

C:\working\aecon\ ds10_ au\joseph.delatorre@aecon.com\0187135\SGA-DRG-NWE-002-GE-1001.dwg

100mm

0 10 20 30 40 50 60 70 80 90 100

ORIGINAL SIZE A1



TRIG ROAD LOCATION PLAN
NTS

REV	REVISIONS	DRAWN	DATE	DESIGNED	DATE	DESIGNED	DATE	APPROVED	DATE
E	ISSUED FOR NOTICE OF REQUIREMENT LODGEMENT	VOLT	DEC. 2022	DRAWING CHECK	J. DELA TORRE	01.05.20			
D	FOR NOTICE OF REQUIREMENT AND RESOURCE CONSENT	VOLT	28.08.20	DESIGN	P. HADWIN	01.05.20			
C	FOR DRAFT DETAILED BUSINESS CASE	VOLT	25.07.19	DESIGN REVIEW	R. BROWN	01.05.20			
B	FOR AT INTERNAL REVIEW	VOLT	17.04.19						
A	FOR SAFETY AUDIT	VOLT	05.04.19	APPROVED	B. BUSNARDO	07.12.2022			



Project:
**SUPPORTING GROWTH PROGRAMME
NORTH WEST - HIF TRIG ROAD (SOUTH)**

Drawing Title:
TRIG ROAD AND HOBSONVILLE ROAD
LOCATION PLAN, GENERAL NOTES AND DRAWING LIST

Drawing Status:
FOR LODGEMENT

Drawing Date:
07.12.2022

Drawing No.:
SGA-DRG-NWE-002-GE-1001

Revision:
E

DRAWING LIST - NORTHWEST - TRIG ROAD SOUTH

DRAWING No.	DRAWING TITLE	REVISION
SGA-DRG-NWE-002-GE-1001	LOCATION PLAN, GENERAL NOTES AND DRAWING LIST	E
SGA-DRG-NWE-002-GE-1100	GENERAL ARRANGEMENT PLAN	E
SGA-DRG-NWE-002-CI-1101	GENERAL ARRANGEMENT LAYOUT PLAN - SHEET 1 OF 5	B
SGA-DRG-NWE-002-CI-1102	GENERAL ARRANGEMENT LAYOUT PLAN - SHEET 2 OF 5	B
SGA-DRG-NWE-002-CI-1103	GENERAL ARRANGEMENT LAYOUT PLAN - SHEET 3 OF 5	B
SGA-DRG-NWE-002-CI-1104	GENERAL ARRANGEMENT LAYOUT PLAN - SHEET 4 OF 5	B
SGA-DRG-NWE-002-CI-1105	GENERAL ARRANGEMENT LAYOUT PLAN - SHEET 5 OF 5	B
SGA-DRG-NWE-002-DR-1401	STORMWATER LAYOUT PLAN - SHEET 1 OF 5	B
SGA-DRG-NWE-002-DR-1402	STORMWATER LAYOUT PLAN - SHEET 2 OF 5	B
SGA-DRG-NWE-002-DR-1403	STORMWATER LAYOUT PLAN - SHEET 3 OF 5	B
SGA-DRG-NWE-002-DR-1404	STORMWATER LAYOUT PLAN - SHEET 4 OF 5	B
SGA-DRG-NWE-002-DR-1405	STORMWATER LAYOUT PLAN - SHEET 5 OF 5	B
SGA-DRG-NWE-002-DR-1410	DRY POND AND RAINGARDEN TYPICAL CROSS SECTIONS	B
SGA-DRG-NWE-002-EN-1500	EROSION & SEDIMENT CONTROL LEGEND AND GENERAL NOTES	B
SGA-DRG-NWE-002-EN-1501	EROSION & SEDIMENT CONTROL PLAN - SHEET 1 OF 5	B
SGA-DRG-NWE-002-EN-1502	EROSION & SEDIMENT CONTROL PLAN - SHEET 2 OF 5	B
SGA-DRG-NWE-002-EN-1503	EROSION & SEDIMENT CONTROL PLAN - SHEET 3 OF 5	B
SGA-DRG-NWE-002-EN-1504	EROSION & SEDIMENT CONTROL PLAN - SHEET 4 OF 5	B
SGA-DRG-NWE-002-EN-1505	EROSION & SEDIMENT CONTROL PLAN - SHEET 5 OF 5	B
SGA-DRG-NWE-002-EN-1510	EROSION & SEDIMENT CONTROL SEDIMENT RETENTION DEVICES	B

GENERAL NOTES

GENERAL

- 1.1. THE GENERAL ARRANGEMENT LAYOUT PLANS (GA's) PROVIDE A PRELIMINARY / CONCEPT LEVEL OF DESIGN REQUIRED TO IDENTIFY THE DESIGNATION FOOTPRINT FOR CONSTRUCTION AND OPERATION OF THE PERMANENT WORKS.
- 1.2. THE GENERAL ARRANGEMENT PLAN INDICATE HOW IT IS INTENDED THAT THE CORRIDOR TIES INTO THE WIDER EXISTING TRANSPORT NETWORK.

STORMWATER

- 2.1. THE STORMWATER DESIGN IS INDICATIVE.
- 2.2. THE DESIGN IS BASED ON THE UPGRADED ROAD HAVING KERB AND CHANNEL WITH CATCHPITS PROVIDED ON BOTH SIDES OF THE ROAD.
- 2.3. THE PIPE SIZES ARE SUBJECT TO FURTHER DESIGN DEVELOPMENT AND MANHOLES WILL BE PROVIDED ON EACH PIPELINE.
- 2.4. RAINGARDEN SERVICING HOBSONVILLE ROAD HAS BEEN DESIGNED FOR STORMWATER TREATMENT, RETENTION / DETENTION AND ATTENUATION. CONFIRMATION OF THE LEVEL OF SERVICES IS REQUIRED.
- 2.5. RAINGARDENS SERVICING TRIG ROAD HAVE BEEN DESIGNED AS A TREATMENT WITHOUT RETENTION / DETENTION AND ATTENUATION.
- 2.6. DRY POND AND RAINGARDEN ON HOBSONVILLE ROAD HAS BEEN DESIGNED TO:
 - PROVIDE RETENTION/ DETENTION AND ATTENUATE FLOW FOR THE 10% AEP AND 1% AEP. CONFIRMATION OF THE LEVEL OF SERVICES IS REQUIRED.
 - PROVIDE TREATMENT IN ACCORDANCE WITH AUCKLAND COUNCIL GUIDELINE GD01.
- 2.7. CATCHMENT 2 DISCHARGES TO WAIAROHIA STREAM DURING LOW FLOW EVENTS TO MAINTAIN BASEFLOW AND HIGHER FLOWS DRAIN TO DRY POND FOR ATTENUATION.

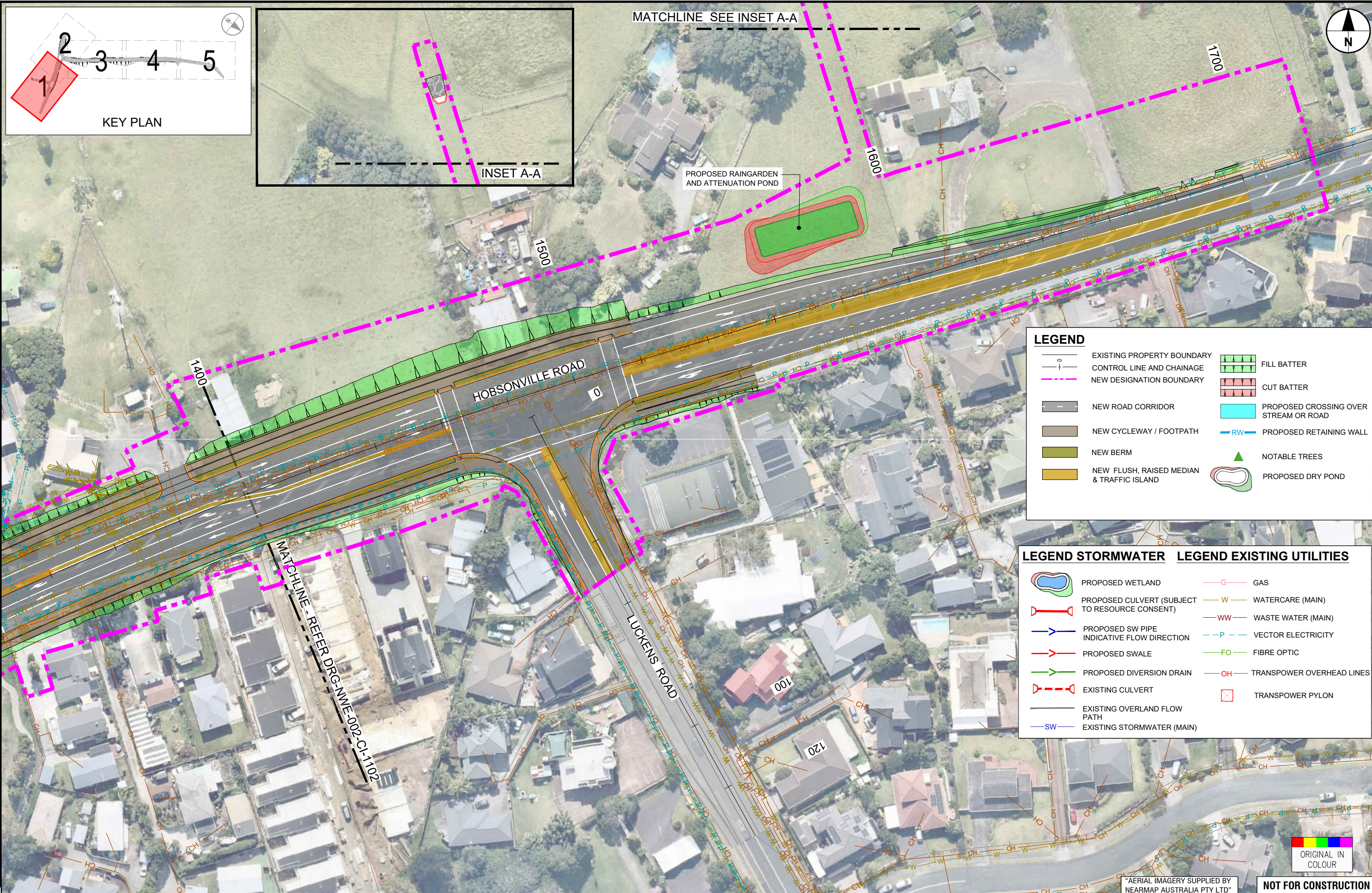
WETLANDS

- 2.8. RAIN GARDENS AND DRY POND
 - POTENTIAL SEEPAGE FROM RAIN GARDEN AND DRY POND TO BE CONTAINED AND DISCHARGED AWAY FROM FILL AREAS IF REQUIRED TO MANAGE GEOTECHNICAL EFFECTS .



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LEGEND

	EXISTING PROPERTY BOUNDARY		FILL BATTER
	CONTROL LINE AND CHAINAGE		CUT BATTER
	NEW DESIGNATION BOUNDARY		PROPOSED CROSSING OVER STREAM OR ROAD
	NEW ROAD CORRIDOR		PROPOSED RETAINING WALL
	NEW CYCLEWAY / FOOTPATH		NOTABLE TREES
	NEW BERM		PROPOSED DRY POND
	NEW FLUSH, RAISED MEDIAN & TRAFFIC ISLAND		

LEGEND STORMWATER		LEGEND EXISTING UTILITIES	
	PROPOSED WETLAND		GAS
	PROPOSED CULVERT (SUBJECT TO RESOURCE CONSENT)		WATERCARE (MAIN)
	PROPOSED SW PIPE INDICATIVE FLOW DIRECTION		WASTE WATER (MAIN)
	PROPOSED SWALE		VECTOR ELECTRICITY
	PROPOSED DIVERSION DRAIN		FIBRE OPTIC
	EXISTING CULVERT		TRANSPOWER OVERHEAD LINES
	EXISTING OVERLAND FLOW PATH		TRANSPOWER PYLON
	EXISTING STORMWATER (MAIN)		

			SURVEYED	N/A	
			DRAWN	V. DELA TORRE	01.05.20
			DRAWING CHECK	J. DELA TORRE	01.05.20
			DESIGN	P. HADWIN	01.05.20
			DESIGN REVIEW	R. BROWN	01.05.20
			APPROVED	B. BUSNARDO	07.12.2022
B	ISSUED FOR NOTICE OF REQUIREMENT LODGEMENT	VDLT	DEC. 2022		
A	FOR NOTICE OF REQUIREMENT AND RESOURCE CONSENT	VDLT	AUG. 2022		
REV	REVISIONS	DRAWN	DATE		

TE TUPU NGĀTAHI
Supporting Growth

AT

WAKA KOTAHI
NZ TRANSPORT AGENCY

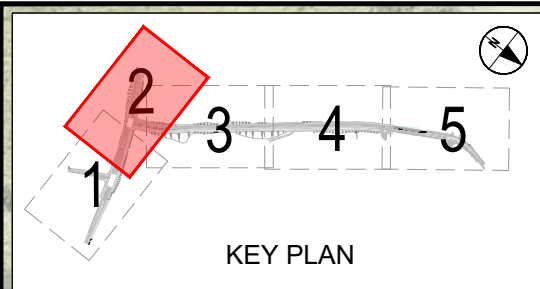
SUPPORTING GROWTH PROGRAMME
NORTH WEST - HIF TRIG ROAD (SOUTH)

Drawing Title:
GENERAL ARRANGEMENT LAYOUT PLAN
SHEET 1 OF 5

FOR LODGEMENT

Drawing Date: 07.12.2022

A1	1:500	A3	1:1000
Discipline: CIVIL			
Drawing No: SGA-DRG-NWE-002-CI-1101			
Revision: B			



LEGEND STORMWATER

LEGEND EXISTING UTILITIES

 PROPOSED WETLAND

 PROPOSED CULVERT (SUBJECT TO RESOURCE CONSENT)

 PROPOSED SW PIPE

 PROPOSED SWALE

 PROPOSED DIVERSION DRAIN

 EXISTING CULVERT

 EXISTING OVERLAND FLOW PATH

 EXISTING STORMWATER (MAIN)

 GAS

 WATERCARE (MAIN)

 WASTE WATER (MAIN)

 VECTOR ELECTRICITY

 FIBRE OPTIC

 TRANSPOWER OVERHEAD LINES

 TRANSPOWER PYLON

LEGEND

 EXISTING PROPERTY BOUNDARY

 CONTROL LINE AND CHAINAGE

 NEW DESIGNATION BOUNDARY

 NEW ROAD CORRIDOR

 NEW CYCLEWAY / FOOTPATH

 NEW BERM

 NEW FLUSH, RAISED MEDIAN & TRAFFIC ISLAND

 FILL BATTER

 CUT BATTER

 PROPOSED CROSSING OVER STREAM OR ROAD

 PROPOSED RETAINING WALL

 NOTABLE TREES

 PROPOSED DRY POND

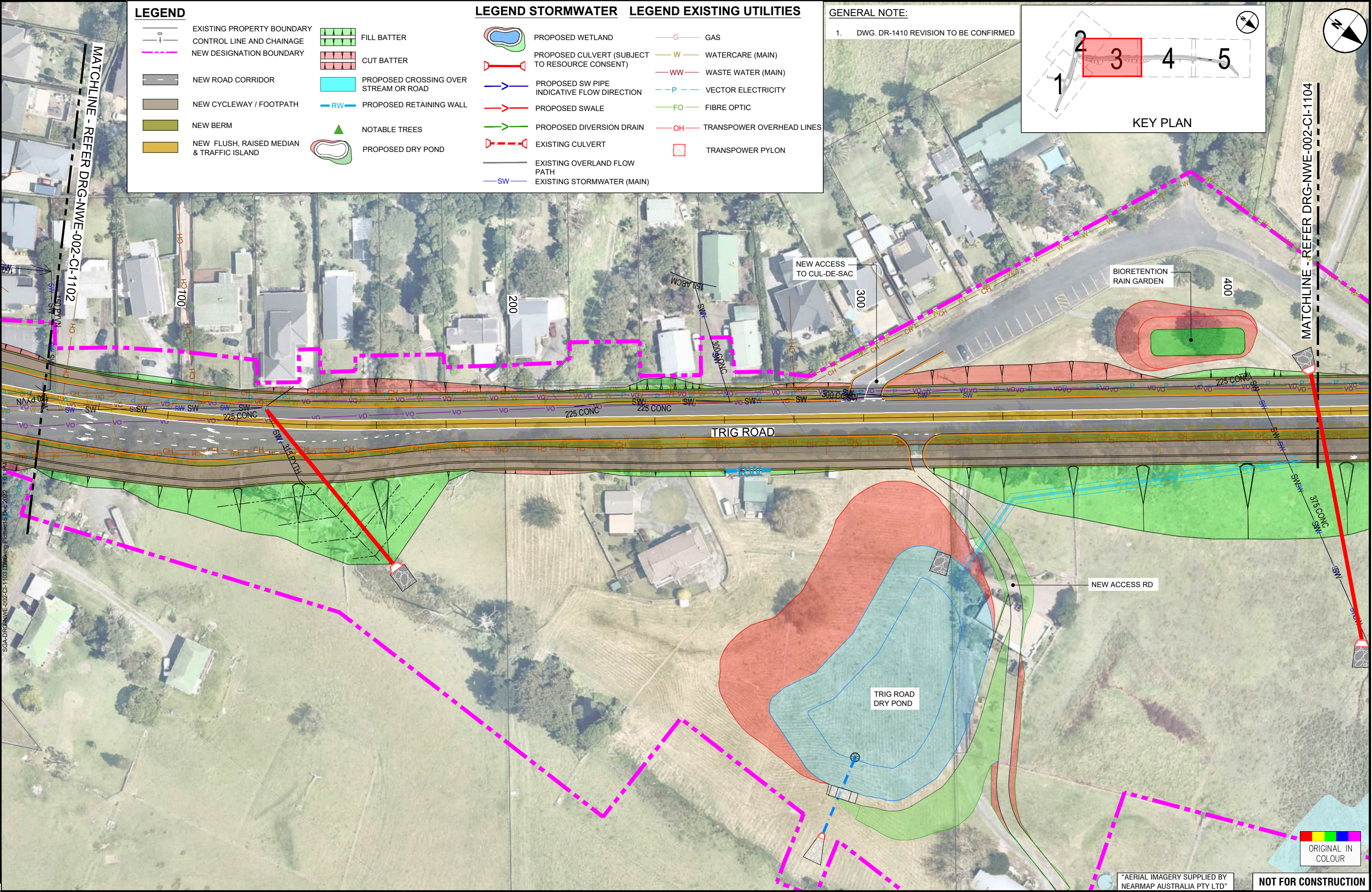


				SURVEYED	N/A	
				DRAWN	V. DELA TORRE	01.05.20
				DRAWING CHECK	J. DELA TORRE	01.05.20
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				DESIGN REVIEW	R. BROWN	01.05.20
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A	FOR NOTICE OF REQUIREMENT AND RESOURCE CONSENT	VDLT	AUG. 2022			
REV	REVISIONS	DRAWN	DATE			



SUPPORTING GROWTH PROGRAMME
NORTH WEST - HIF TRIG ROAD (SOUTH)
Project:
Drawing Title:
GENERAL ARRANGEMENT LAYOUT PLAN
SHEET 2 OF 5

FOR LODGEMENT
Drawing Date: 07.12.2022
A1 Scale: 1:500
A3 Scale: 1:1000
Discipline: CIVIL
Drawing No: SGA-DRG-NWE-002-CI-1102
Revision: B



				SURVEYED	N/A	
				DRAWN	V. DELA TORRE	01.05.20
				DRAWING CHECK	J. DELA TORRE	01.05.20
				DESIGN	P. HADWIN	01.05.20
				DESIGN REVIEW	R. BROWN	01.05.20
				APPROVED	B. BUSNARDO	07.12.2022
B	ISSUED FOR NOTICE OF REQUIREMENT LODGEMENT	VDLT	DEC. 2022	DESIGN REVIEW	R. BROWN	01.05.20
A	FOR NOTICE OF REQUIREMENT AND RESOURCE CONSENT	VDLT	AUG. 2022	APPROVED	B. BUSNARDO	07.12.2022
REV	REVISIONS	DRAWN	DATE			

SUPPORTING GROWTH PROGRAMME
NORTH WEST - HIF TRIG ROAD (SOUTH)

Drawing Title:
GENERAL ARRANGEMENT LAYOUT PLAN
SHEET 3 OF 5

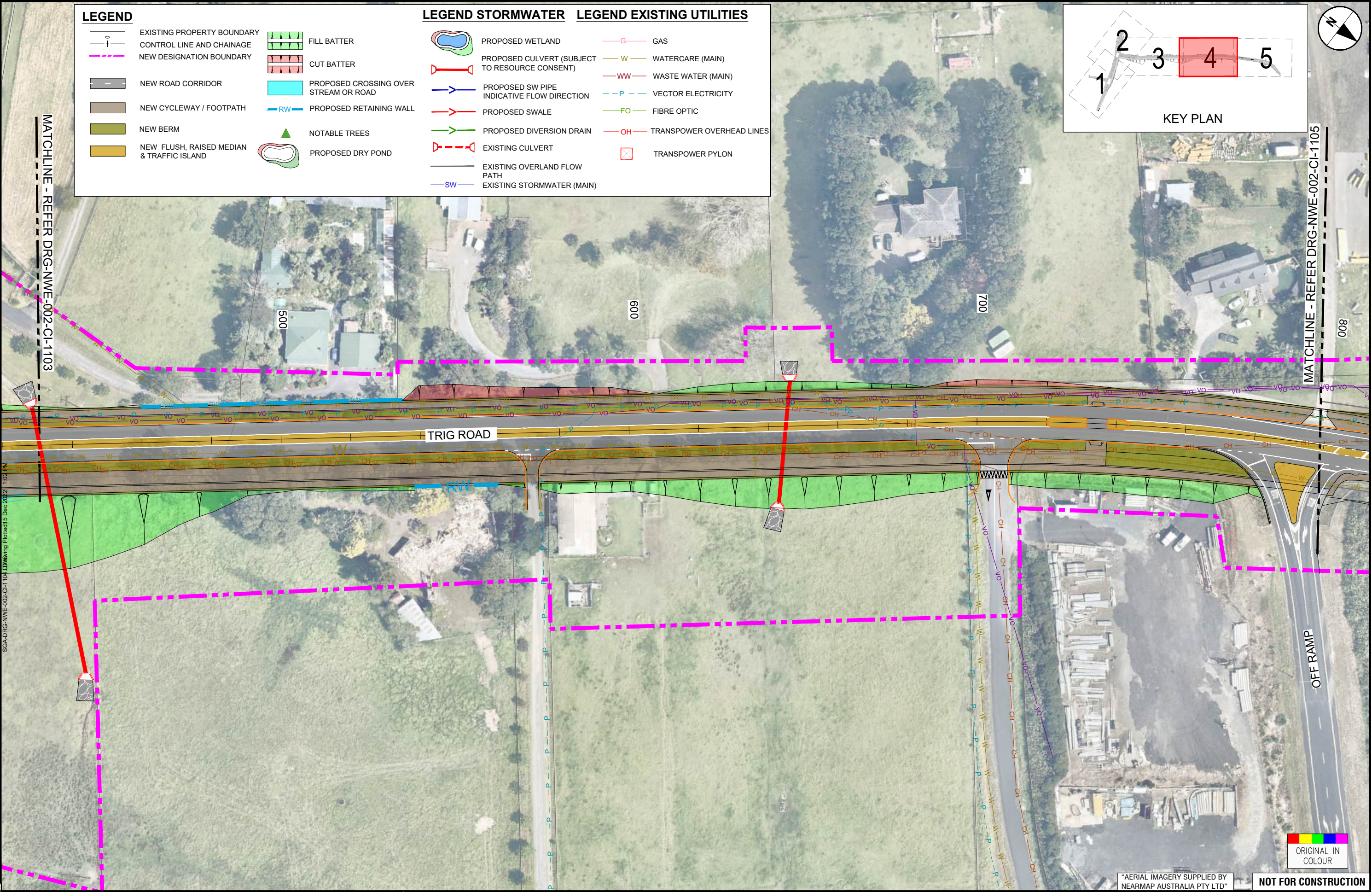
FOR LODGEMENT

Drawing Date: 07.12.2022

A1 Scales: 1:500 A3 Scales: 1:1000

Discipline: CIVIL

Drawing No: SGA-DRG-NWE-002-CI-1103 Revision: B



B		ISSUED FOR NOTICE OF REQUIREMENT LODGEMENT	VDLT	DEC. 2022	DESIGN REVIEW	R. BROWN	01.05.20
A		FOR NOTICE OF REQUIREMENT AND RESOURCE CONSENT	VDLT	AUG. 2022	DESIGN	P. HADWIN	01.05.20
REV		REVISIONS	BROWN	DATE	APPROVED	B. BUSNARDO	07.12.2022

Project: **SUPPORTING GROWTH PROGRAMME**
NORTH WEST - HIF TRIG ROAD (SOUTH)

Drawing Title: **GENERAL ARRANGEMENT LAYOT PLAN**
SHEET 4 OF 5

Drawing Status: **FOR LODGEMENT**

Drawing Date: 07.12.2022

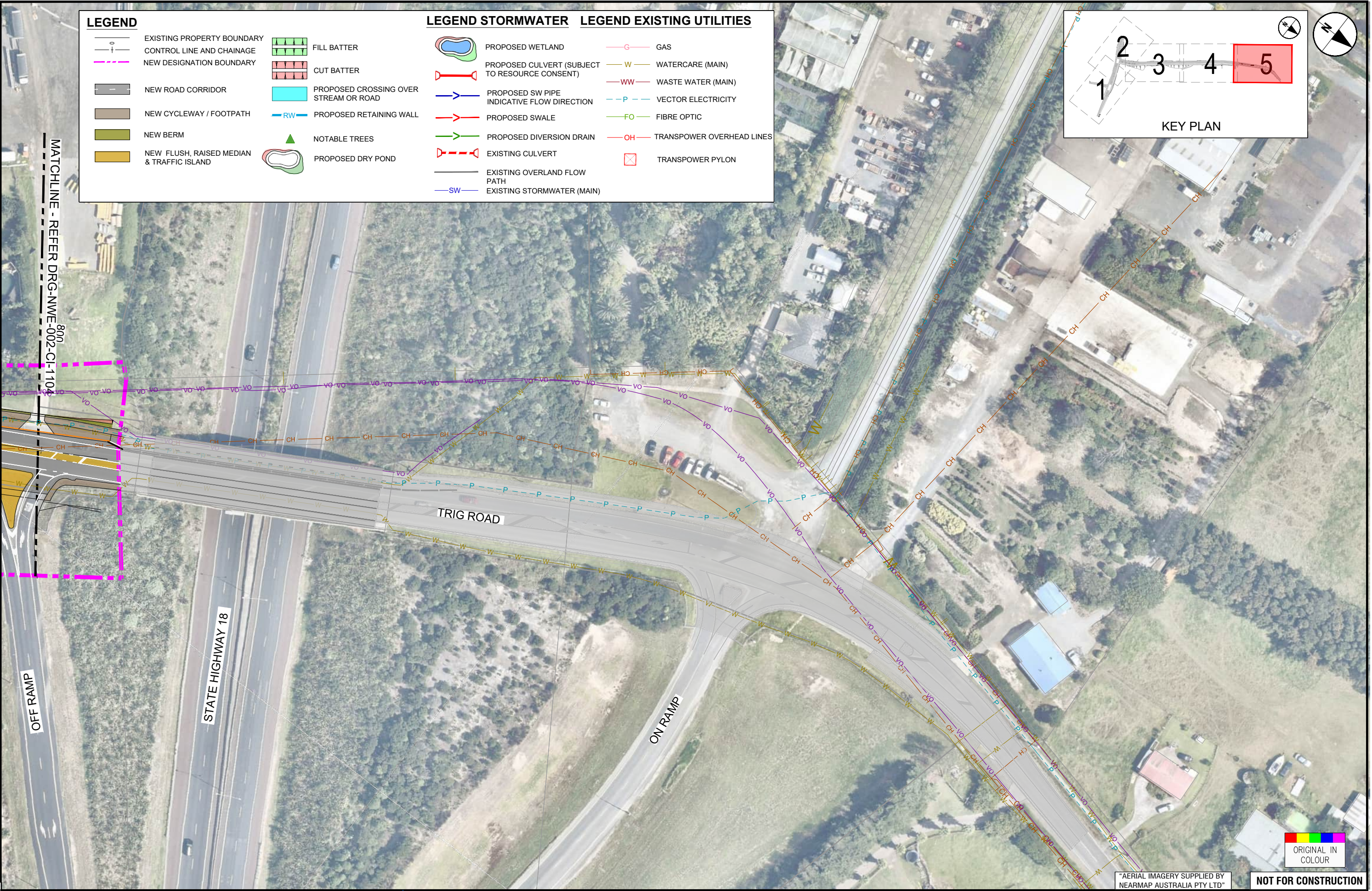
A1 Scale: 1:500 A3 Scale: 1:1000

Discipline: CIVIL

Drawing No: SGA-DRG-NWE-002-CI-1104

Revision: **B**

NOT FOR CONSTRUCTION



LEGEND

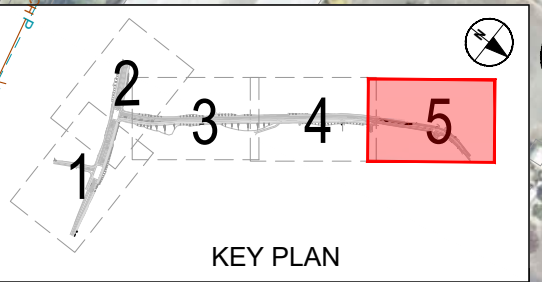
- EXISTING PROPERTY BOUNDARY
- CONTROL LINE AND CHAINAGE
- NEW DESIGNATION BOUNDARY
- NEW ROAD CORRIDOR
- NEW CYCLEWAY / FOOTPATH
- NEW BERM
- NEW FLUSH, RAISED MEDIAN & TRAFFIC ISLAND
- FILL BATTER
- CUT BATTER
- PROPOSED CROSSING OVER STREAM OR ROAD
- PROPOSED RETAINING WALL
- NOTABLE TREES
- PROPOSED DRY POND

LEGEND STORMWATER

- PROPOSED WETLAND
- PROPOSED CULVERT (SUBJECT TO RESOURCE CONSENT)
- PROPOSED SW PIPE INDICATIVE FLOW DIRECTION
- PROPOSED SWALE
- PROPOSED DIVERSION DRAIN
- EXISTING CULVERT
- EXISTING OVERLAND FLOW PATH
- EXISTING STORMWATER (MAIN)

LEGEND EXISTING UTILITIES

- GAS
- WATERCARE (MAIN)
- WASTE WATER (MAIN)
- VECTOR ELECTRICITY
- FIBRE OPTIC
- TRANSPower OVERHEAD LINES
- TRANSPower PYLON



				SURVEYED	N/A	
				DRAWN	V. DELA TORRE	01.05.20
				DRAWING CHECK	J. DELA TORRE	01.05.20
				DESIGN	P. HADWIN	01.05.20
				DESIGN REVIEW	R. BROWN	01.05.20
				APPROVED	B. BUSNARDO	07.12.2022
B	ISSUED FOR NOTICE OF REQUIREMENT LODGEMENT	VDLT	DEC. 2022			
A	FOR NOTICE OF REQUIREMENT AND RESOURCE CONSENT	VDLT	AUG. 2022			
REV	REVISIONS	DRAWN	DATE			



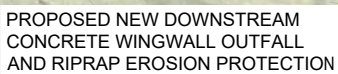
SUPPORTING GROWTH PROGRAMME
NORTH WEST - HIF TRIG ROAD (SOUTH)
Project:
Drawing Title:
GENERAL ARRANGEMENT LAYOUT PLAN
SHEET 5 OF 5

"AERIAL IMAGERY SUPPLIED BY NEARMAP AUSTRALIA PTY LTD"

NOT FOR CONSTRUCTION

FOR LODGEMENT

Drawing Date:	07.12.2022
A1 Scale:	1:500
A3 Scale:	1:1000
Discipline:	CIVIL
Drawing No:	SGA-DRG-NWE-002-CI-1105
Revision:	B



KEY PLAN

MATCHLINE SEE INSET A-A

PROPOSED NEW DOWNSTREAM CONCRETE WINGWALL OUTFALL AND RIPRAP EROSION PROTECTION

INSET A-A

PROPOSED RAINGARDEN AND
ATTENUATION POND 248m² BASE x
0.6m DEEP WITH 1:4 INTERNAL SIDE
SLOPES. INCLUDES SCRUFFY DOME
OVERFLOW MANHOLE, DISCHARGING
INTO OVERLAND FLOW PATH

NEW Ø300mm RRJ
CONCRETE SW PIPE

STORMWATER PIPES
UPSTREAM OF
EXISTING MANHOLE TO
BE MADE REDUNDANT

TIE INTO EXISTING
STORMWATER MANHOLE

NEW Ø300mm RRJ
CONCRETE SW PIPE

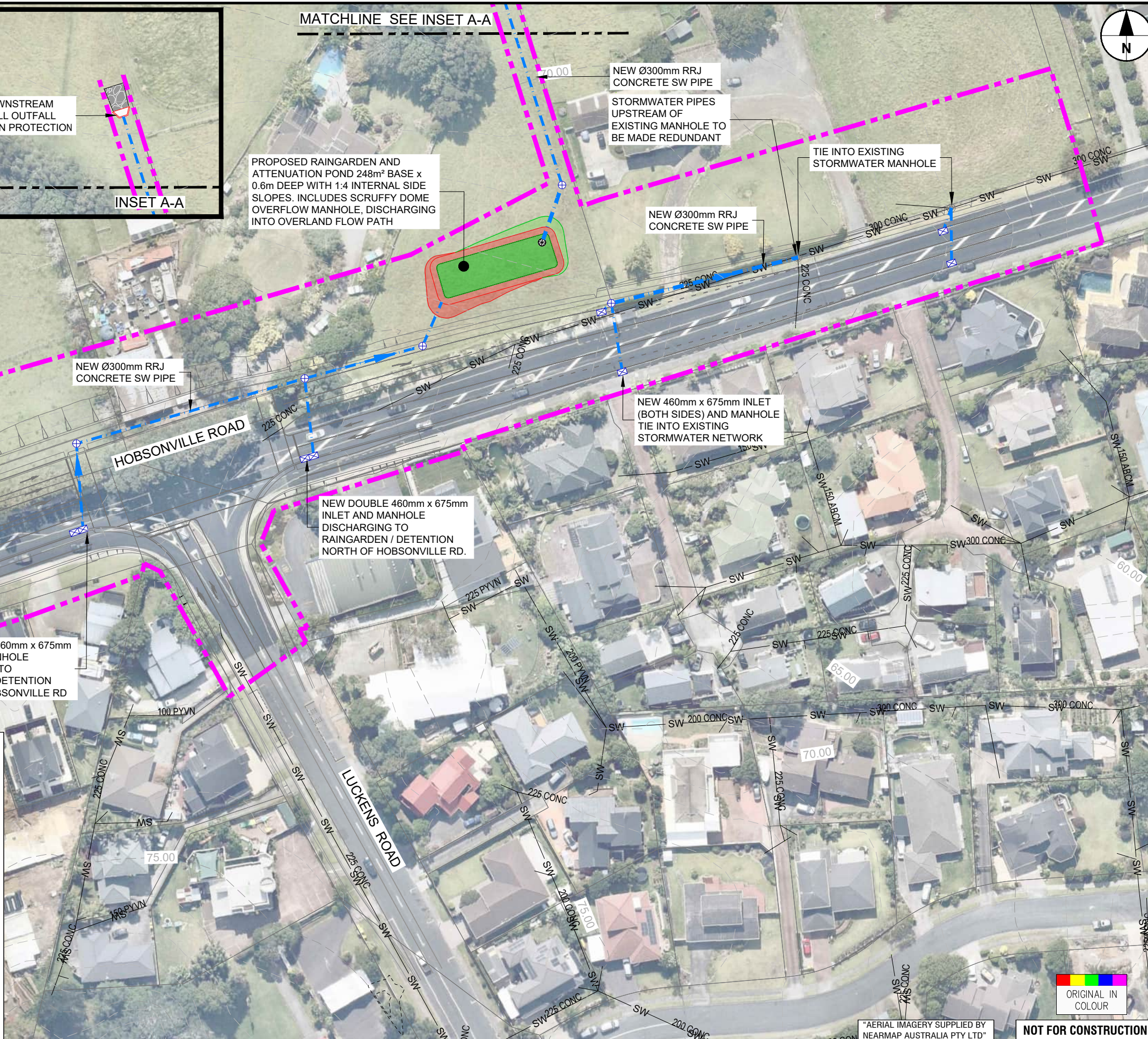
NEW 460mm x 675mm INLET
(BOTH SIDES) AND MANHOLE
TIE INTO EXISTING
STORMWATER NETWORK

NEW DOUBLE 460mm x 675mm
INLET AND MANHOLE
DISCHARGING TO
RAINGARDEN / DETENTION
NORTH OF HOBSONVILLE RD.

NEW DOUBLE 460mm x 675mm
INLET AND MANHOLE
DISCHARGING TO
RAINGARDEN/DETENTION
NORTH OF HOBSONVILLE RD

LEGEND

- | | | | |
|--|--|---|---------------------------------------|
|  | PROPOSED DESIGNATION BOUNDARY |  | INDICATIVE HEADWALL |
|  | EXISTING 1% AEP FLOOD PLAIN |  | INDICATIVE MANHOLE |
|  | PROPOSED DRY POND |  | EXISTING MANHOLE |
|  | PROPOSED NEW CULVERT |  | INDICATIVE SCRUFFY DOME INLET MANHOLE |
|  | INDICATIVE PROPOSED SW PIPE & FLOW DIRECTION |  | INDICATIVE CATCHPIT |
|  | INDICATIVE FLOW DIRECTION |  | INDICATIVE DROP KERB INTO RAINGARDEN |
|  | RIP RAP |  | EXISTING OVERLAND FLOW PATH |
|  | RAINGARDEN LOCATED WITHIN BERM |  | EXISTING STORMWATER PIPES |
|  | BIORETENTION RAINGARDEN (WITH ATTENUATION) |  | EXISTING PROPERTY BOUNDARY |
| | |  | EXISTING CONTOUR |



"AERIAL IMAGERY SUPPLIED BY
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**Project: SUPPORTING GROWTH PROGRAMME
NORTH WEST - HIF TRIG ROAD (SOUTH)**

Drawing Title:

STORMWATER LAYOUT PLAN
SHEET 1 OF 5

FOR LODGEMENT

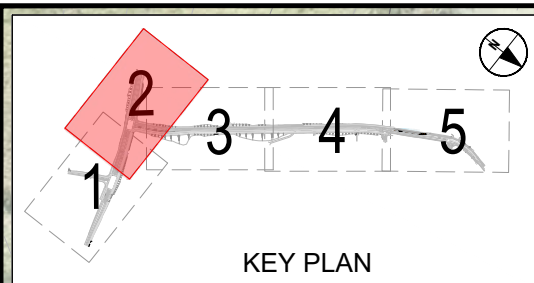
Drawing Date:		07.12.2022	
A1 Scales	1:500	A3 Scales	1:1000
Discipline: STORMWATER			

SGA-DRG-NWE-002-DR-1401

Revised

			SURVEYED		
			DRAWN	V. DELA TORRE	01.05.20
			DRAWING CHECK	J. DELA TORRE	01.05.20
			DESIGN	N. WOLFAARDT	20.08.20
B	ISSUED FOR NOTICE OF REQUIREMENT LODGEMENT	VDLT	DESIGN REVIEW	R. SEYB	20.08.20
A	FOR NOTICE OF REQUIREMENT AND RESOURCE CONSENT	VDLT	APPROVED	B. BUSNARDO	07.12.2022
REV		VDLT			





				SURVEYED		
				DRAWN	V. DELA TORRE	01.05.20
				DRAWING CHECK	J. DELA TORRE	01.05.20
				DESIGN	N. WOLFAARDT	20.08.20
B	ISSUED FOR NOTICE OF REQUIREMENT LODGEMENT	VOLT	DEC. 2022	DESIGN REVIEW	R. SEYB	20.08.20
A	FOR NOTICE OF REQUIREMENT AND RESOURCE CONSENT	VOLT	AUG. 2020	APPROVED	B. BUSNARDO	07.12.2022
REV	REVISIONS	DRAWN				

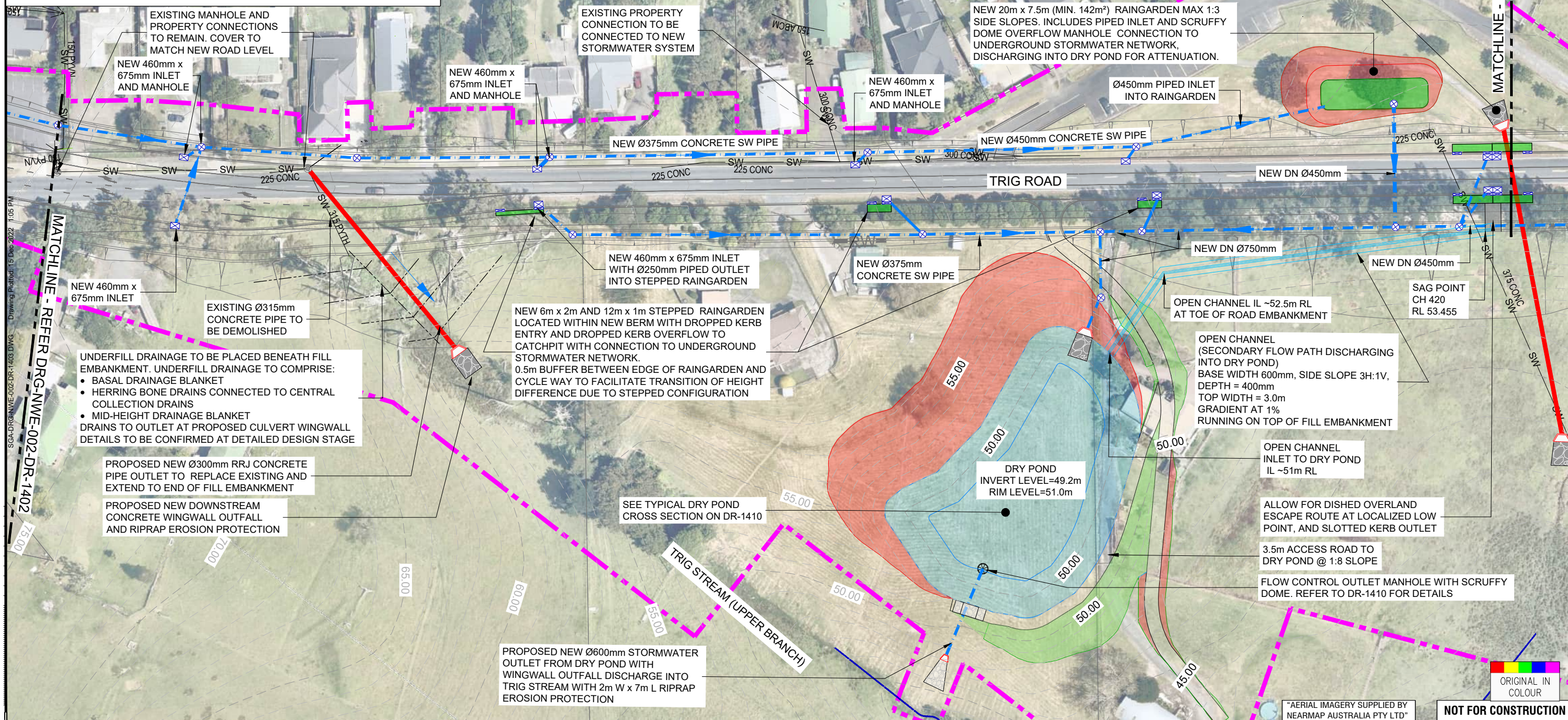
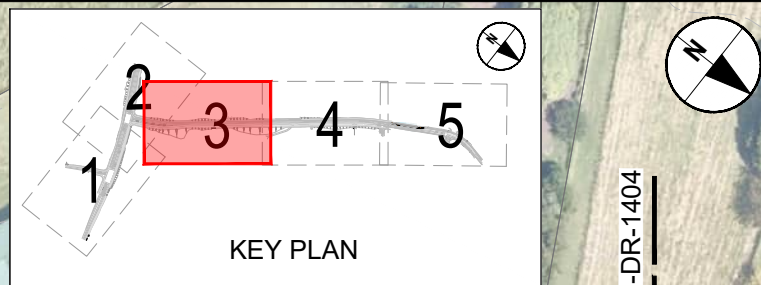


Project:	SUPPORTING GROWTH PROGRAMME NORTH WEST - HIF TRIG ROAD (SOUTH)
Drawing title:	STORMWATER LAYOUT PLAN SHEET 2 OF 5

Drawing Status:		FOR LODGEMENT	
Drawing Date:			
07.12.2022			
A1 Scales	1:500	A3 Scales	1:1000
Discipline: STORMWATER			
Drawing No. SGA-DRG-NWE-002-DR-1402			Revision: B

LEGEND

- | | | | |
|--|--|---|---------------------------------------|
|  | PROPOSED DESIGNATION BOUNDARY |  | INDICATIVE HEADWALL |
|  | EXISTING 1% AEP FLOOD PLAIN |  | INDICATIVE MANHOLE |
|  | PROPOSED DRY POND |  | EXISTING MANHOLE |
|  | PROPOSED NEW CULVERT |  | INDICATIVE SCRUFFY DOME INLET MANHOLE |
|  | INDICATIVE PROPOSED SW PIPE & FLOW DIRECTION |  | INDICATIVE CATCHPIT |
|  | INDICATIVE FLOW DIRECTION |  | INDICATIVE DROP KERB INTO RAINGARDEN |
|  | RIP RAP |  | EXISTING OVERLAND FLOW PATH |
|  | RAINGARDEN LOCATED WITHIN BERM |  | EXISTING STORMWATER PIPES |
|  | BIORETENTION RAINGARDEN (WITH ATTENUATION) |  | EXISTING PROPERTY BOUNDARY |
| | |  | EXISTING CONTOUR |



				SURVEYED		
				DRAWN	V. DELA TORRE	01.05.20
				DRAWING CHECK	J. DELA TORRE	01.05.20
				DESIGN	N. WOLFAARDT	20.08.20
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REV	REVISIONS	DRAWN DATE				



SUPPORTING GROWTH PROGRAMME
NORTH WEST - HIF TRIG ROAD (SOUTH)

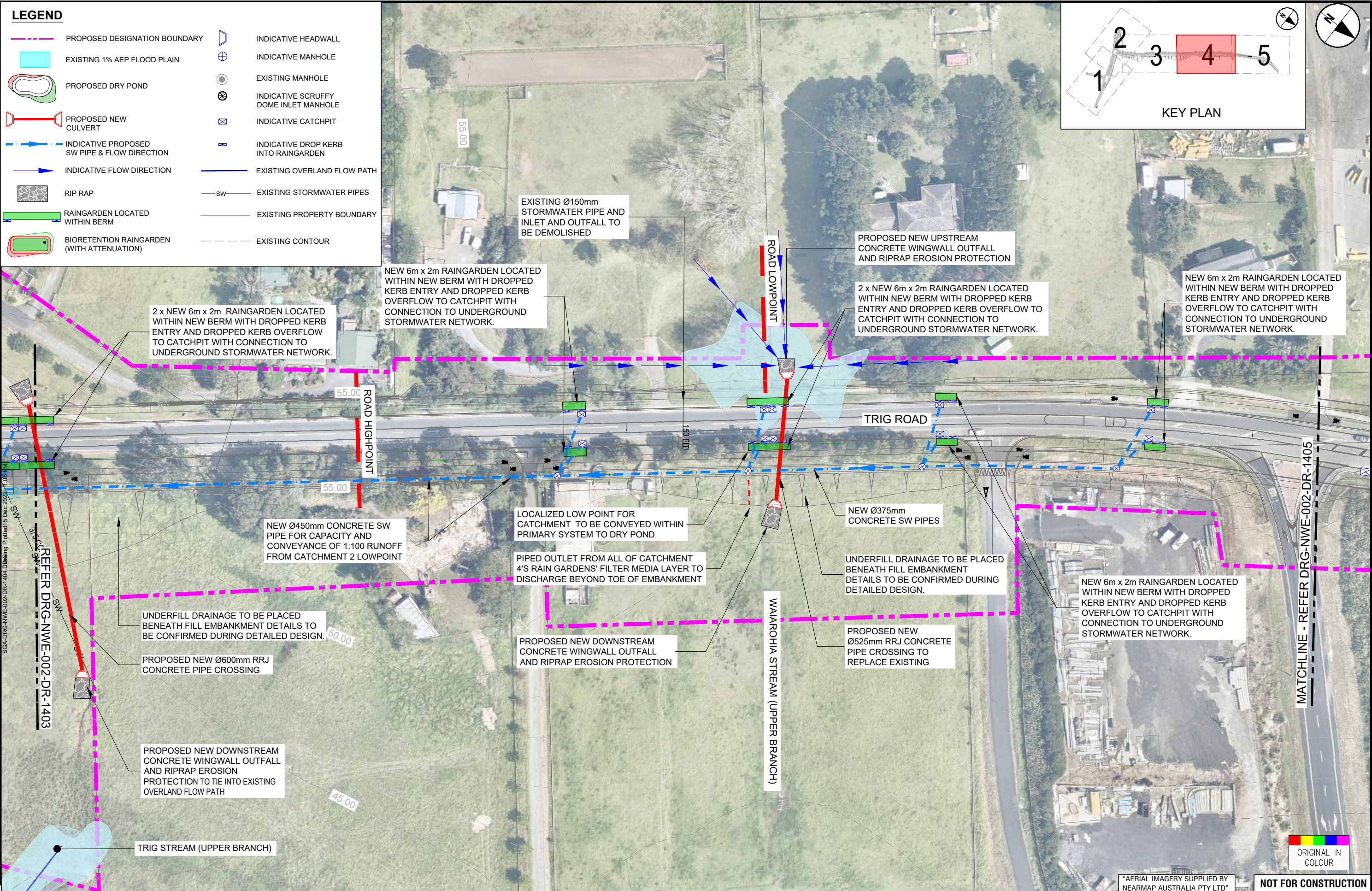
Drawing Title:

STORMWATER LAYOUT PLAN
SHEET 3 OF 5

"AERIAL IMAGERY SUPPLIED BY
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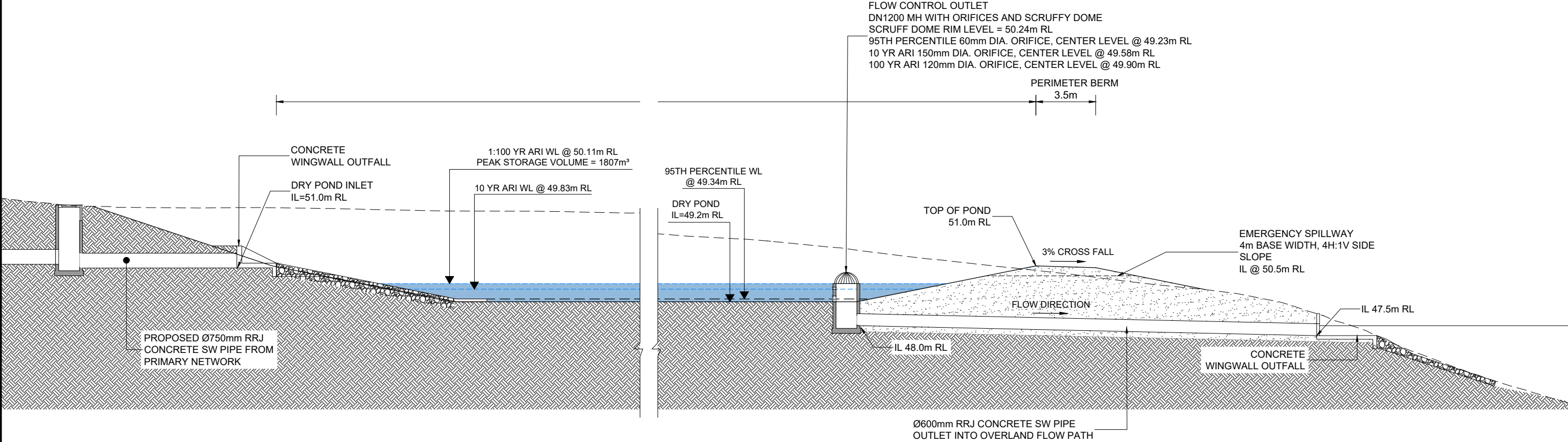
NOT FOR CONSTRUCTION

Drawing Status:		FOR LODGEMENT	
Drawing Date:		07.12.2022	
A1 Scales	1:500	A3 Scales	1:1000
Discipline STORMWATER			
Drawing No. SGA-DRG-NWE-002-DR-1403			Revision B

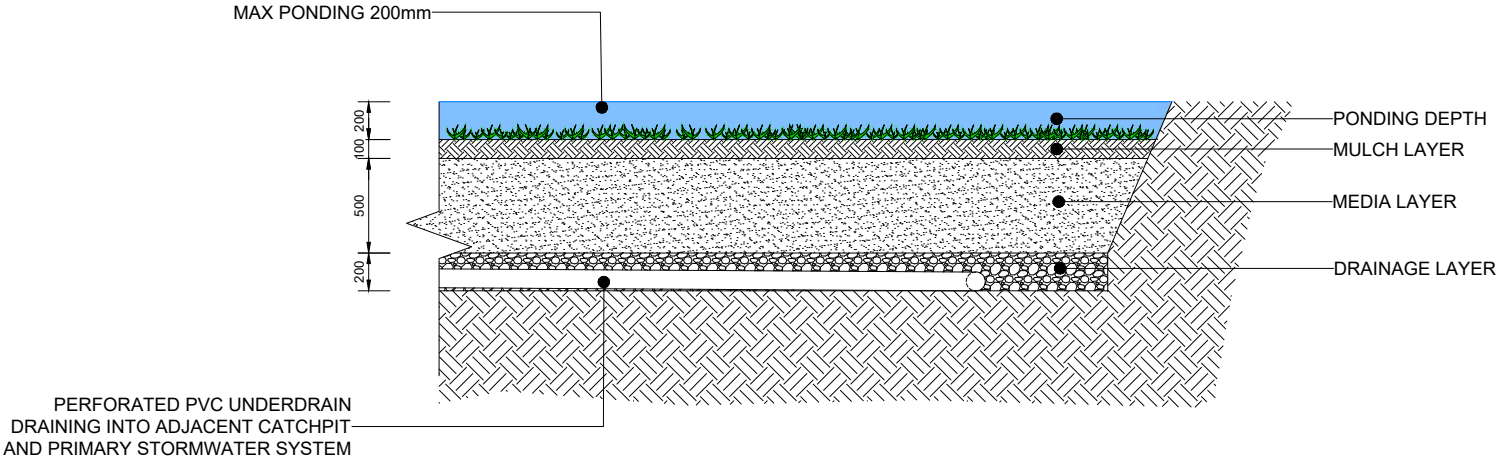


SURVEYED		DRAWN		DESIGN		DESIGN REVIEW		APPROVED	
V. DELA TORRE		J. DELA TORRE		N. WOLFAARDT		R. SEYB		B. BUSNARDO	
01.05.20		01.05.20		20.08.20		20.08.20		07.12.2022	
B		A		REV		VOL		DATE	
ISSUED FOR NOTICE OF REQUIREMENT LODGEMENT		FOR NOTICE OF REQUIREMENT AND RESOURCE CONSENT		REV		VOL		DATE	
DEC. 2022		AUG. 2020		DEC. 2022		AUG. 2020		DEC. 2022	
TE TUPU NGĀTAHI		WAKA KOTAHI		NZ TRANSPORT		AGENCY		SUPPORTING GROWTH PROGRAMME	
Supporting Growth		NZ TRANSPORT		AGENCY		SUPPORTING GROWTH PROGRAMME		NORTH WEST - HIF TRIG ROAD (SOUTH)	
STORMWATER LAYOUT PLAN		SHEET 4 OF 5		Drawing Title:		Drawing No:		Revision:	
SGA-DRG-NWE-002-DR-1404		SGA-DRG-NWE-002-DR-1404		SGA-DRG-NWE-002-DR-1404		SGA-DRG-NWE-002-DR-1404		SGA-DRG-NWE-002-DR-1404	
B		B		B		B		B	

SGA-DRG-NWE-002-DR-1410 Drawing Plotted 5 Dec 2022 1:07 PM



A | TYPICAL DRY POND CROSS SECTION
Scale 1:100



B | TYPICAL RAINGARDEN LONG SECTION
Scale 1:20



NOT FOR CONSTRUCTION

				SURVEYED		
				DRAWN	V. DELA TORRE	01.05.20
				DRAWING CHECK	J. DELA TORRE	01.05.20
				DESIGN	N. WOLFAARDT	20.08.20
				DESIGN REVIEW	R. SEYB	20.08.20
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REV	REVISIONS	DRAWN	DATE			



Project: **SUPPORTING GROWTH PROGRAMME**
NORTH WEST - HIF TRIG ROAD (SOUTH)
Drawing Title: **STORMWATER**
DRY POND AND RAINGARDEN TYPICAL CROSS SECTIONS

Drawing Status: FOR LODGEMENT	
Drawing Date: 07.12.2022	
A1 Scale: AS SHOWN	A3 Scale: HALF SCALE
Discipline: STORMWATER	
Drawing No. SGA-DRG-NWE-002-DR-1410	
Revision: B	

SGA-DRG-NWE-002-EN-1500 Drawing Plotted 5 Dec 2022 11:07 PM

PROPOSED DESIGNATION BOUNDARY

EXISTING 1% AEP FLOOD PLAIN

PROPOSED DRY POND

PROPOSED NEW CULVERT

INDICATIVE PROPOSED SW PIPE & FLOW DIRECTION

INDICATIVE FLOW DIRECTION

RIP RAP

RAINGARDEN LOCATED WITHIN BERM

BIORETENTION RAINGARDEN (WITH ATTENUATION)

INDICATIVE HEADWALL

INDICATIVE MANHOLE

EXISTING MANHOLE

INDICATIVE SCRUFFY DOME INLET MANHOLE

INDICATIVE CATCHPIT

INDICATIVE DROP KERB INTO RAINGARDEN

EXISTING OVERLAND FLOW PATH

EXISTING STORMWATER PIPES

EXISTING PROPERTY BOUNDARY

EXISTING CONTOUR

EXISTING SWALE

CLEAN WATER DIVERSION BUND

'DIRTY' WATER DIVERSION BUND

SILT FENCE

SAND BAG/LOG

SILT SOCK

CONTOUR DRAIN

SILT STABILIZED ENTRANCEWAY

DECANTING EARTH BUND

EXTEND SURFACING/LAYERWORKS (DISTURBED AREAS). APPLIES TO FULL LENGTH OF TRIG ROAD AND HOBSONVILLE ROAD AS INDICATED

- GENERAL NOTES (APPLICABLE TO ALL LAYOUTS):
1.

ALL ENVIRONMENTAL CONTROLS TO BE SET UP PRIOR TO COMMENCEMENT OF WORKS AND APPROVED FOR SUITABILITY BY ENGINEER.
2.

CLEAN WATER DIVERSION BUNDS TO DIRECT RUNOFF TO EXISTING CROSSINGS UNTIL OFFLINE CONSTRUCTION OF NEW STORMWATER CROSSINGS HAVE BEEN COMPLETED, INCLUDING OUTFALL AND EROSION PROTECTION, AFTER WHICH CLEAN RUNOFF WILL BE DIVERTED TO NEW STORMWATER CROSSINGS.
3.

STORMWATER CROSSINGS UNDER TRIG ROAD TO BE CONSTRUCTED OFFLINE ALONG NEW ALIGNMENT. DOWNSTREAM DISCHARGE FROM EXISTING CROSSINGS TO BE TEMPORARILY DIVERTED TO ALLOW FOR DRY WORKS AREA AT NEW OUTFALL POSITION.
4.

WHERE EXISTING STORMWATER PIPES TIE INTO NEW NETWORK, ENSURE DOWNSTREAM STORMWATER PIPES AND OUTFALLS ARE COMPLETED PRIOR TO CONNECTION.
5.

TRAFFIC MANAGEMENT PLAN TO BE SUPPLIED BY CONTRACTOR FOR ZONE 2 AND 3 OF WORKS FOR WHICH FULL ROAD RECONSTRUCTION IS EXPECTED WITH DETAILS OF PROGRESSIVE CHANGES TO SEDIMENT CONTROL METHODS WITHIN THE CARRIAGEWAY.
6.

WORKS AND ASSOCIATED EROSION AND SEDIMENT CONTROL MEASURES TO BE STAGED TO MAINTAIN ACCESS TO EXISTING PROPERTIES THROUGHOUT.
7.

USE CUT AND COVER METHOD FOR OPEN TRENCH INSTALLATION.
8.

ALL STOCKPILES TO BE COVERED DURING PERIODS OF INACTIVITY.
9.

ALL EXISTING STORMWATER INLETS AND NEW INLETS DRAINING INTO EXISTING STORMWATER SYSTEMS, TO RECEIVE SEDIMENT PROTECTION.
10.

ALL SEDIMENT CONTROL MEASURES TO REMAIN IN PLACE POST CONSTRUCTION UNTIL >80% STABILIZED SURFACES HAVE BEEN ESTABLISHED.
11.

ANY SEDIMENT LADEN RUNOFF COLLECTED OFF THE TRIG ROAD SURFACE AREA WILL BE COLLECTED VIA THE NEW STORMWATER PIPE NETWORK AND DISCHARGED INTO THE SEDIMENT RETENTION POND FOR TREATMENT.
12.

ANY SEDIMENT LADEN RUNOFF COLLECTED OFF THE ROAD SURFACE OF HOBSONVILLE ROAD, JUST EAST OF THE INTERSECTION, WILL BE COLLECTED VIA THE NEW STORMWATER PIPE NETWORK AND DISCHARGED INTO THE PROPOSED ATTENUATION POND / RAINGARDEN (TO USED AS A TEMPORARY TREATMENT DEVICE DURING CONSTRUCTION) FOR TREATMENT.
13.

NEW SLOTTED KERB ENTRY INTO AND OUT OF THE PROPOSED RAINGARDENS WITHIN THE BERM ARE TO BE ADDED ONLY AFTER FULL SITE STABILIZATION IS ACHIEVED AND ROAD SURFACE RUNOFF IS NO LONGER SEDIMENT LADEN. RAINGARDENS ARE TO RECIEVE PERIMETER SEDIMENT PROTECTION MEASURES AND TEMPORARY COVERS DURING THIS PERIOD UNTIL OPEN FOR USE.

				SURVEYED		
				DRAWN	V. DELA TORRE	20.08.20
				DRAWING CHECK	J. DELA TORRE	20.08.20
				DESIGN	N. WOLFAARDT	20.08.20
				DESIGN REVIEW	R. SEYB	20.08.20
				APPROVED	B. BUSNARDO	07.12.2022
B	ISSUED FOR NOTICE OF REQUIREMENT LODGEMENT	VDLT	DEC. 2022			
A	FOR NOTICE OF REQUIREMENT AND RESSOURCE CONSENT	VDLT	AUG. 2020			
REV	REVISIONS	DRAWN	DATE			



Project:

SUPPORTING GROWTH PROGRAMME

NORTH WEST - HIF TRIG ROAD (SOUTH)

Drawing Title:

EROSION & SEDIMENT CONTROL

LEGEND AND GENERAL NOTES

Drawing Status:

FOR LODGEMENT

Drawing Date:

07.12.2022

A1
Scale

NTS

A3
Scale

NTS

Discipline:

ENVIRONMENTAL

Drawing No.

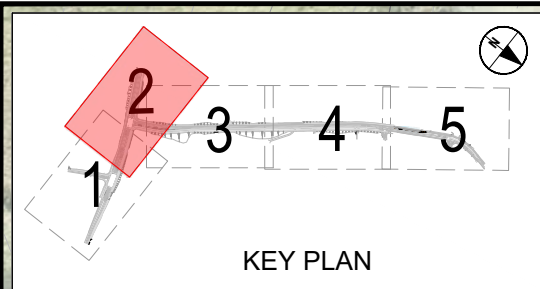
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Revision:

B



NOT FOR CONSTRUCTION



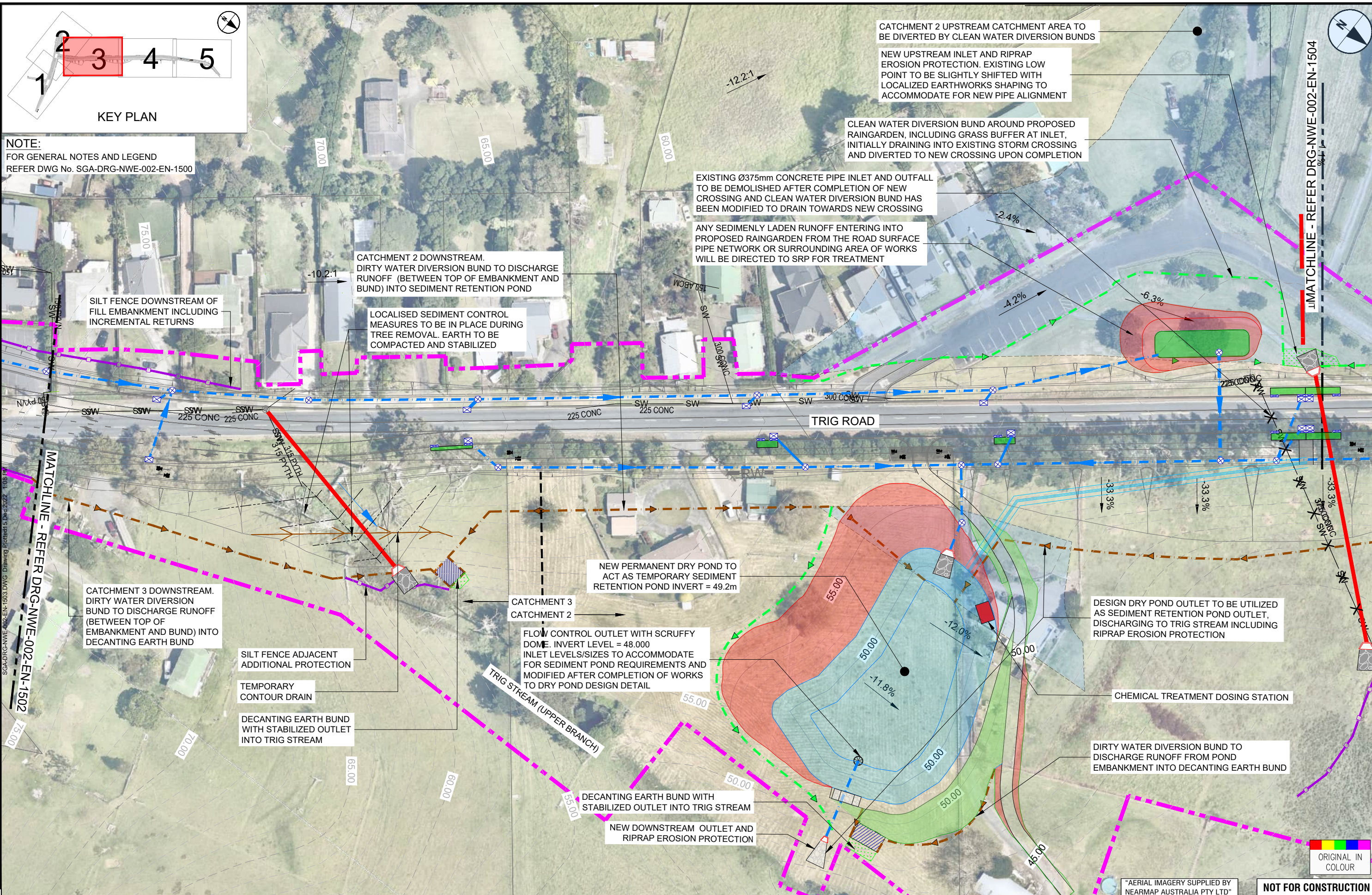
NOTE:
FOR GENERAL NOTES AND LEGEND
REFER DWG No. SGA-DRG-NWE-002-EN-1500



			SURVEYED		
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REV	REVISIONS	DRAWN	DATE		

Project: **SUPPORTING GROWTH PROGRAMME**
NORTH WEST - HIF TRIG ROAD (SOUTH)
Drawing Title: **EROSION & SEDIMENT CONTROL PLAN**
SHEET 2 OF 5

Drawing Status:	FOR LODGEMENT
Drawing Date:	07.12.2022
A1 Scale:	1:500
A3 Scale:	1:1000
Discipline:	ENVIRONMENTAL
Drawing No:	SGA-DRG-NWE-002-EN-1502
Revision:	B

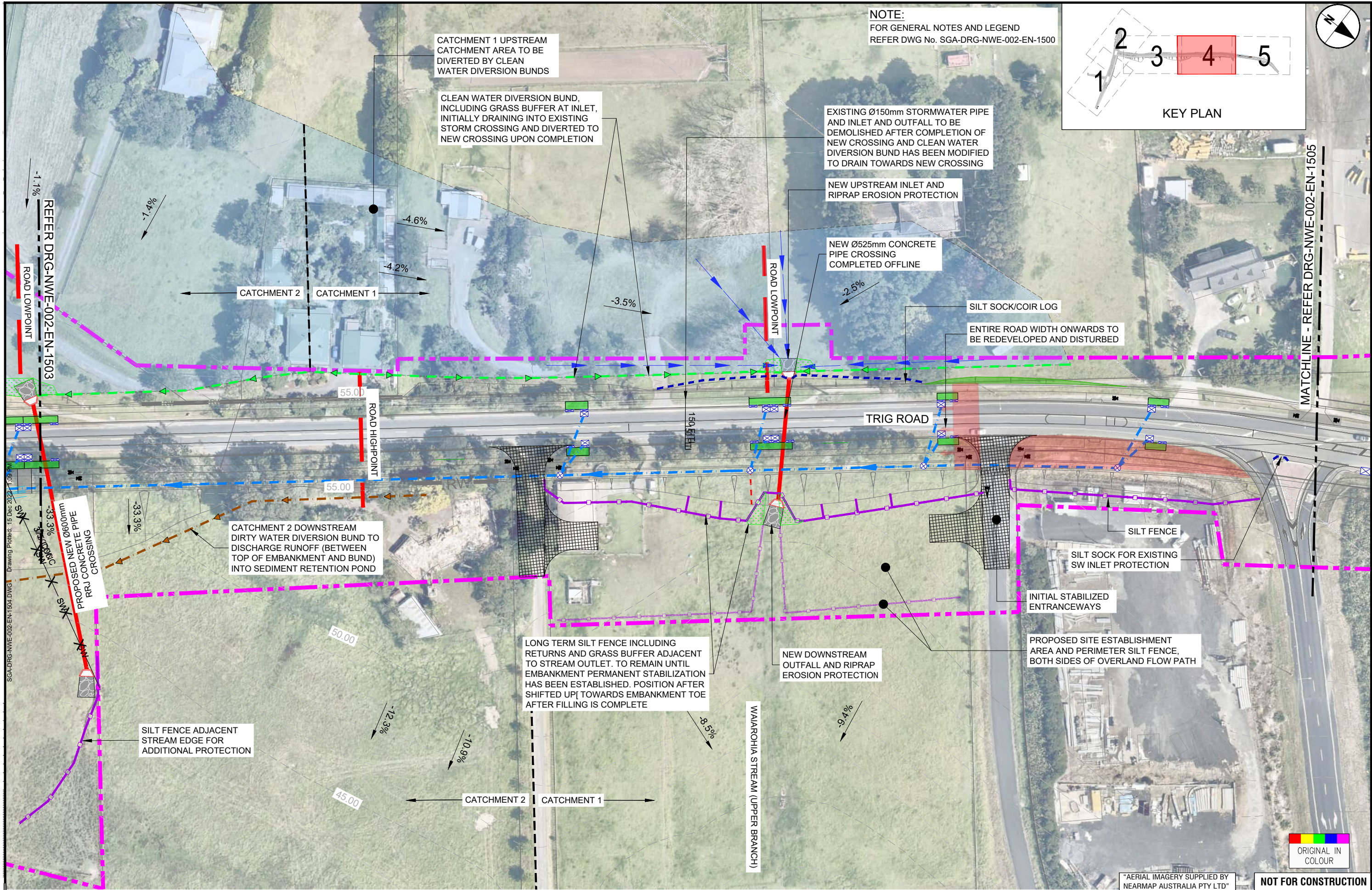


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				DRAWN	V. DELA TORRE	20.08.20
				DRAWING CHECK	J. DELA TORRE	20.08.20
				DESIGN	N. WOLFAARDT	20.08.20
B	ISSUED FOR NOTICE OF REQUIREMENT LODGEMENT	V.DLT	DEC. 2022	DESIGN REVIEW	R. SEYB	20.08.20
A	FOR NOTICE OF REQUIREMENT AND RESOURCE CONSENT	V.DLT	AUG. 2020			
REV.	REVISIONS	DRAWN	RATE	APPROVED	B. BUSNARDO	07.12.2022



Project:	SUPPORTING GROWTH PROGRAMME NORTH WEST - HIF TRIG ROAD (SOUTH)
Drawing Title:	EROSION & SEDIMENT CONTROL PLAN SHEET 3 OF 5

	Drawing Status:		FOR LODGEMENT	
	Drawing Date:		07.12.2022	
	A1 Scales	1:500	A3 Scales	1:1000
	Discipline: ENVIRONMENTAL			
Drawing No:		SGA-DRG-NWE-002-EN-1503		Revision: B



REV			SURVEYED		
			DRAWN	V. DELA TORRE	20.08.20
			DRAWING CHECK	J. DELA TORRE	20.08.20
			DESIGN	N. WOLFAARDT	20.08.20
			DESIGN REVIEW	R. SEYB	20.08.20
B	ISSUED FOR NOTICE OF REQUIREMENT LODGEMENT		VDLT	DEC. 2022	
A	FOR NOTICE OF REQUIREMENT AND RESOURCE CONSENT		VDLT	AUG. 2020	
	REVISIONS		DRAWN	DATE	APPROVED
					B. BUSNARDO 07.12.2022



Project:
SUPPORTING GROWTH PROGRAMME
NORTH WEST - HIF TRIG ROAD (SOUTH)

Drawing Title:
EROSION & SEDIMENT CONTROL PLAN
SHEET 4 OF 5

Drawing Status:
FOR LODGEMENT

Drawing Date:
07.12.2022

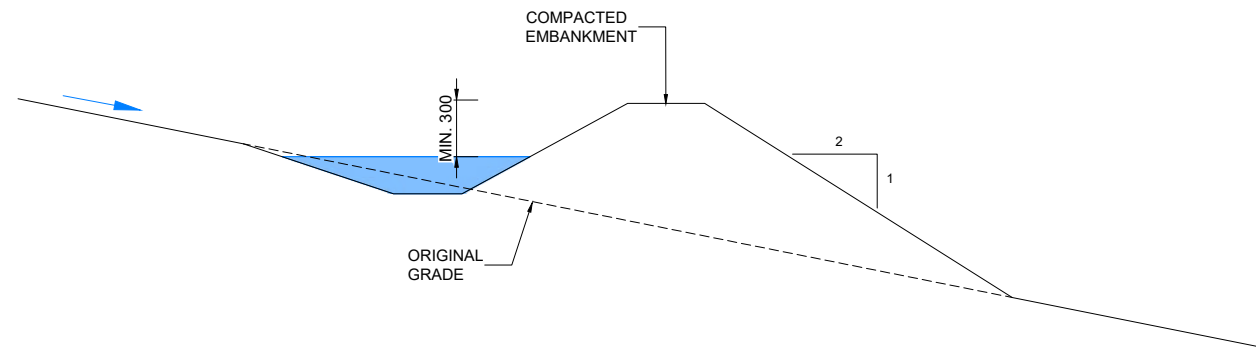
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1:500

A3 Scale:
1:1000

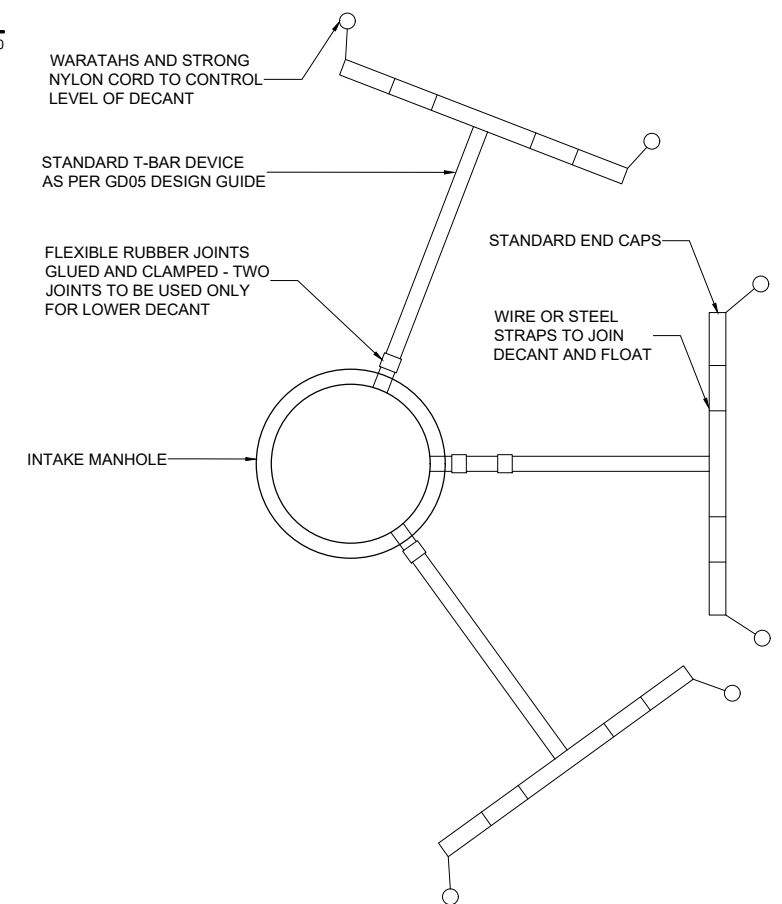
Discipline:
ENVIRONMENTAL

Drawing No:
SGA-DRG-NWE-002-EN-1504

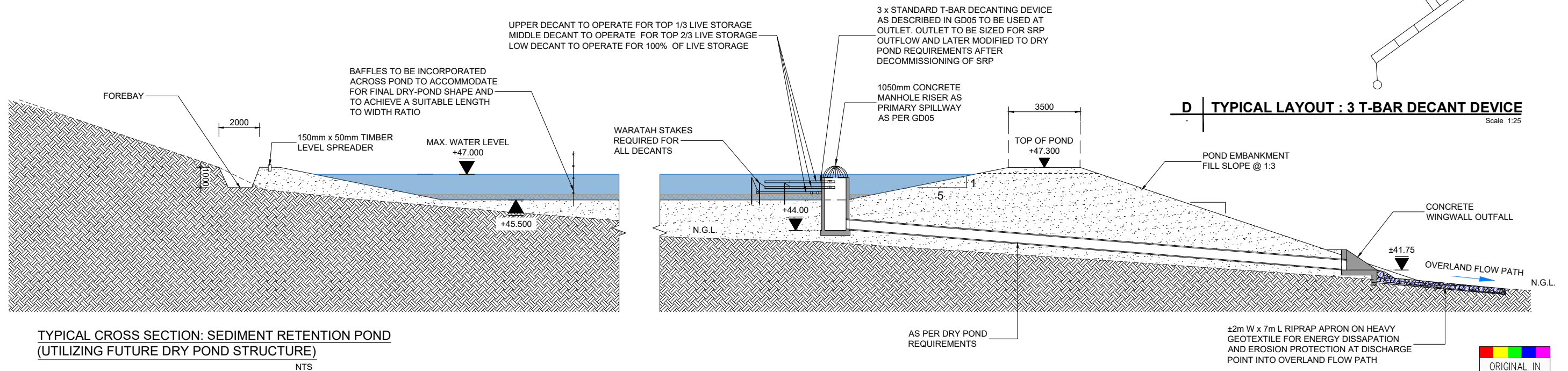
Revision:
B



C	TYPICAL CROSS SECTION : DIRTY WATER DIVERSION BUND
---	--



D | TYPICAL LAYOUT : 3 T-BAR DECANT DEVICE



ORIGINAL IN
COLOUR

NOT FOR CONSTRUCTION

				SURVEYED		
				DRAWN	V. DELA TORRE	20.08.20
				DRAWING CHECK	J. DELA TORRE	20.08.20
				DESIGN	N. WOLFAARDT	20.08.20
B	ISSUED FOR NOTICE OF REQUIREMENT LODGEMENT	VDLT	DEC. 2022	DESIGN REVIEW	R. SEYB	20.08.20
A	FOR NOTICE OF REQUIREMENT AND RESOURCE CONSENT	VDLT	AUG. 2020	APPROVED	B. BUSHARDO	07.12.2022
REV		TRIMM				



Project: **SUPPORTING GROWTH PROGRAMME**
NORTH WEST - HIF TRIG ROAD (SOUTH)

Drawing Title:

EROSION & SEDIMENT CONTROL
SEDIMENT RETENTION DEVICES

Drawing Status:		FOR LODGEMENT	
Drawing Date:		07.12.2022	
A1 Scales	AS SHOWN	A3 Scales	HALF SCALE
Discipline		ENVIRONMENTAL	
Drawing No.			Revision
SGA-DRG-NWE-002-EN-1510			B