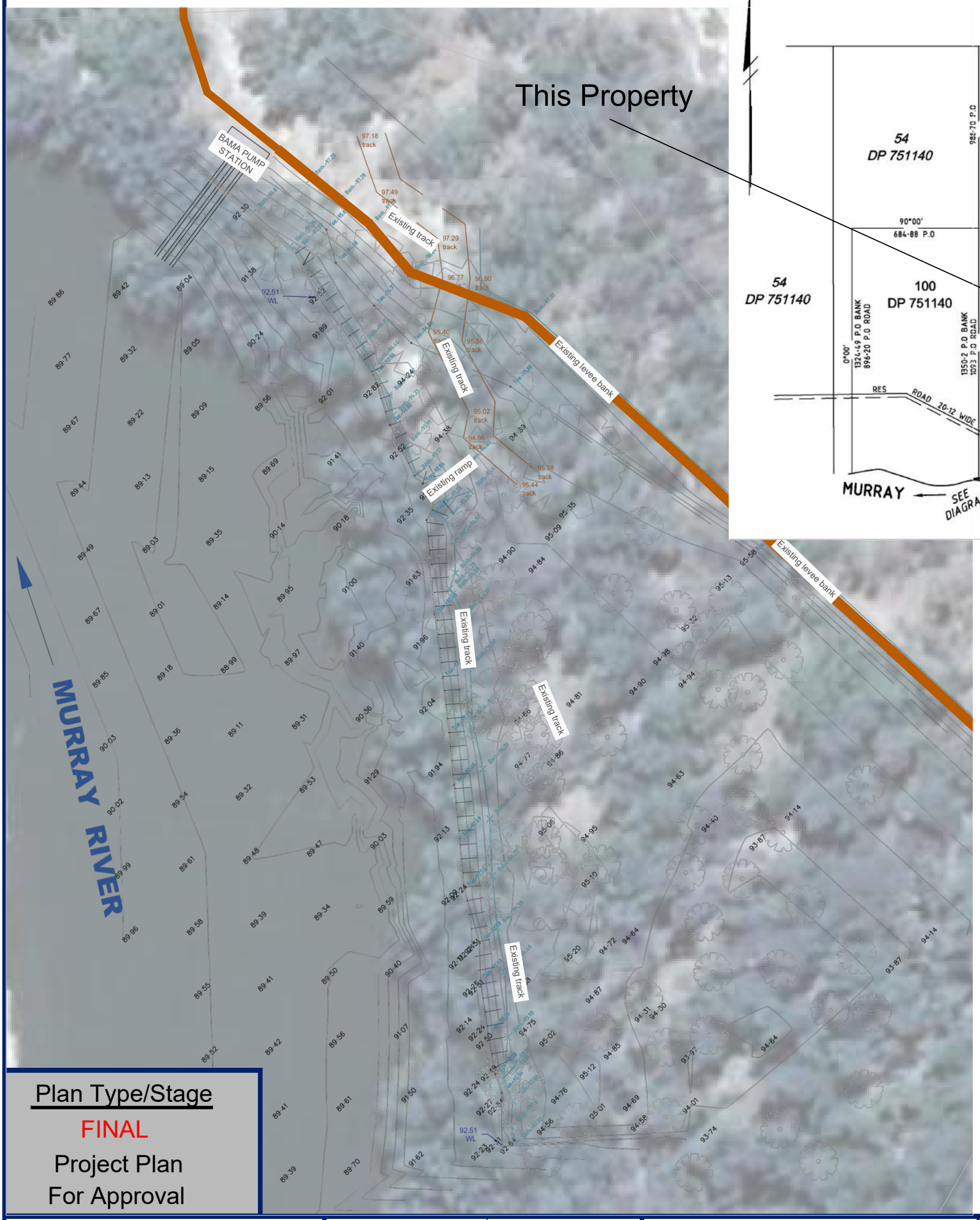
- Existing Channel
- Existing Drain
- Existing Track
- Existing Pipe
- Boundary Fence
- Internal Fence
- Check Banks
- Field Direction
- Waterway
- Top of Bank
- Powerline
- Tree
- External Road (ROAD)

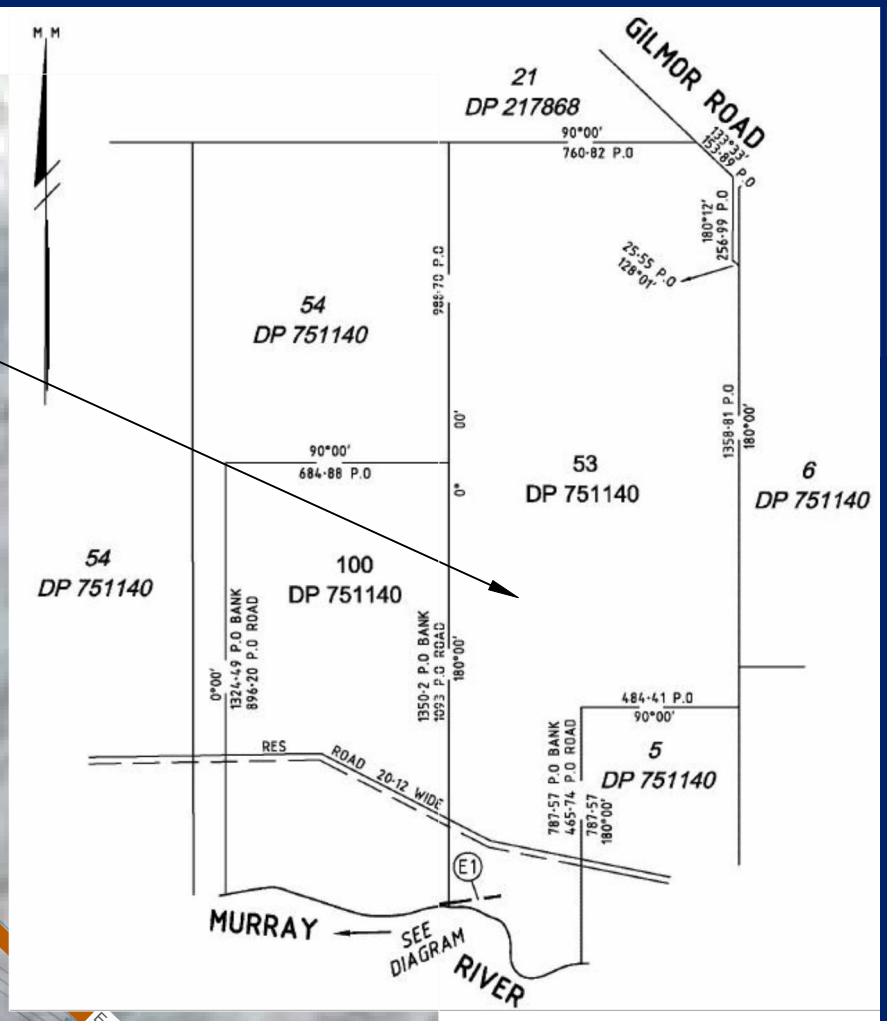


Locality Plan



Locality Plan





Plan Type/Stage

FINAL

Project Plan

For Approval

Progressive Rural Solutions Pty Ltd
PO Box 74, DENILIQUIN NSW 2710
Ph. 0408577248 ACN: 634 646 825 ABN: 58 634 646 825
Email: admin@prsltd.com.au Web: www.prsltd.com.au

Scale:	1:750	Sheet Size:	A3
Date:	20/03/2022		
Client:	C.S Muir (C.M. Pastoral Co)		
Property:	'Pine View' Gilmour Rd Moama		
Project:	Erosion control (wall) on Murray River bank		
Plan Type:	Site Plan Lot 53 DP751140		

Plan Description:
Plan showing existing site proposed for erosion control in the form of a retaining wall in NSW Murray River

Drawing No.- J122.2-Plan_Site-

Version	Date	Amendment
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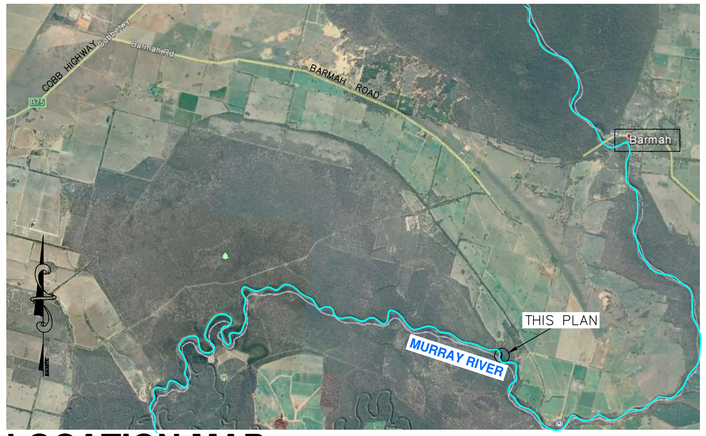
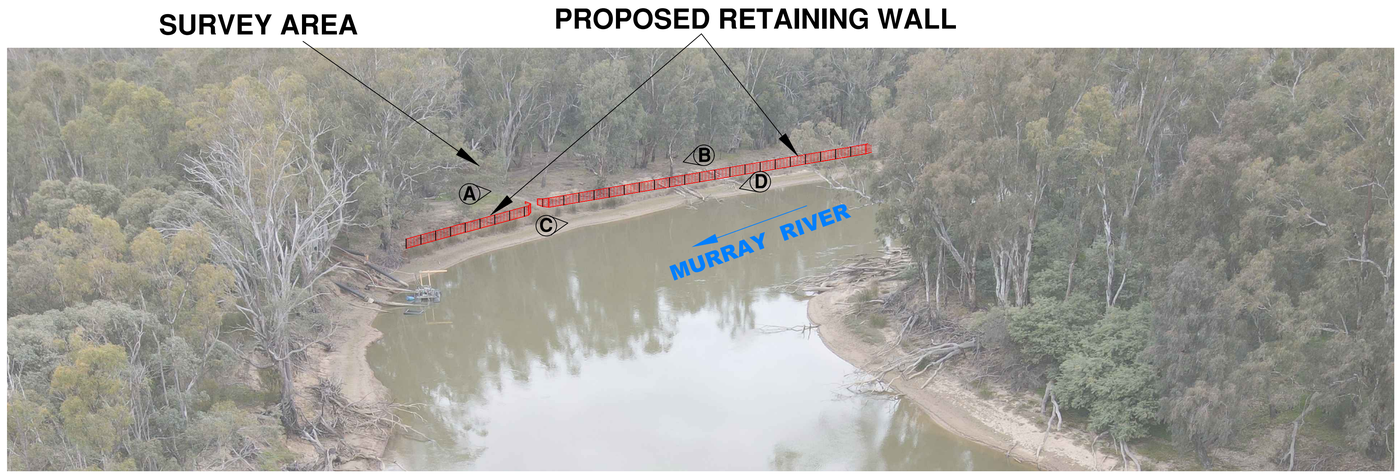
V1R2	01/03/22	Draft for internal review
V1R3	07/03/22	Final Draft for review
V1R4	20/03/22	Final for lodgement

PROGRESSIVE RURAL SOLUTIONS

PROPOSED RETAINING WALL OVERVIEW



LOCATION MAP



NOTES:

GENERAL:
These drawing shall be read in conjunction with all relevant Architectural and other consultant drawings, and with any other written instructions issued during the course of the contract.

Check all dimensions and setting out on site before ordering or manufacturing any materials.

Substitutions shall not be permitted without the approval of the Engineer.

The builder is to ensure that during construction the structure shall be maintained in a stable condition and that no part shall be overstressed.

FOOTINGS:

All footings shall be founded in medium to stiff silty clay.

All foundations must be inspected and approved by the relevant building inspector before concrete is poured.

CONCRETE:

All workmanship and materials shall be in accordance with AS 3600-2019.

STEELWORK:

All workmanship and materials must be in accordance with AS 4100-2020

All steel to be grade 300. Bolts unless otherwise noted to be M20grade 4.6 hot dip galvanised.

All weld connections to be made with 6mm CFW E48XX GP

Gusset plates unless otherwise noted to be 10mm thick.

The fabricator must provide all clear holes etc. For fixing of timber members, as required by Architectural drawings and specifications.

All steelwork shop drawings must be approved by this office before fabrication is commenced. Approval does not cover checking dimensions or layout, or preclude the fabricator from the responsibility for the correctness of the work.

All structural steelwork below ground to be encased by concrete 75mm min. all round.

All steelwork to be hot dipped galvanized to AS 4680-2006 unless otherwise noted.

Any damage to the hot dip galvanised finish from cutting or welding steel on site shall be made good with 2 heavy brush coats of inorganic zinc silicate primer. Apply the second coat after the first coat has dried and hardened

TIMBER:

All workmanship and materials shall be in accordance with AS 1684-2010 & AS1720.1-2010.

All timber to be strength grade F8.

Timber shall be protected from termite infestation in accordance with AS 3660.1-2000.

All timber in contact with ground or not protected from weather exposure and associated moisture ingress shall be of durability class 1 or 2 in accordance with AS1720.1-2010 & AS1720.2-2010 or preservative treated in accordance with AS 1604-2012.

Where required all timber shall be preservative treated for the appropriate hazard level in accordance with AS 1604-2012. The specified hazard levels are as follows:

Exterior in ground contact. H4 & H5

Structure is defined as a Class 10b structure and relate to the following Australian Standards.
AS 1170.1 - 2010 - Loading Code Part 1 Dead and Live loads and load combinations.
AS 300 - 2019 Concrete Structures
AS 4100 - 2020 Steel Structures
AS 4678 - 2002 Earth-retaining structures
AS 1720 - 2010 Timber Structures (Parts 1 & 2)

IMAGE A: RIVER BANK LOOKING UPSTREAM

IMAGE B: RIVER BANK LOOKING DOWNSTREAM

IMAGE C: TOE OF RIVER BANK LOOKING UPSTREAM

IMAGE D: TOE OF RIVER BANK LOOKING DOWNSTREAM

SHEET 1 OF 3

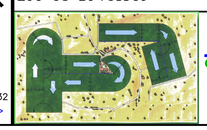
REV.	DATE	DESCRIPTION.
1	03/02/22	Notes updated

NOTES GENERALLY:
NO RESPONSIBILITY TAKEN FOR TITLE DEFINITION.
Finished Level Pegs To Be Placed at Clients Instruction Prior to Landforming. Any Internal Channels, Fences etc. Not Required Are To Be Removed Before Landforming. Where Subsoil Is Exposed during Landforming, Resalting is Suggested. Beaching is to be Placed Downstream of All Structures. Proposed Channels Are To Be Constructed Out Of Suitable Soils. Where Channels and Drains Step, Erosion Control is Suggested.
SOIL TESTS MUST BE UNDERTAKEN TO DETERMINE THE SUITABILITY OF ANY PROPOSED RECYCLE DRAIN, SUMP OR STORAGE AREA.
This Plan May Be Subject To Change.

LEGEND

- Fence on Boundary
- Fence – Internal
- Gate
- Laneway/Access Tracks
- Tree
- Timber Belt
- Swamp
- Gilgai or Crab Hole
- Powerline
- Channel To Be Removed
- Drain To Be Removed
- Main Supply Channel
- Proposed Farm Supply
- Existing Farm Supply
- Main Drainage
- Farm Drainage
- Terrace Line
- Fence on Terrace Line
- Channel Pad Height
- Channel Base Width
- Pad RL.– 9.32
- BW.– 7.83
- Drainage Bed
- Drainage Width
- Design Bay Elevation
- Change of Grade
- Flow Direction & Slope
- Cut & Fill (in cm.)
- Permanent Mark
- Bench Mark
- Finished Level Peg
- House or Shed
- Inv.– 8.83
- W.– 3.60
- F.L.– 9.171
- F.L.–9.102
- F.L.–9.102
- 0.10% GRADE
- +12 or –12
- S
- H
- Grid Peg
- Road Crossing Bridge
- Farm Crossing Culvert
- Drop Structure
- Check or Regulator
- Farm Crossing & Drop
- Farm Crossing & Check
- Detheridge Outlet
- Dumpy Peg Level
- Design Full Supply Level
- Dy.–9.32
- 9.80

DATUM.– BM 2x2 Peg RL.–95.799 A.H.D. MGA ZONE 55
LOT 53 DP751140



Rich River Irrigation Developments.
One Step Ahead
BAUER
FOR A GREEN WORLD
Centerstar- Centre pivot
Linestar- Linear move
Centerliner- Pivoting Linear, Ditch or Hose feed

RICH RIVER IRRIGATION DEVELOPMENTS PTY LTD A.C.N.106 901 777

DATE.– 03/02/22 SCALE.– SEE PLAN

Rich River Irrigation Developments. P/L. A.B.N. 48 106 901 777
26 McCulloch Drive, Moama N.S.W. 2731. web. www.rrid.com.au
Ph. 03 5482 2564, Fax. 03 5482 1918, Mob. 0427 691 042. Email. admin@rrid.com.au

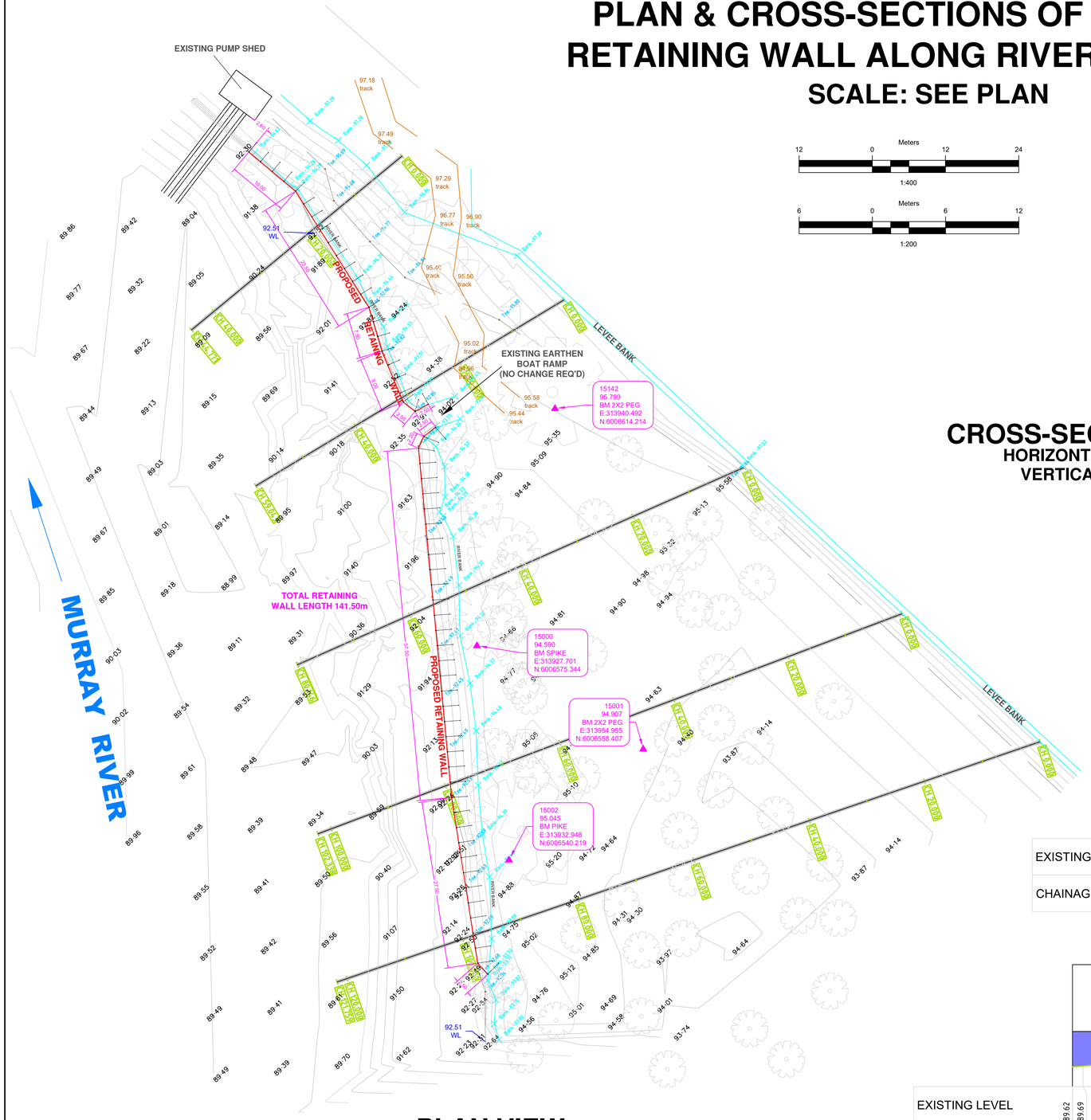
Client.– CMP Development
Proposed Retaining Wall
Retaining Wall Details

SURVEY	C.HEARN
BASE PLAN	C.HEARN
FINAL PLAN	C.HEARN

SHEET SIZE: A1
DRAWING NO.: J000508

PLAN & CROSS-SECTIONS OF PROPOSED RETAINING WALL ALONG RIVER BANK AREA

SCALE: SEE PLAN



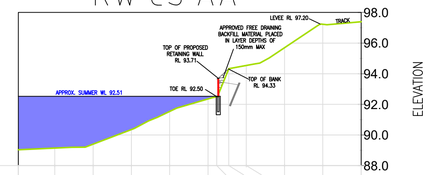
PLAN VIEW
SCALE:1:400

Meters
12 0 12 24
1:400

Meters
6 0 6 12
1:200

CROSS-SECTION VIEWS
HORIZONTAL SCALE:1:400
VERTICAL SCALE:1:200

RW CS AA



EXISTING LEVEL	89.04	89.15	89.40	90.36	91.54	92.35	92.50	94.33	94.54	95.70	97.23	97.39
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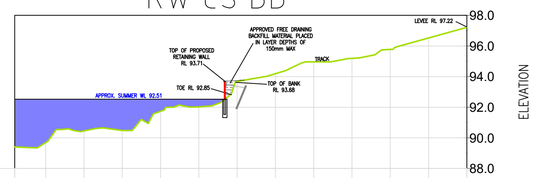
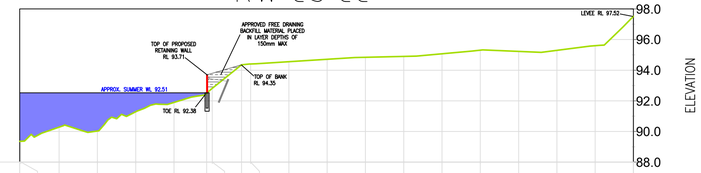
RW CS BB



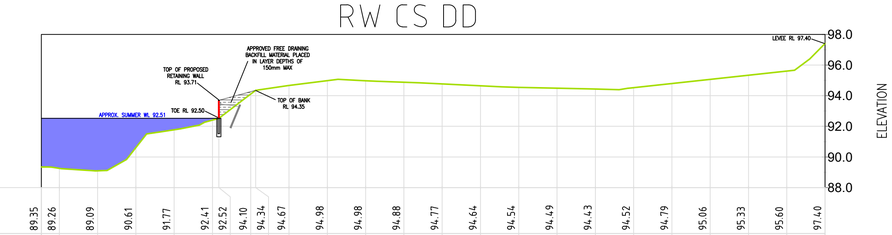
EXISTING LEVEL	89.41	89.69	90.45	90.48	91.74	92.03	93.68	94.19	94.96	95.19	95.78	96.52	97.22
CHAINAGE	59.043	55.000	50.000	45.000	40.000	35.000	30.000	25.000	20.000	15.000	10.000	5.000	0.000

RW CS CC



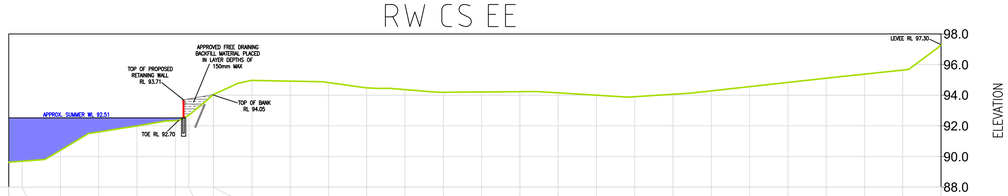
EXISTING LEVEL	89.36	89.36	90.28	90.03	91.28	91.90	92.50	92.82	94.35	94.41	94.55	94.71	94.84	94.90	95.07	95.31	95.23	95.30	95.60	97.52
CHAINAGE	80.146	80.000	75.000	70.000	65.000	60.000	55.727	55.000	51.171	50.000	45.000	40.000	35.000	30.000	25.000	20.000	15.000	10.000	5.000	0.000

RW CS DD



EXISTING LEVEL	89.35	89.26	89.09	90.61	91.77	92.41	92.52	94.10	94.34	94.67	94.98	94.98	94.88	94.77	94.64	94.54	94.49	94.43	94.52	94.79	95.06	95.33	95.60	97.40
CHAINAGE	102.338	100.000	95.000	90.000	85.000	80.000	79.162	75.000	74.348	70.000	65.000	60.000	55.000	50.000	45.000	40.000	35.000	30.000	25.000	20.000	15.000	10.000	5.000	0.000

RW CS EE



EXISTING LEVEL	89.62	89.69	90.41	91.60	92.00	92.35	92.69	94.04	94.05	94.97	94.92	94.82	94.68	94.36	94.19	94.21	94.23	94.15	94.00	93.90	94.06	94.29	94.56	94.83	95.11	95.37	95.64	97.30
CHAINAGE	121.759	120.000	115.000	110.000	105.000	100.000	98.241	95.028	95.000	90.000	85.000	80.000	75.000	70.000	65.000	60.000	55.000	50.000	45.000	40.000	35.000	30.000	25.000	20.000	15.000	10.000	5.000	0.000

SHEET 2 OF 3

REV.	DATE	DESCRIPTION.
1	03/02/22	Notes added

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This Plan May Be Subject To Change.

LEGEND

- Fence on Boundary
- Fence – Internal
- Gate
- Laneway/Access Tracks
- Tree
- Timber Belt
- Swamp
- Gilgai or Crab Hole
- Powerline
- Channel To Be Removed
- Drain To Be Removed
- Main Supply Channel
- Proposed Farm Supply
- Existing Farm Supply
- Main Drainage
- Farm Drainage
- Terrace Line
- Fence on Terrace Line
- Channel Pad Height
- Channel Base Width
- Pad RL.– 9.32
- BW.– 7.83
- Drainage Bed
- Drainage Width
- Design Bay Elevation
- Change of Grade
- Flow Direction & Slope
- Cut & Fill (in cm.)
- Permanent Mark
- Bench Mark
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- F.L.– 9.171
- F.L.–9.102
- F.L.–9.102
- 0.10% GRADE
- +12 or –12
- S H
- Grid Peg
- Road Crossing Bridge
- Farm Crossing Culvert
- Drop Structure
- Check or Regulator
- Farm Crossing & Drop
- Farm Crossing & Check
- Detheridge Outlet
- Dumpy Peg Level
- Design Full Supply Level
- Dy.–9.32
- S.80

DATUM.– BM 2x2 Peg RL.–95.799 A.H.D. MGA ZONE 55
LOT 53 DP751140

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Centerstar- Centre pivot
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RICH RIVER IRRIGATION DEVELOPMENTS PTY LTD A.C.N.106 901 777

DATE. – 03/02/22 SCALE. – SEE PLAN

Rich River Irrigation Developments. P/L. A.B.N. 48 106 901 777
26 McCulloch Drive, Moama N.S.W. 2731. Web. www.rrid.com.au
Ph. 03 5482 2564, Fax. 03 5482 1918, Mob. 0427 691 042. Email. admin@rrid.com.au

Client.– CMP Development
Proposed Retaining Wall
RIVER BANK ENLARGEMENT AND CROSS-SECTIONS

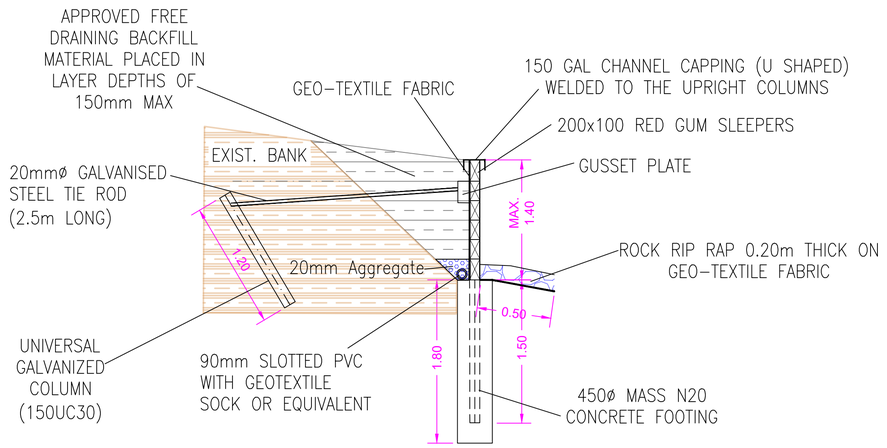
SURVEY	C.HEARN
BASE PLAN	C.HEARN
FINAL PLAN	C.HEARN

SHEET SIZE: A1
DRAWING NO.: J000508

PROPOSED RETAINING WALL DETAIL DESIGN SPECIFICATIONS

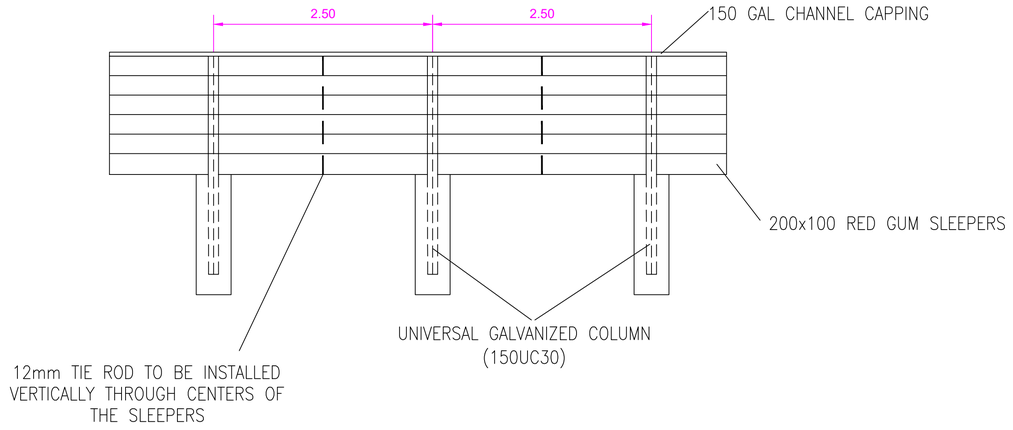
TYPICAL RETAINING WALL - SIDE VIEW

NOT TO SCALE



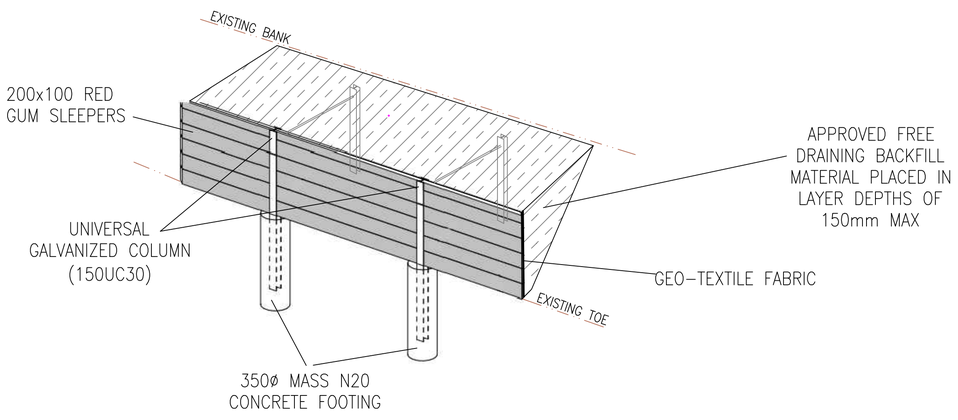
TYPICAL RETAINING WALL - FRONT VIEW

NOT TO SCALE



TYPICAL RETAINING WALL DETAIL

NOT TO SCALE



SPECIFICATIONS

DESCRIPTION	*NO./LENGTH*
Red Gum Sleepers 200mm X 100mm	**Total length 900m long**
Universal Galvanised Column (150UC30)	**Total Length 238m (61 lengths at 2.7m, 61 lengths @ 1.2m)**
450Ø x 1.80m long N20 Mass Concrete Footing x 61	**18m3**
Approved free draining backfill material	**420m3**
Gusset plate to suit	**61**
20mm Ø galvanized steel tie rod	**Total Length 152.5m (61 lengths at 2.5m)**
12mm Ø galvanized steel tie rod	**Total Length 72m (60 lengths at 1.2m)**
Rock Rip Rap 0.20m thick	**15m3**
20mm aggregate (for slotted pipe surround)	**20m3**
Geotextile Fabric	**440m2**
90mm slotted PVC with geotextile sock or equivalent	**146m**

NOTE: All specifications are calculated on retaining wall length of 146m.

SHEET 3 OF 3

REV.	DATE	DESCRIPTION.
1	03/02/22	CHANGE IN CONCRET VOLUME

NOTES GENERALLY:
NO RESPONSIBILITY TAKEN FOR TITLE DEFINITION.
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This Plan May Be Subject To Change.

LEGEND

Fence on Boundary		Drain To Be Removed		Drainage Bed	Inv.– 8.83	Grid Peg	
Fence – Internal		Main Supply Channel		Drainage Width	W.– 3.60	Road Crossing Bridge	
Gate		Proposed Farm Supply		Design Bay Elevation	F.L.– 9.171	Farm Crossing Culvert	
Laneway/Access Tracks		Existing Farm Supply		Change of Grade	F.L.–9.102 F.L.–9.102 0.10% GRADE	Drop Structure	
Tree		Main Drainage		Flow Direction & Slope		Check or Regulator	
Timber Belt	Timber	Farm Drainage		Cut & Fill (in cm.)	+12 or –12	Farm Crossing & Drop	
Swamp		Terrace Line		Permanent Mark		Farm Crossing & Check	
Gilgai or Crab Hole		Fence on Terrace Line		Bench Mark		Detheridge Outlet	
Powerline		Channel Pad Height	Pad RL.– 9.32	Finished Level Peg	Dy.–9.32 9.80	Dumpy Peg Level	
Channel To Be Removed		Channel Base Width	BW.– 7.83	House or Shed	S H	Design Full Supply Level	

DATUM.– BM 2x2 Peg RL.–95.799 A.H.D. MGA ZONE 55
LOT 53 DP751140

RICH RIVER IRRIGATION DEVELOPMENTS PTY LTD A.C.N.106 901 777

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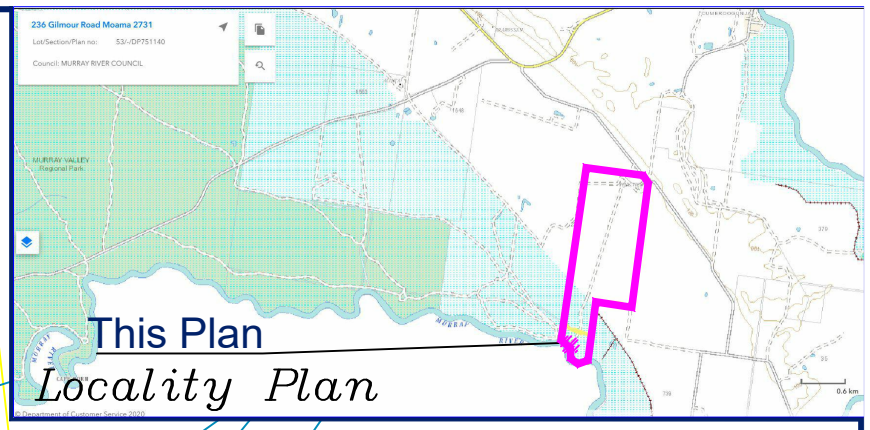
Ph. 03 5482 2564, Fax. 03 5482 1918, Mob. 0427 691 042. Email. admin@rrid.com.au

DATE. - 07/02/22 SCALE. - SEE PLAN

Client.– CMP Development
Proposed Retaining Wall
Retaining Wall Details

SURVEY	C.HEARN
BASE PLAN	C.HEARN
FINAL PLAN	C.HEARN

SHEET SIZE A1 DRAWING NO. J000508



Legend

- Old Channel
- Existing Channel
- New Channel
- Old Drain
- Existing Drain
- New Drain
- Existing Track
- New Track
- Existing Pipe
- New Pipe
- Boundary Fence
- Internal Fence
- Check Banks
- Field Direction
- Waterway
- Top of Bank
- Powerline
- Tree for Removal

Construction Area

- Construction Area
- Excavation Zone
- 'No Go' Zone

Materials storage,
Waste management
Parking Large Machinery,
Amenities area

Native Vegetation
'No-Go' - Zone for
construction activities

Existing levee bank

BAMA PUMP STATION

Existing track

Proposed Retaining Wall

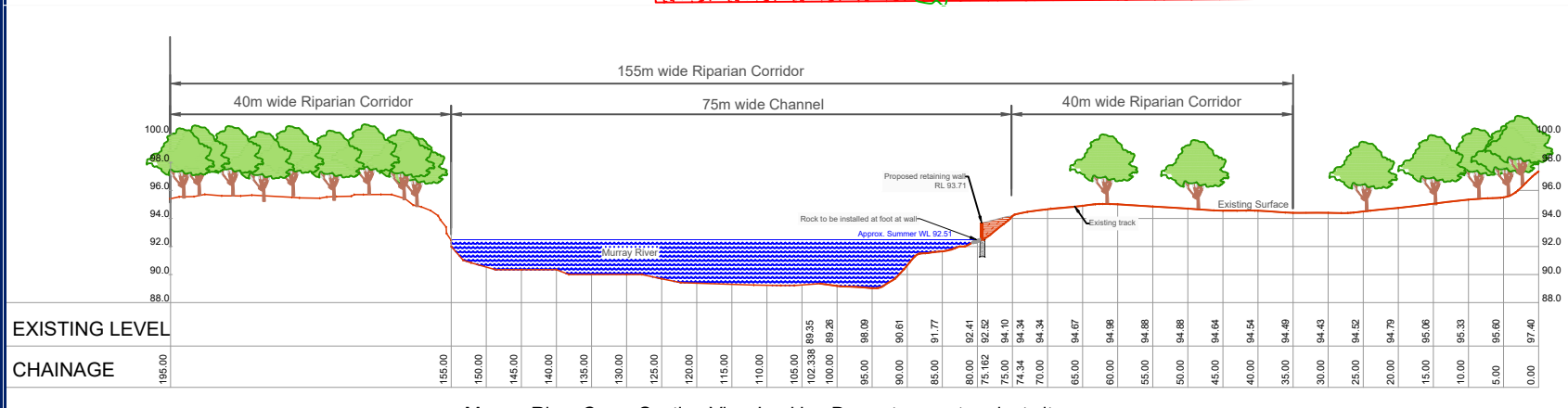
Existing ramp

Existing levee bank

MURRAY RIVER

Murray River -
'No-Go' - Zone for
construction activities

Native Vegetation
'No-Go' - Zone for
construction activities



Murray River Cross Section View Looking Downstream at project site

Scale: Horizontal 1:1,000, Verticle 1:500

Plan Type/Stage

FINAL

Project Plan
For Approval

PROGRESSIVE RURAL SOLUTIONS

Progressive Rural Solutions Pty Ltd
PO Box 74, DENILIQUIN NSW 2710
Ph. 0408577248 ACN: 634 646 825 ABN: 58 634 646 825
Email: admin@prsltd.com.au Web: www.prsltd.com.au

Scale:	1:1,000 or as shown	Sheet Size:	A3
Date:	20/03/2022		
Client:	C.S Muir (C.M. Pastoral Co)		
Property:	'Pine View' Gilmour Rd Moama Lot 53 DP751140		
Project:	Erosion control (retianing wall) on Murray River bank (NSW)		
Plan Type:	Sketch of Development Plan		

Plan Description:
Plan identifying proposed works area in relation to existing site.

Drawing No.- J122.2-Plan_Project-

Version	Date	Amendment
V1R1	30/12/2021	Initial Plan
V1R2	01/03/2022	Draft for internal review
V1R3	07/03/2022	Final Draft for review
V1R4	20/03/2022	FINAL For lodgement

Legend

- Old Channel
- Existing Channel
- New Channel
- Old Drain
- Existing Drain
- New Drain
- Existing Track
- New Track
- Existing Pipe
- New Pipe
- Boundary Fence
- Internal Fence
- Check Banks
- Field Direction
- Waterway
- Top of Bank
- Powerline
- Tree for Removal

Construction Area

- Construction Area
- Excavation Zone
- 'No Go' Zone

Erosion Control

- Diversion Bank
- Silt Fence
- Straw Bale Filter
- Silt Curtain
- Rip Rap
- Erosion Control

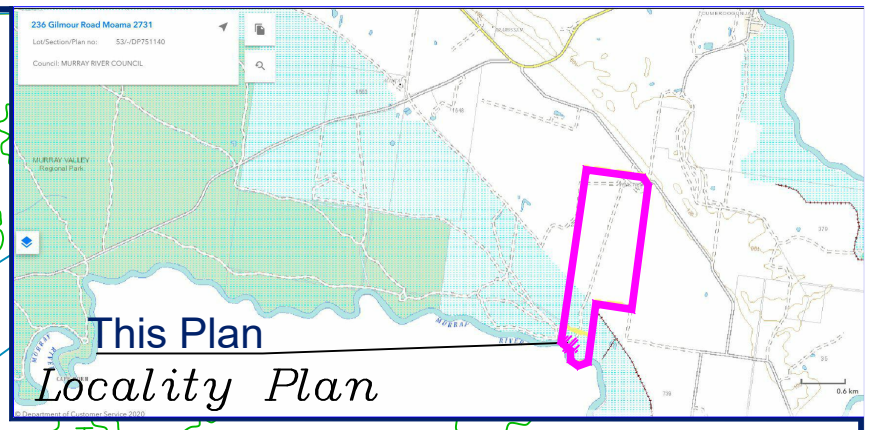
Plan Type/Stage

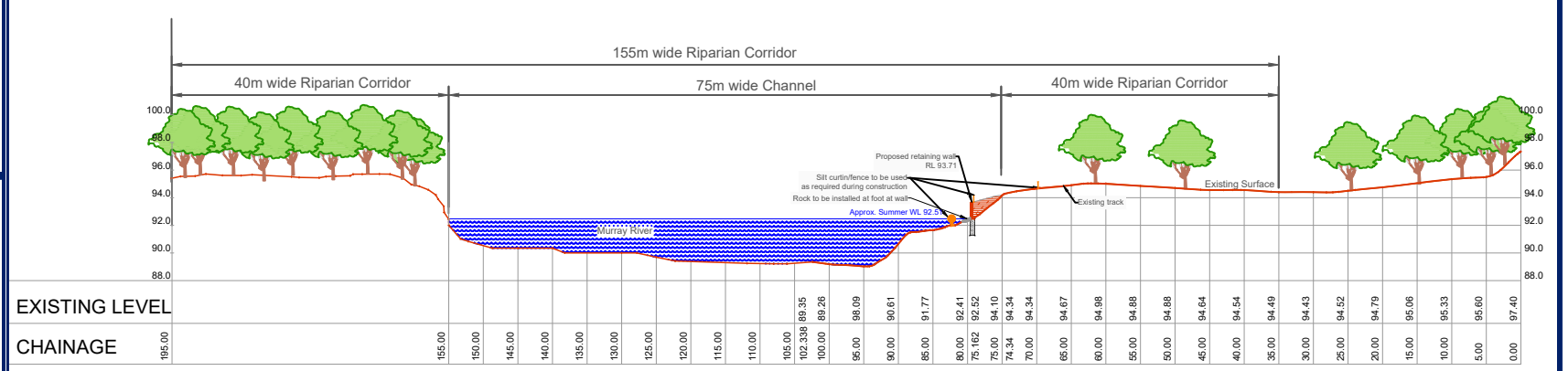
FINAL

Erosion & Sediment Control Plan

For Approval

PROGRESSIVE RURAL SOLUTIONS





Murray River Cross Section View Looking Downstream at project site
Scale: Horizontal 1:1,000, Verticle 1:500

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Scale:	1:750 or as shown	Sheet Size:	A3
Date:	20/03/2022		
Client:	C.S Muir (C.M. Pastoral Co)		
Property:	'Pine View" Gilmour Rd Moama Lot 53 DP751140		
Project:	Erosion control (retaining wall) works on Murray River (NSW)		
Plan Type:	Erosion and Sediment Control Plan		
Plan Description:	Plan showing proposed erosion and sediment control measures		

Drawing No.- J154-Plan_ESC-

Version	Date	Amendment
V1R1	30/12/2021	Initial Plan
V1R2	01/03/2022	Draft for internal review
V1R3	07/03/2022	Final Draft for review
V1R4	20/03/2022	FINAL For lodgement

Legend

- Old Channel
- Existing Channel
- New Channel
- Old Drain
- Existing Drain
- New Drain
- Existing Track
- New Track
- Existing Pipe
- New Pipe
- Boundary Fence
- Internal Fence
- Check Banks
- Field Direction
- Waterway
- Top of Bank
- Powerline
- Tree for Removal

Construction Area

- Construction Area
- Excavation Zone
- 'No Go' Zone

Revegetation Legend

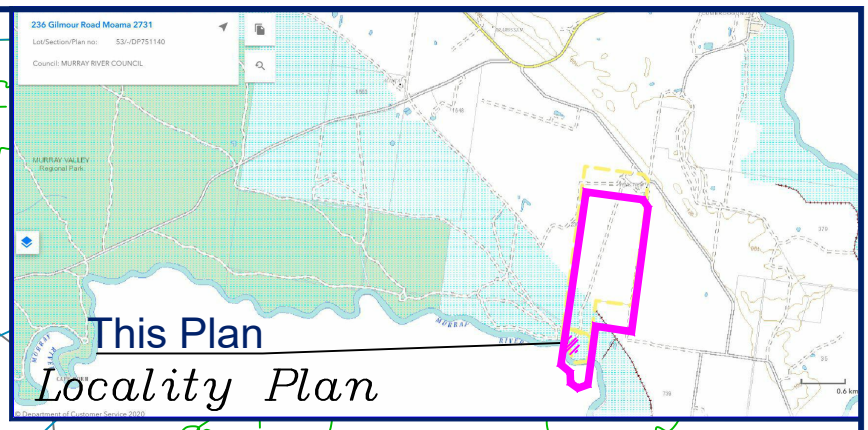
- Ground Cover Revegetation Area
- Mid Story Revegetation Area
- Tree and Tubestock Revegetation Area

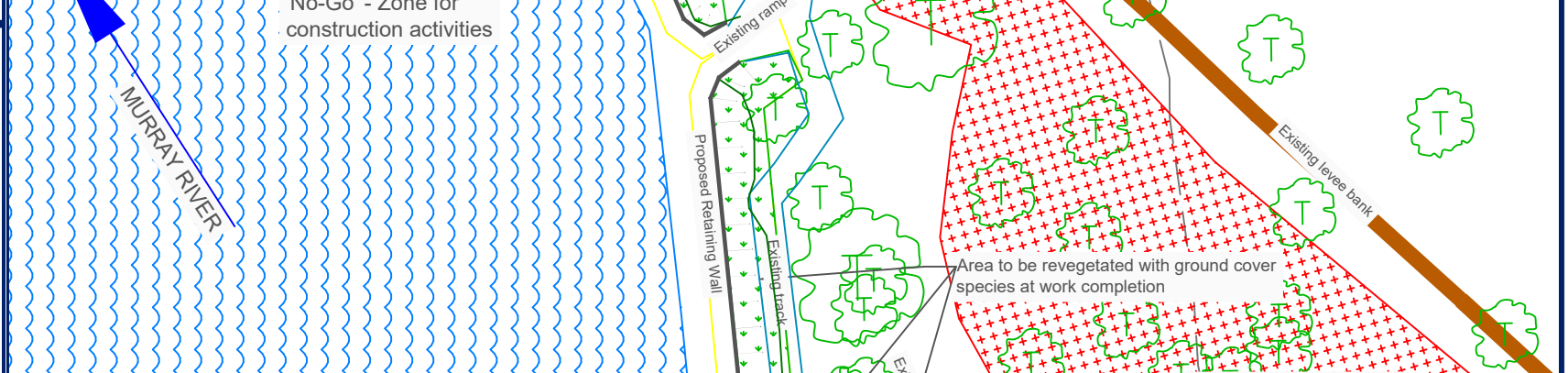
Plan Type/Stage

FINAL

Revegetation Plan

For Approval





Murray River Cross Section View Looking Downstream at project site
Scale: Horizontal 1:1,000, Verticle 1:500

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Scale:	1:750 or as shown	Sheet Size:	A3
Date:	20/03/2022		
Client:	Marand C.S. Muir (C.M. Pastoral Co)		
Property:	'Pine View' Gilmour Rd Moama Lot53 DP751140		
Project:	Erosion control (retaining wall) on Murray River bank (NSW)		
Plan Type:	Revegetation Plan		
Plan Description:	Plan showing proposed revegetaiton works.		

Drawing No.- J122.2-Plan_Re-veg-

Version	Date	Amendment
V1R1	21/12/2021	Initial Plan
V1R2	28/02/2022	Draft for client internal review
V1R3	07/02/2022	FINAL DRAFT for review
V1R4	07/02/2022	FINAL DRAFT for review