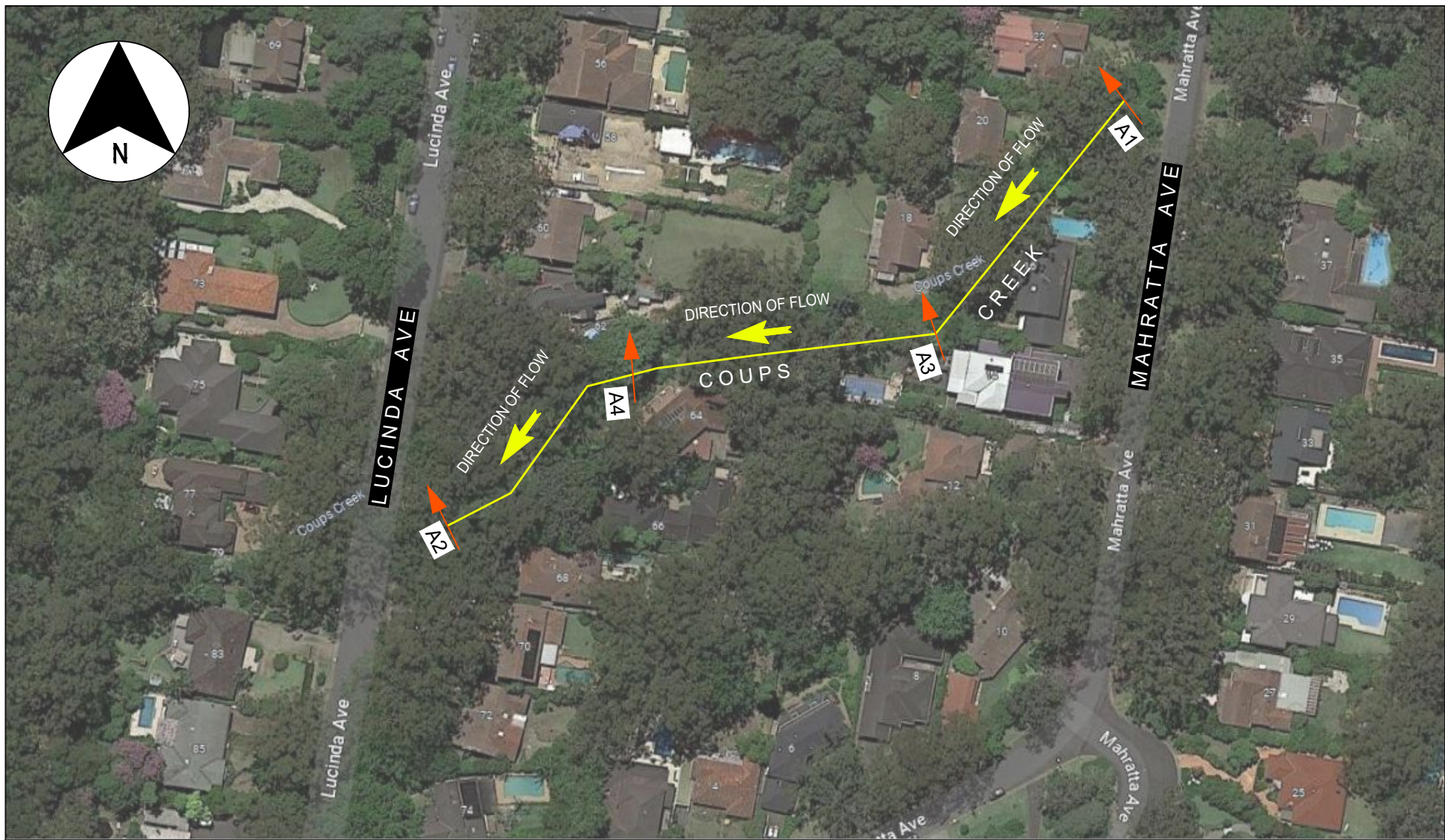
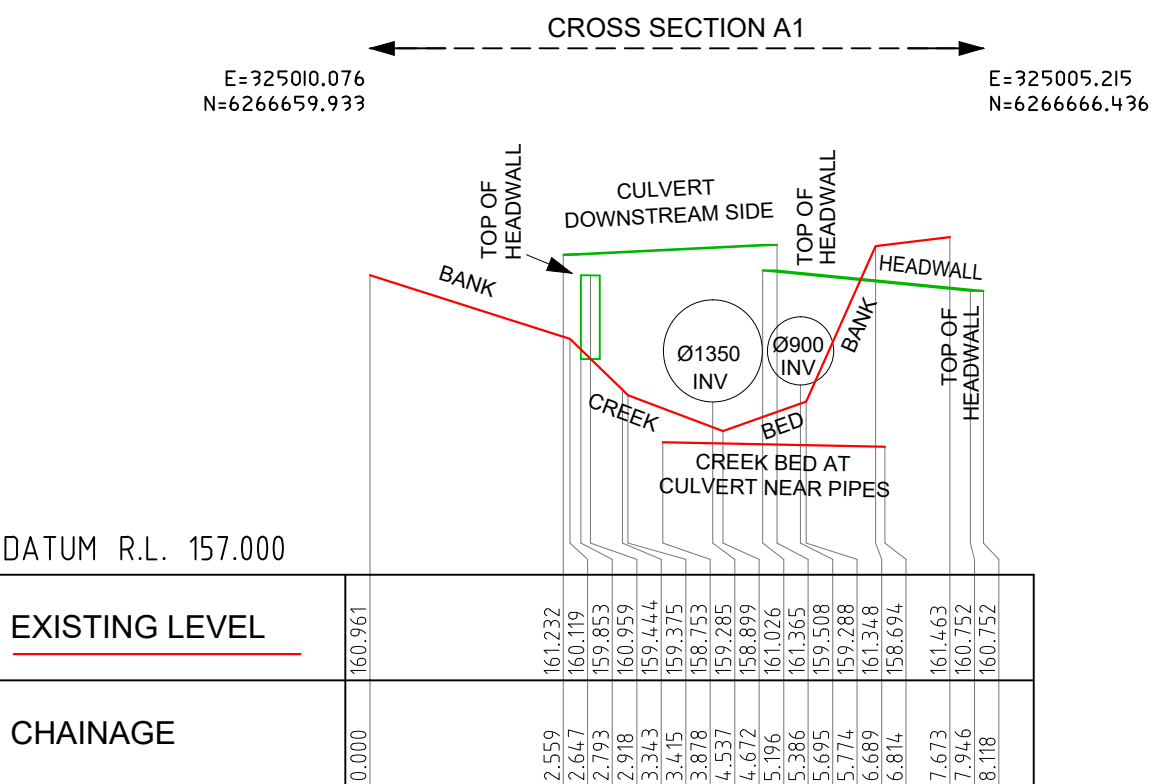
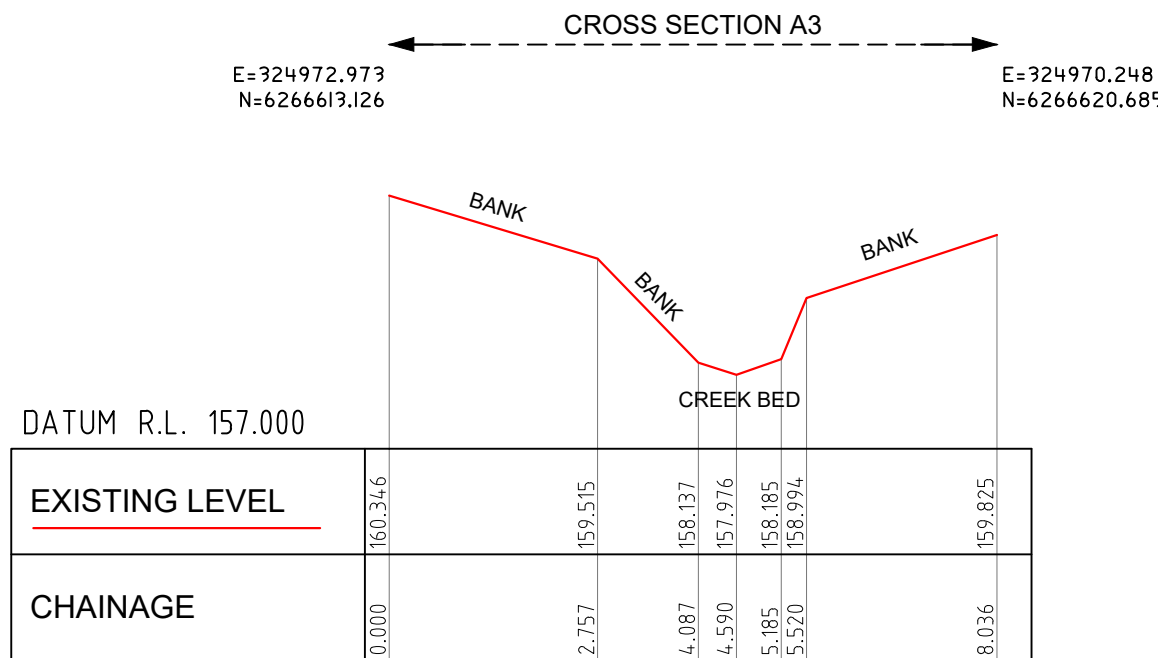




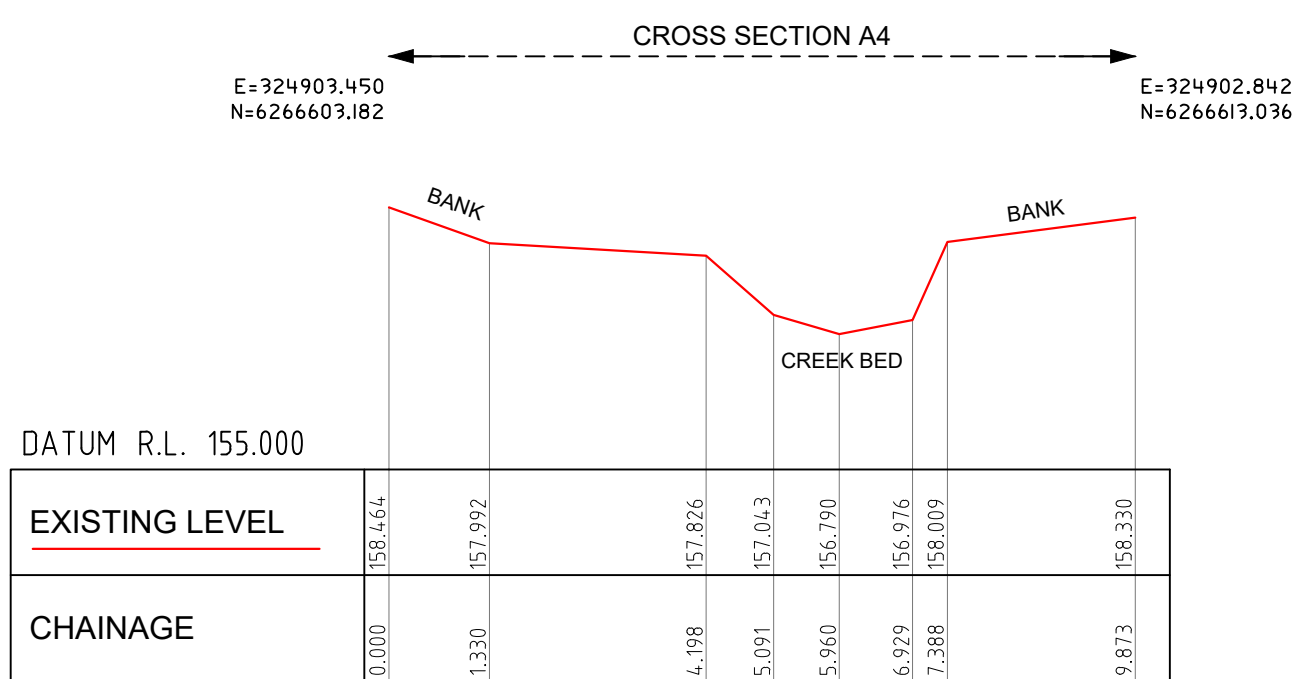
COUPS CREEK CROSS SECTION LOCALITY PLAN
NOT TO SCALE



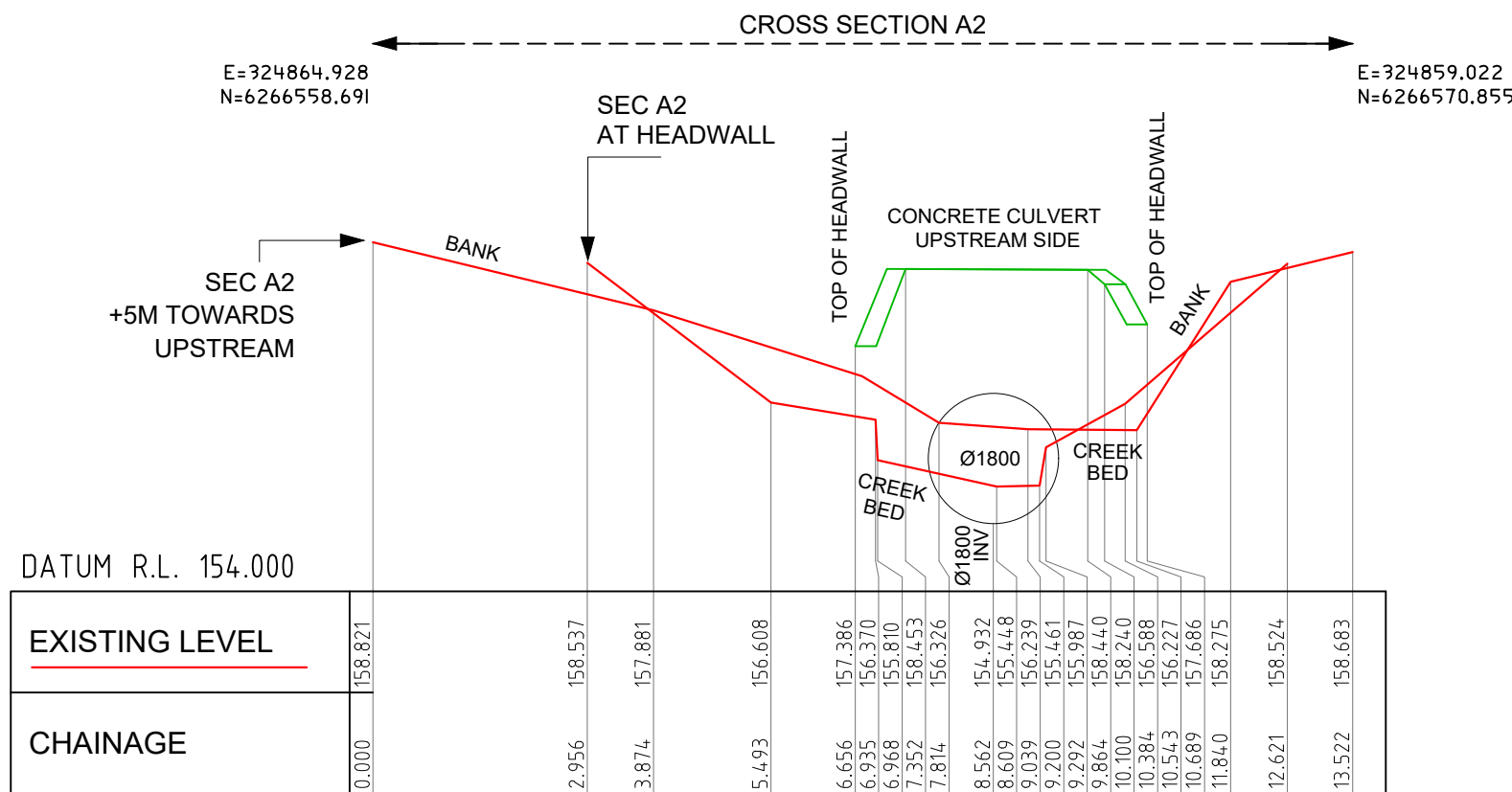
CROSS SECTION A1 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION A3 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION A4 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION A2 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100

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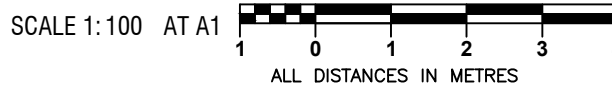




PHOTO A1 CULVERT - DOWNSTREAM



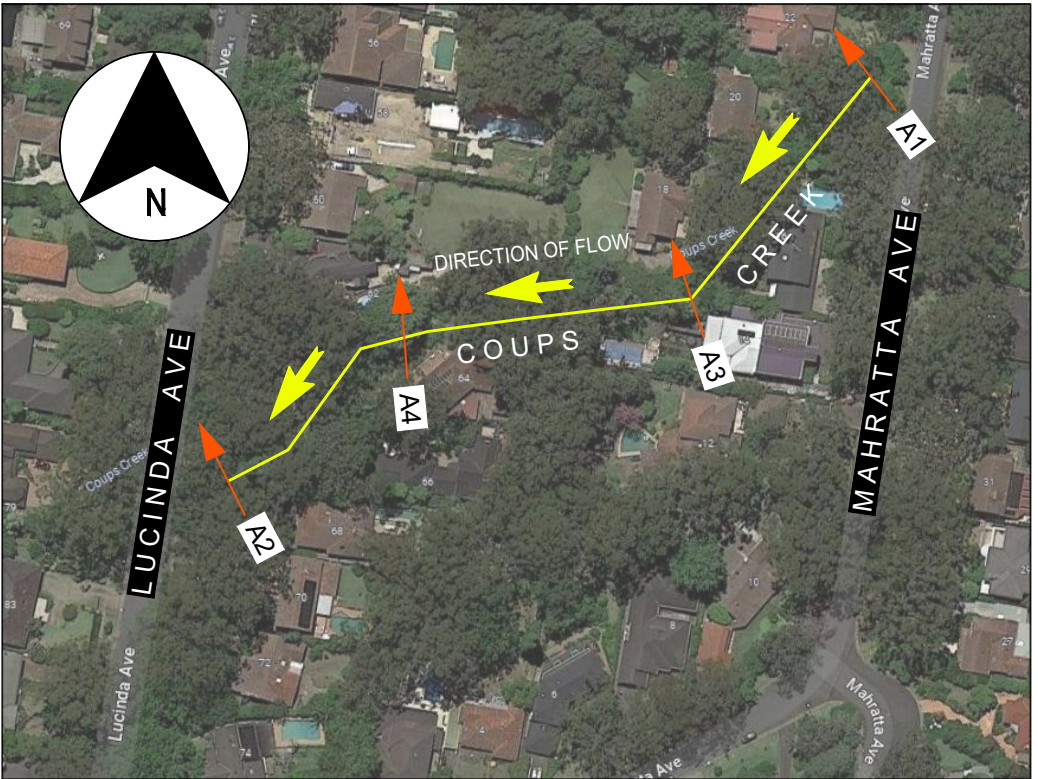
PHOTO A1 UPSTREAM



PHOTO A2 CULVERT - UPSTREAM



PHOTO A3 - DOWNSTREAM



COUPS CREEK CROSS SECTION LOCALITY PLAN
NOT TO SCALE



PHOTO A1 CULVERT - UPSTREAM



PHOTO A1 - WATERWAY



PHOTO A2 - DOWNSTREAM



PHOTO A3 - UPSTREAM



PHOTO A1 CULVERT - WATERWAY



PHOTO A2 CULVERT - DOWNSTREAM



PHOTO A2 - UPSTREAM



PHOTO A3 - WATERWAY



PHOTO A4 - UPSTREAM



PHOTO A1 - DOWNSTREAM



PHOTO A2 CULVERT - TOP



PHOTO A2 - WATERWAY



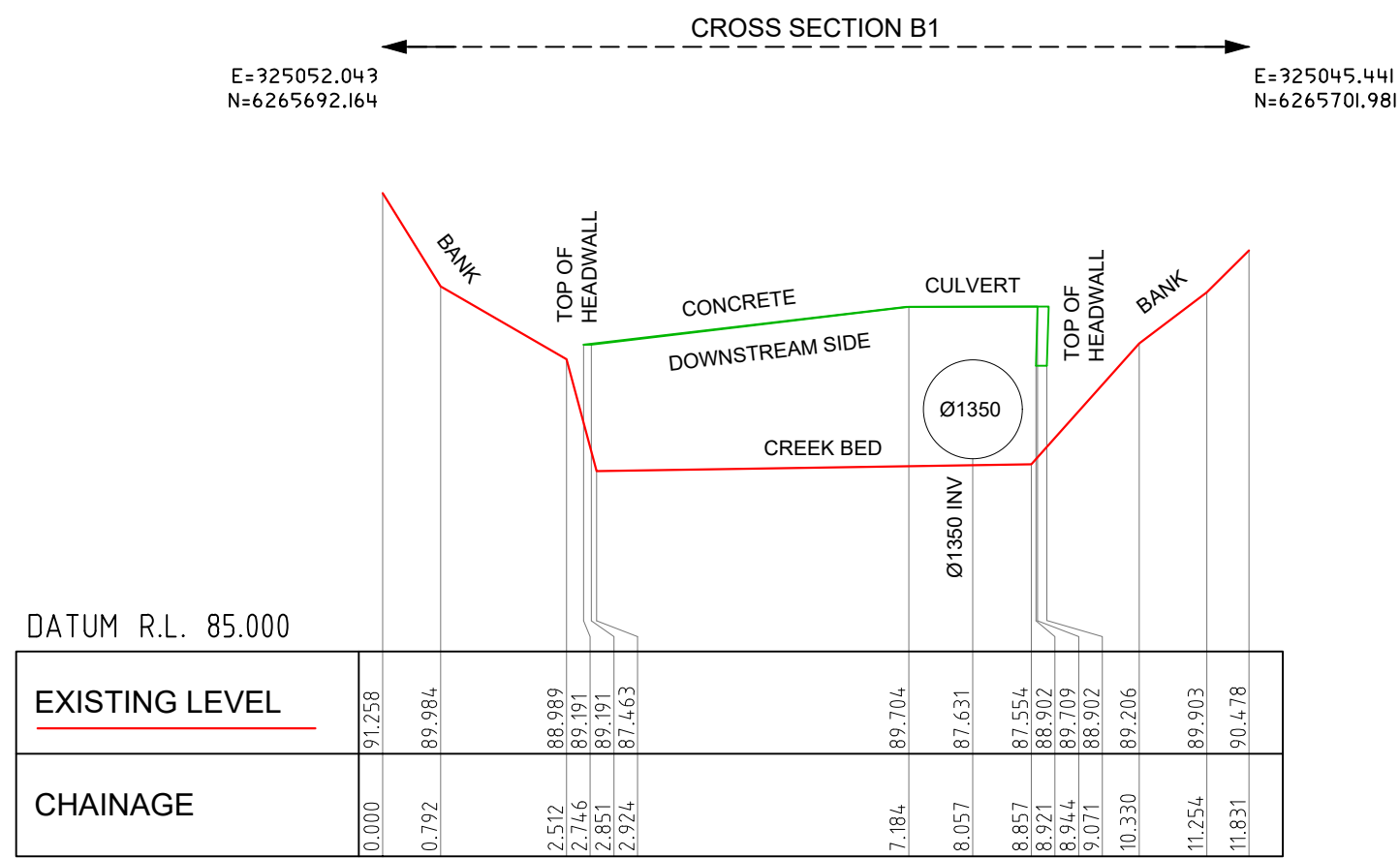
PHOTO A4 - DOWNSTREAM



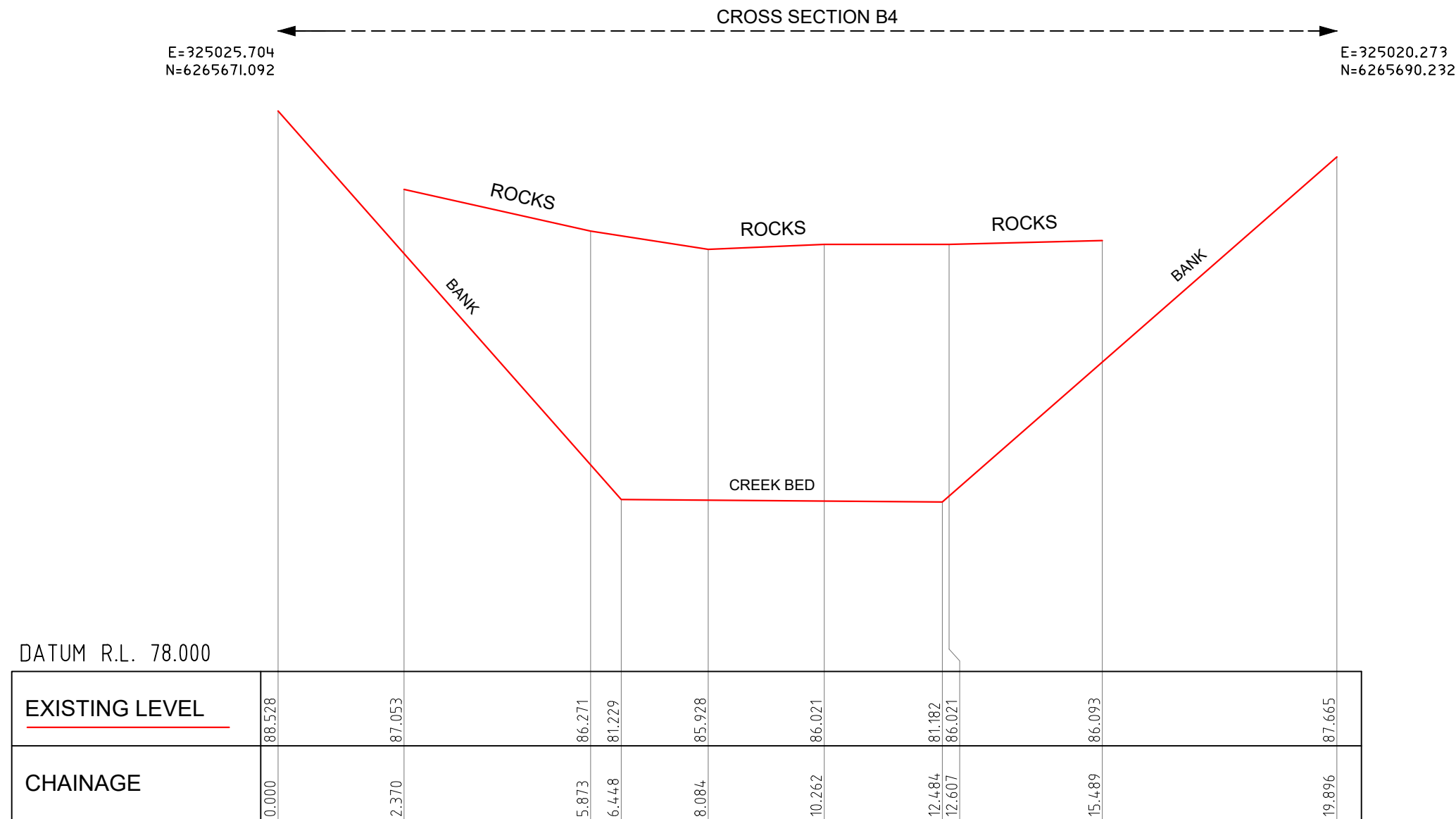
PHOTO A4 - WATERWAY



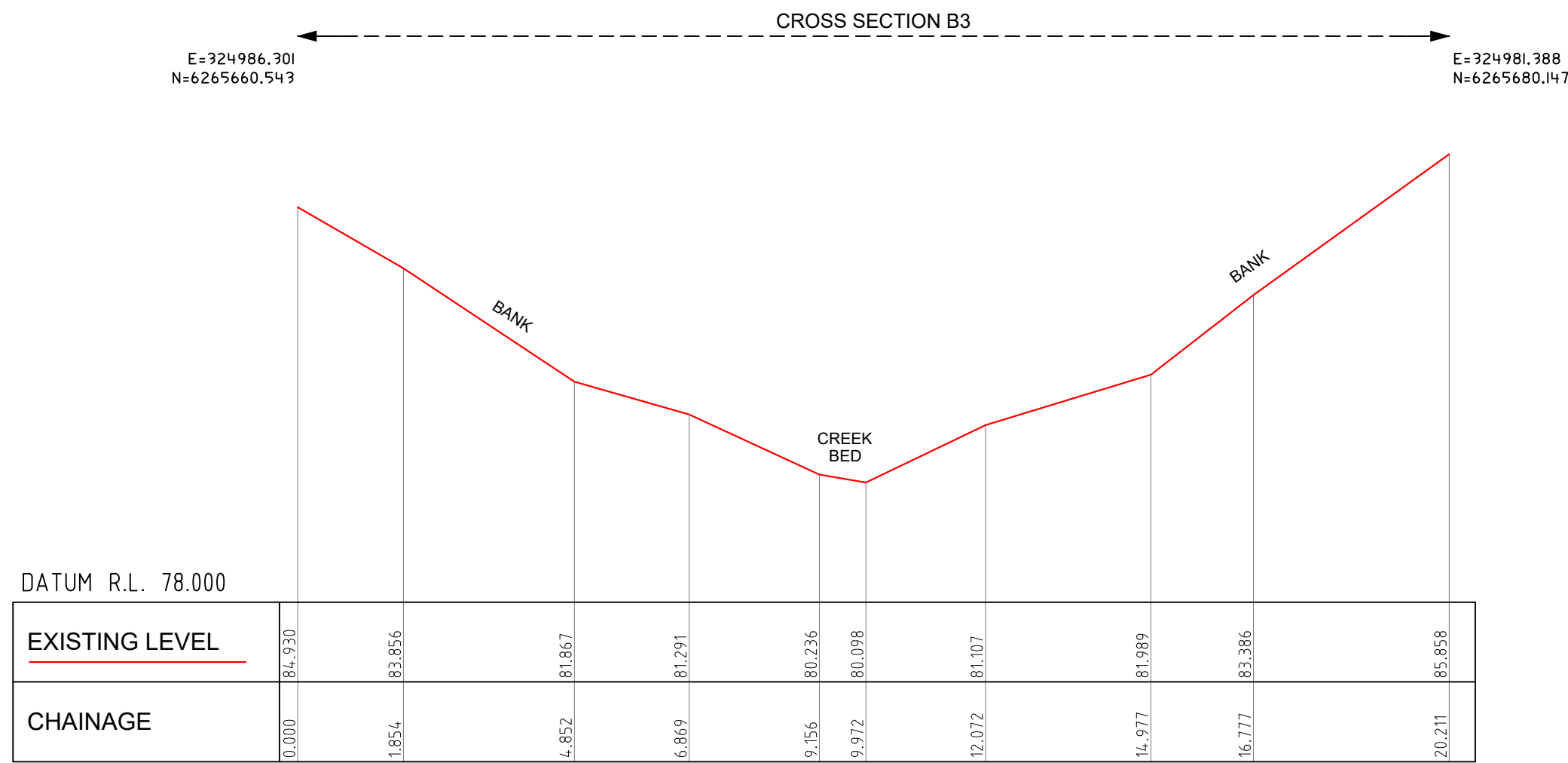
COOPER CRESCENT CROSS SECTION LOCALITY PLAN
NOT TO SCALE



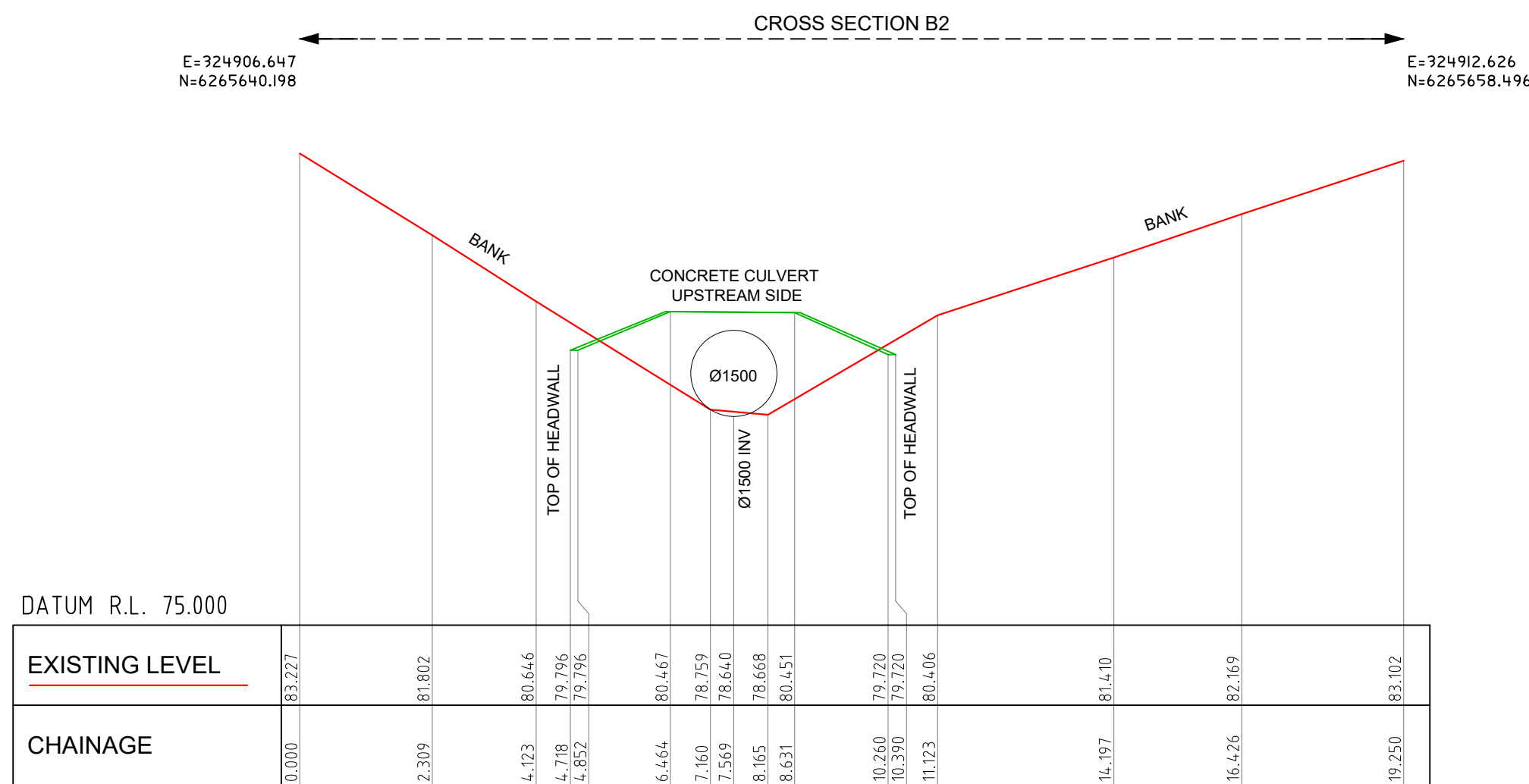
CROSS SECTION B1 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION B4 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION B3 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION B2 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100

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SCALE 1:100 AT A1
ALL DISTANCES IN METRES



PHOTO B1 CULVERT - DOWNSTREAM



PHOTO B1 WATERWAY



PHOTO B1 CULVERT - UPSTREAM



PHOTO B2 CULVERT - DOWNSTREAM



COOPER CRESCENT CROSS SECTION LOCALITY PLAN
NOT TO SCALE



PHOTO B1 - DOWNSTREAM



PHOTO B2 CULVERT - UPSTREAM



PHOTO B2 - UPSTREAM



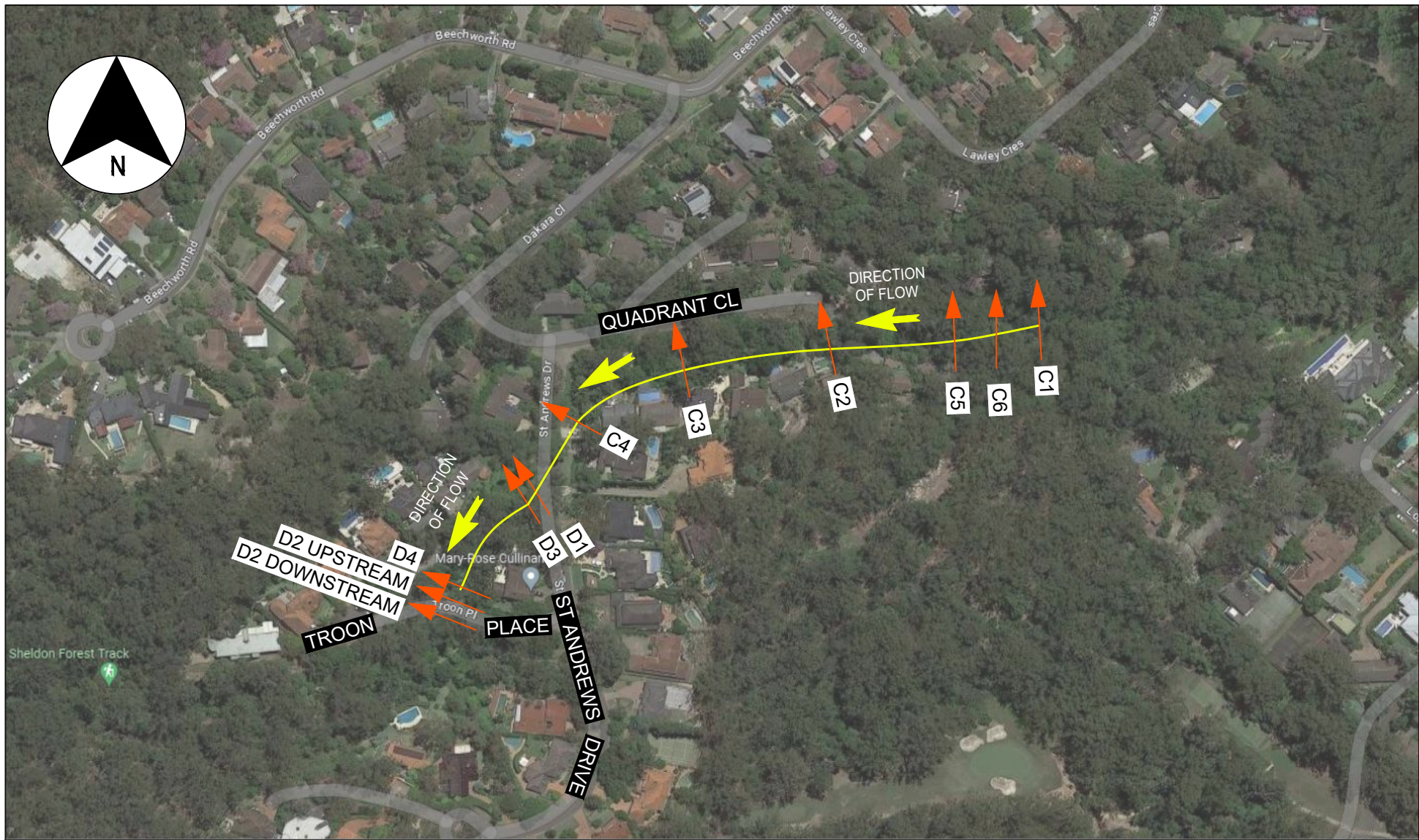
PHOTO B1 - UPSTREAM



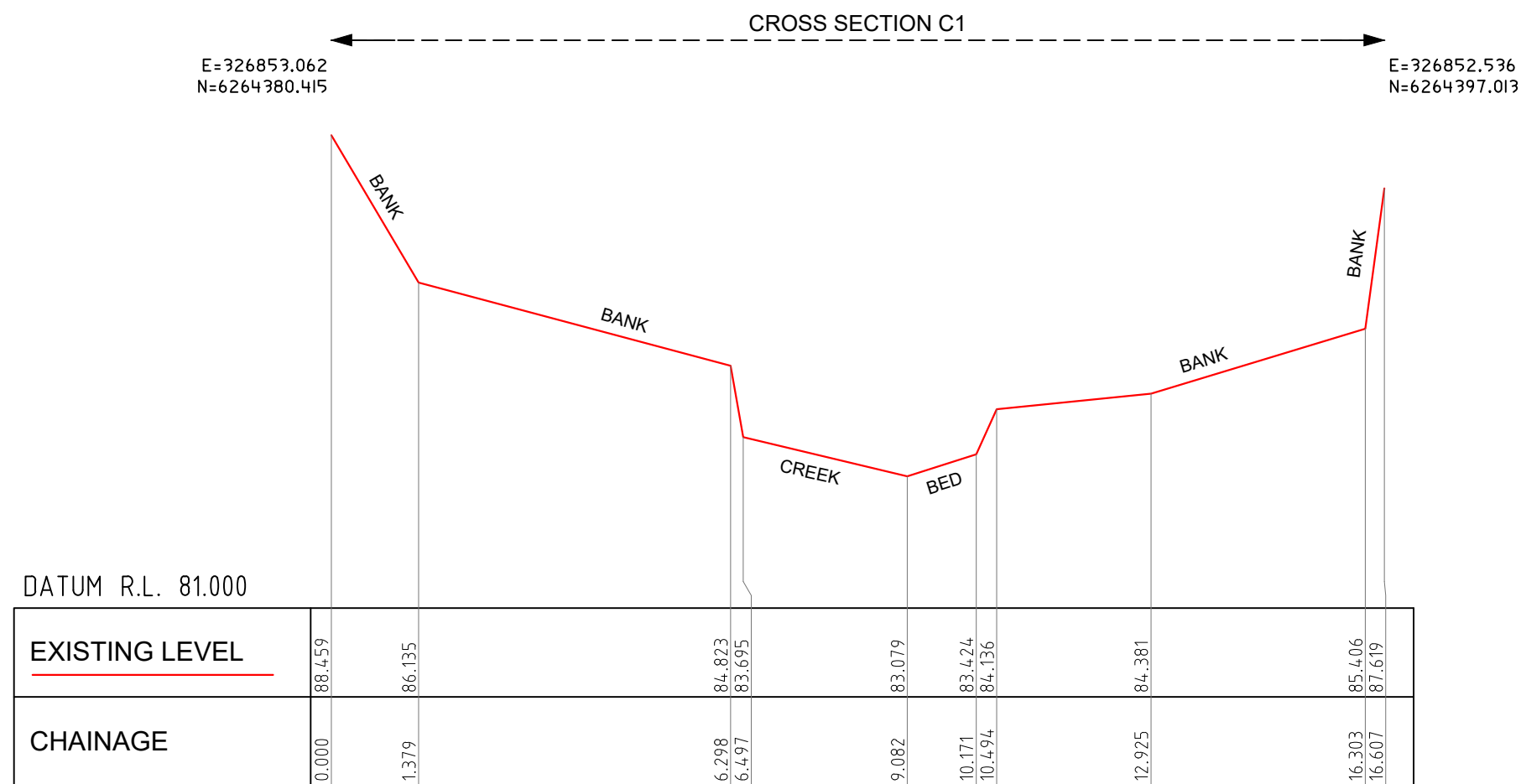
PHOTO B2 - DOWNSTREAM



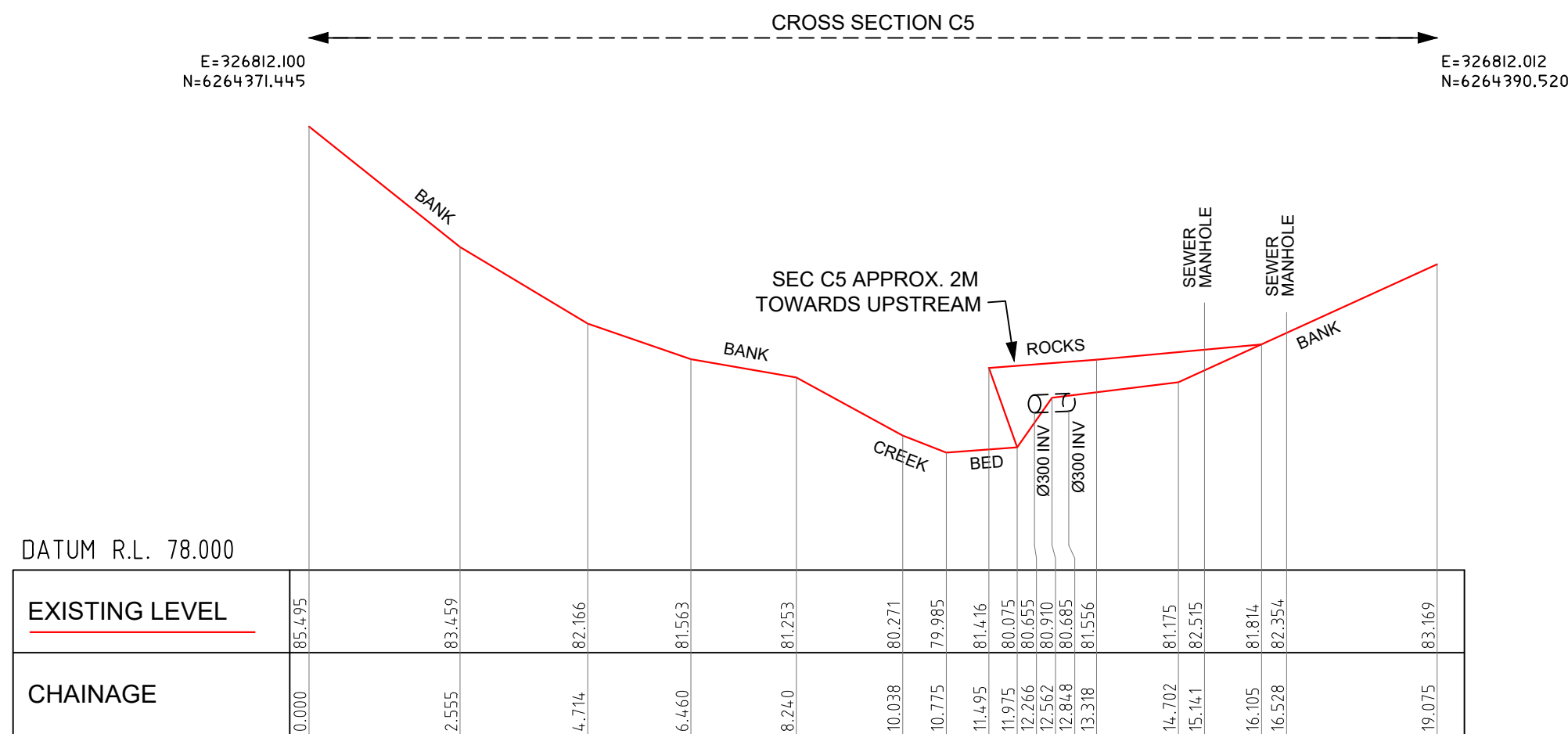
PHOTO B2 WATERWAY



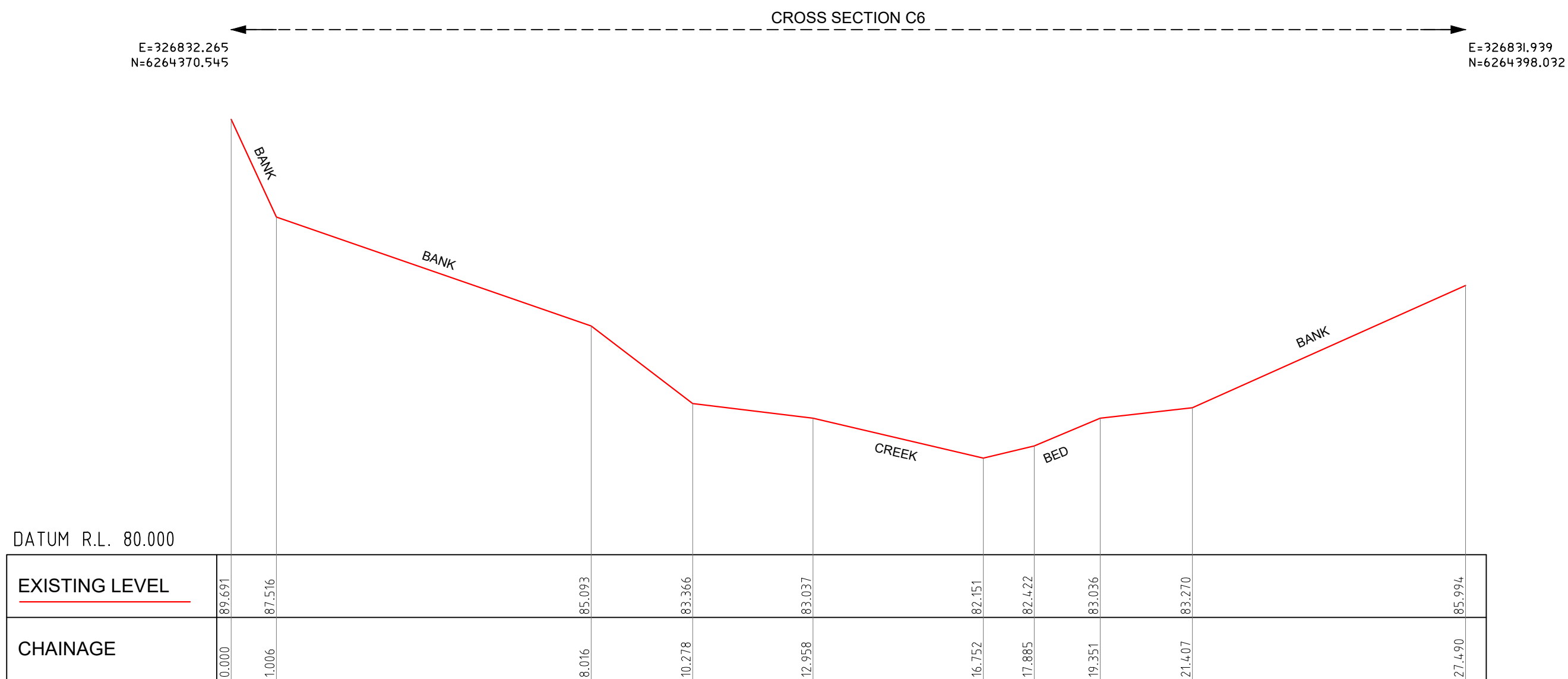
QUADRANT CLOSE AND TROON PLACE CREEK CROSS SECTION LOCALITY PLAN
NOT TO SCALE



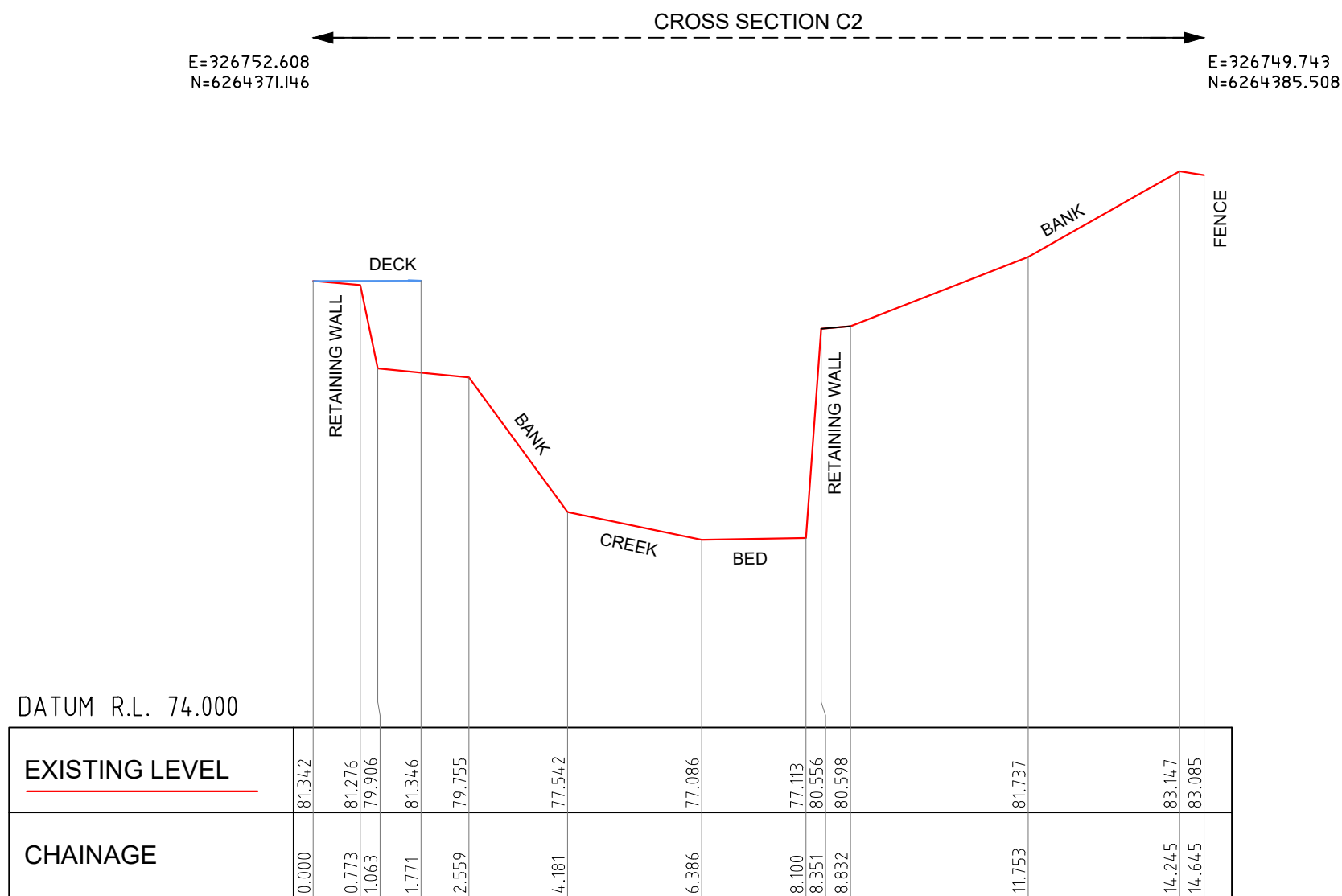
CROSS SECTION C1 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION C5 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION C6 (20M AWAY FROM C1 TOWARDS DOWNSTREAM) - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION C2 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100

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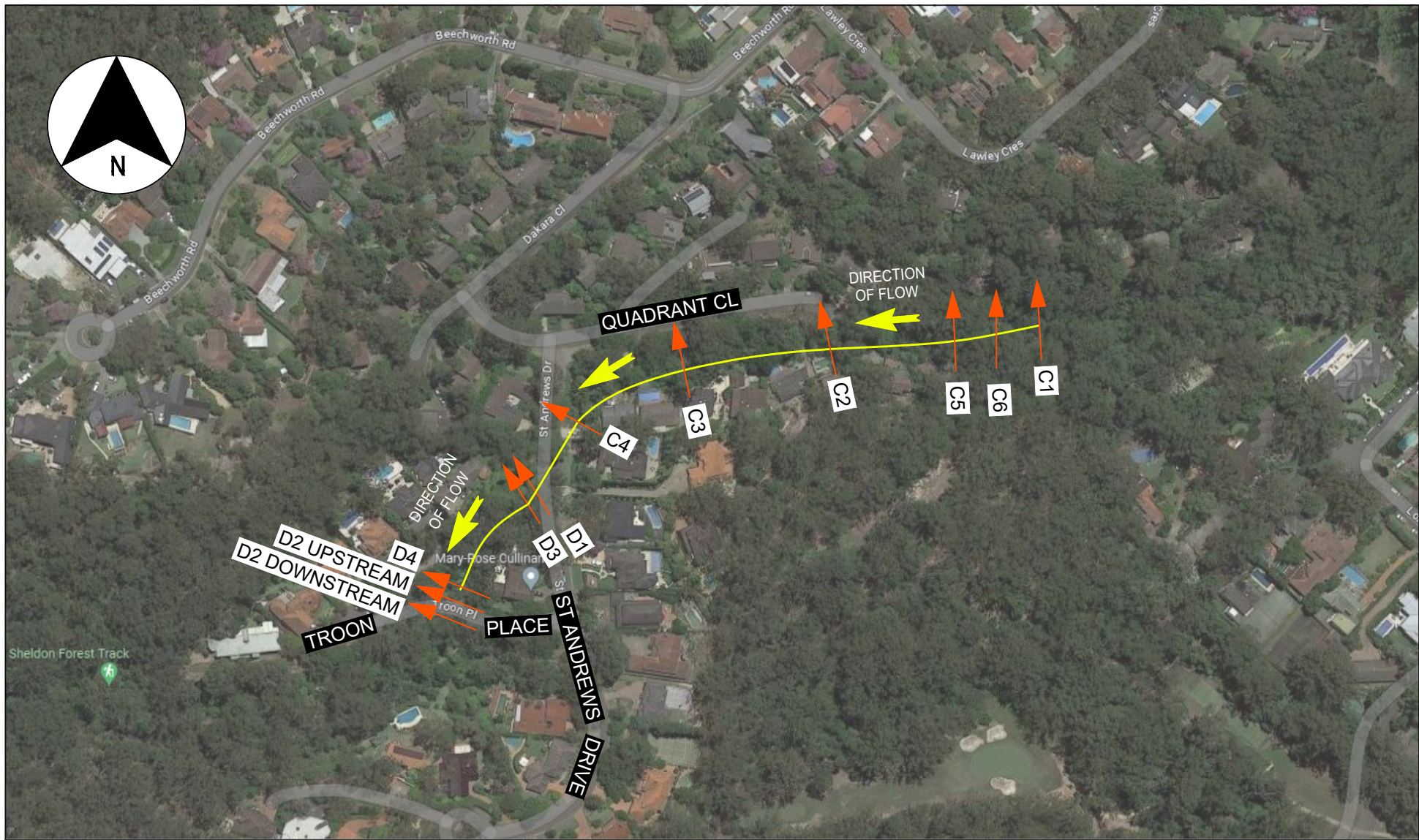
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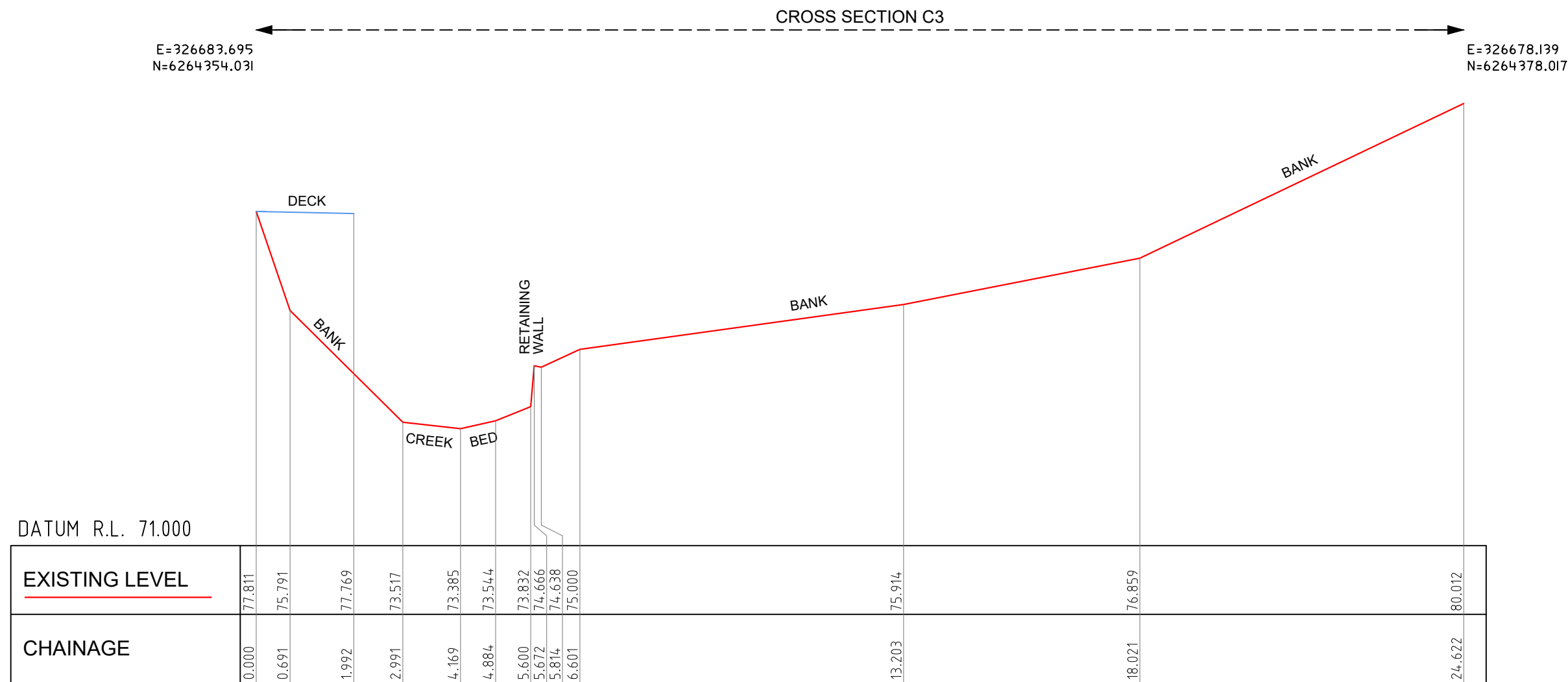
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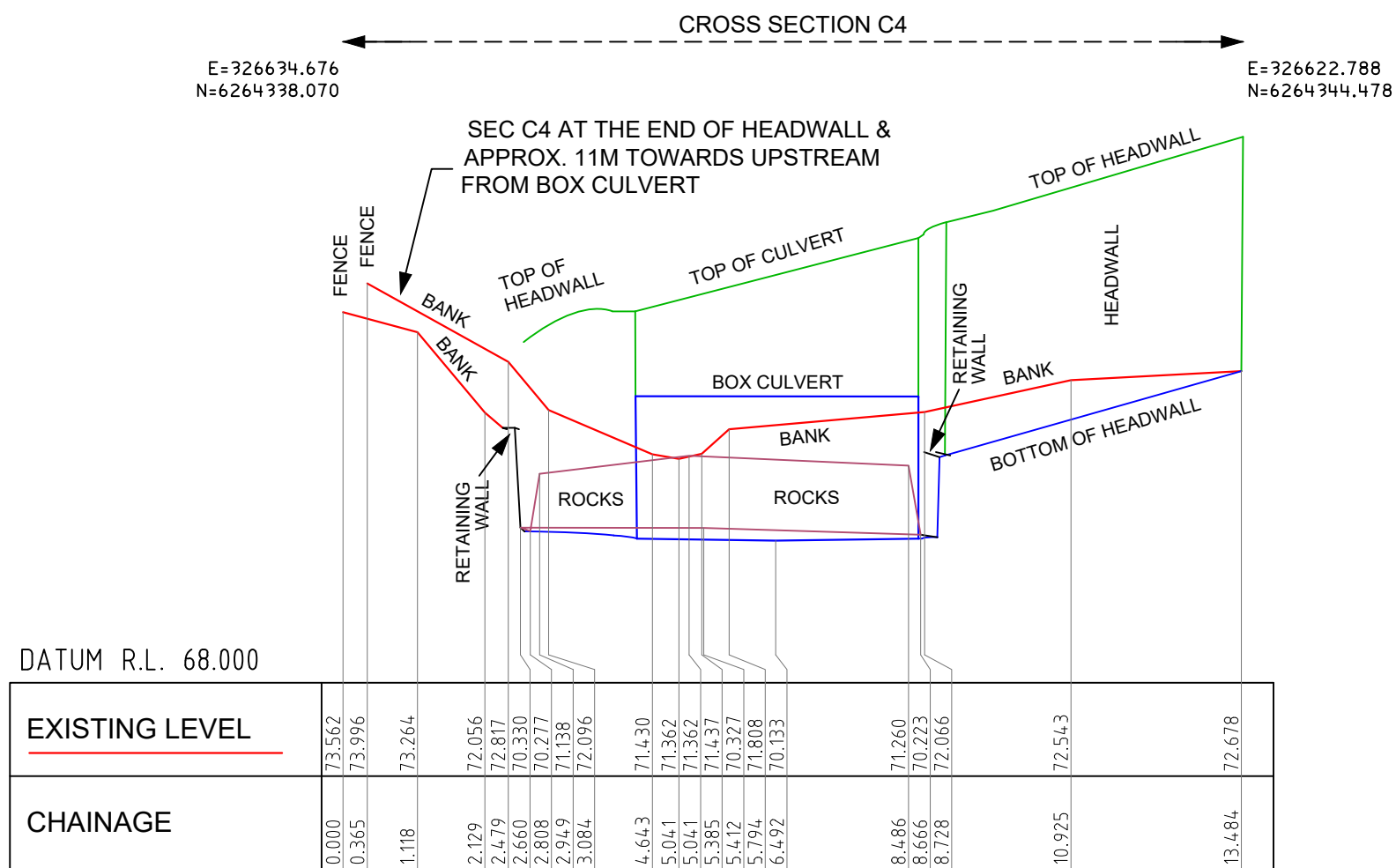
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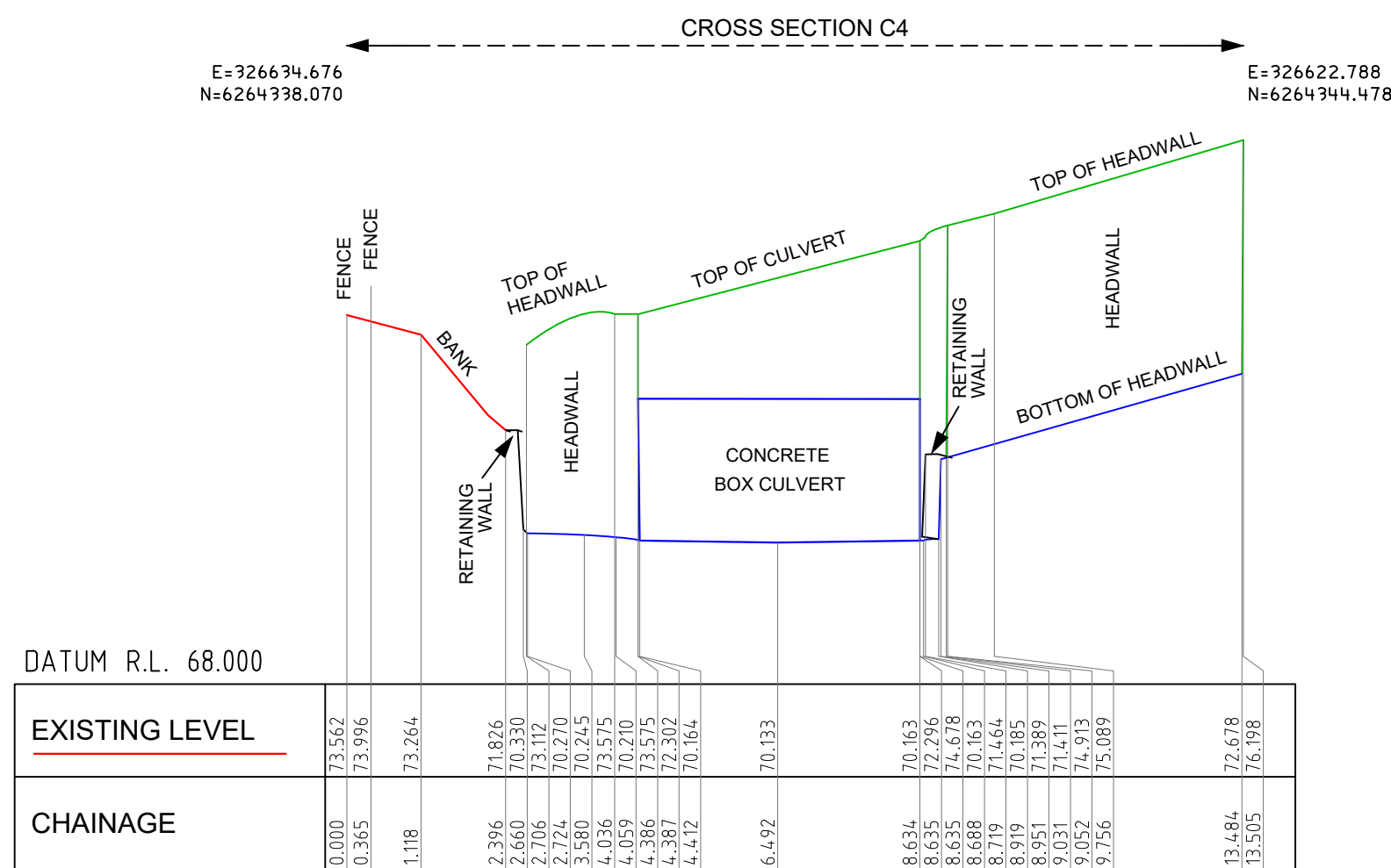
QUADRANT CLOSE AND TROON PLACE CREEK CROSS SECTION LOCALITY PLAN
NOT TO SCALE



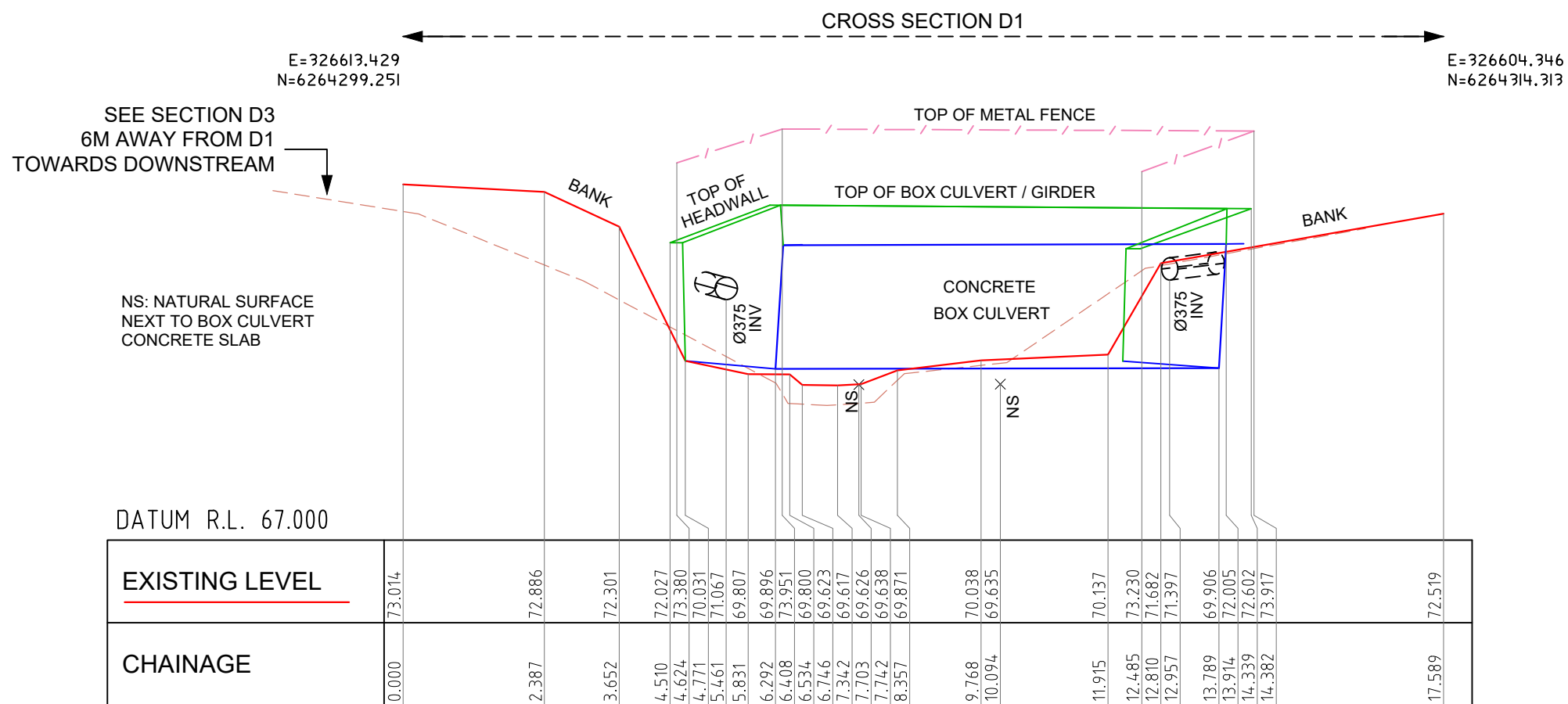
CROSS SECTION C3 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION C4 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION C4 - STRUCTURE - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



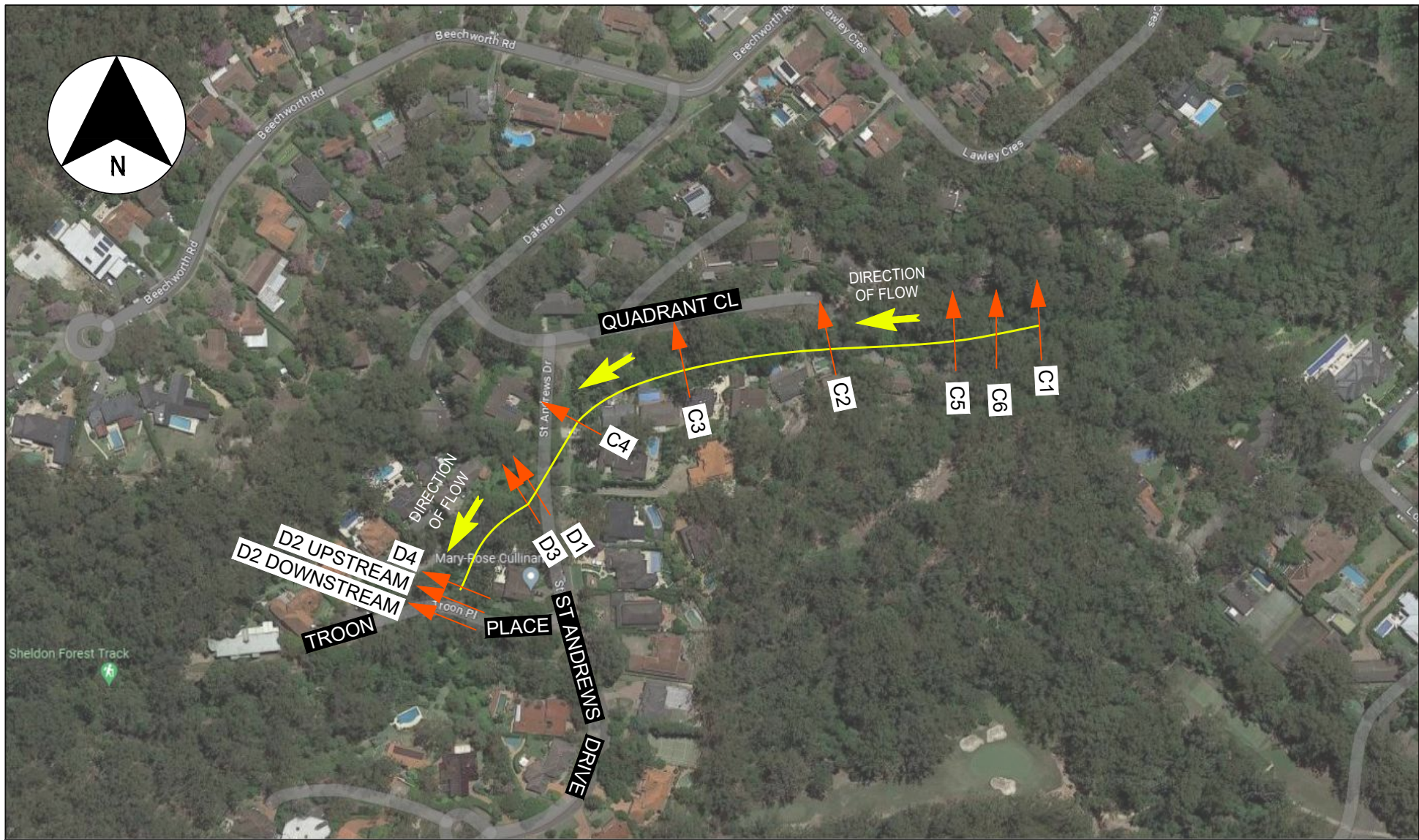
CROSS SECTION D1 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100

Notes:

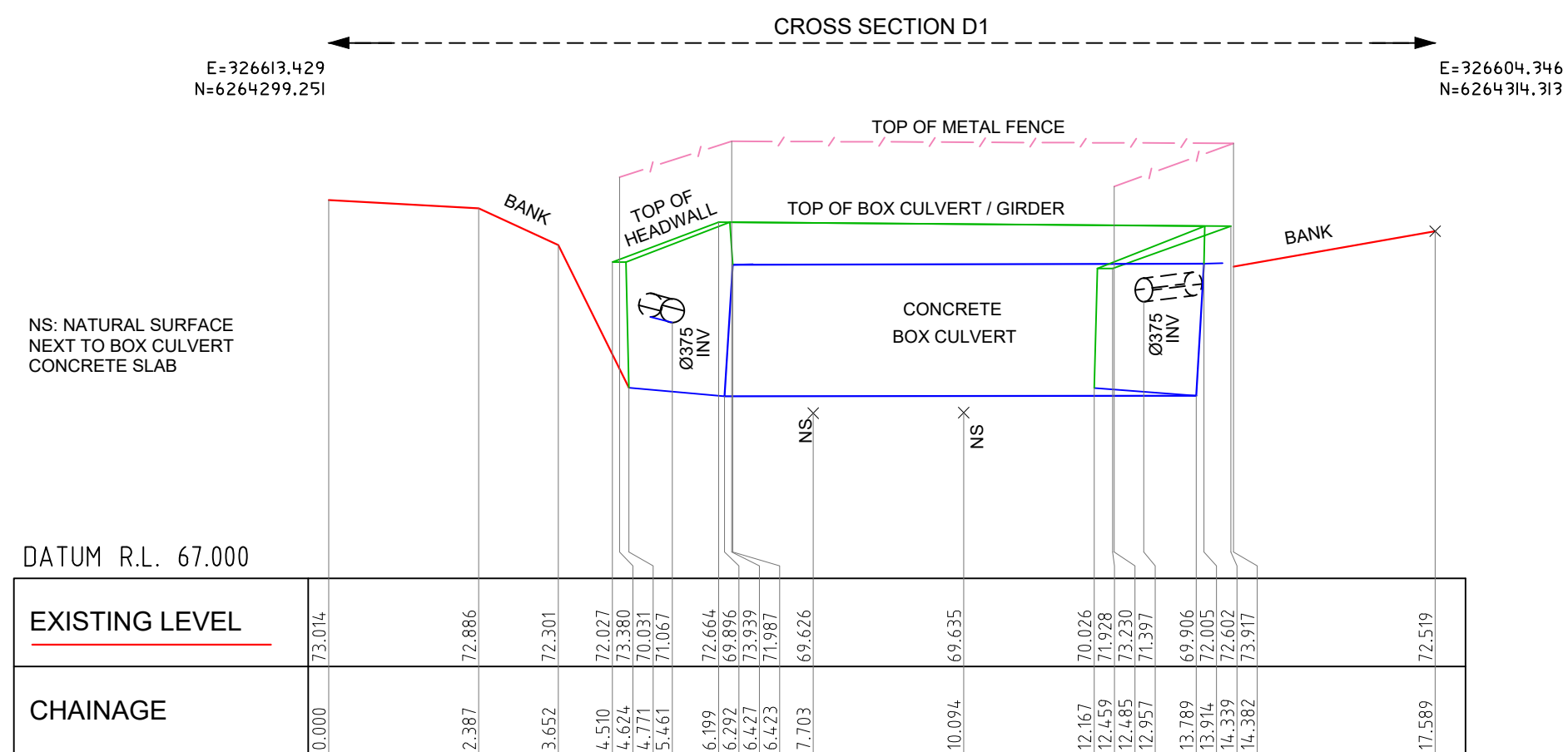
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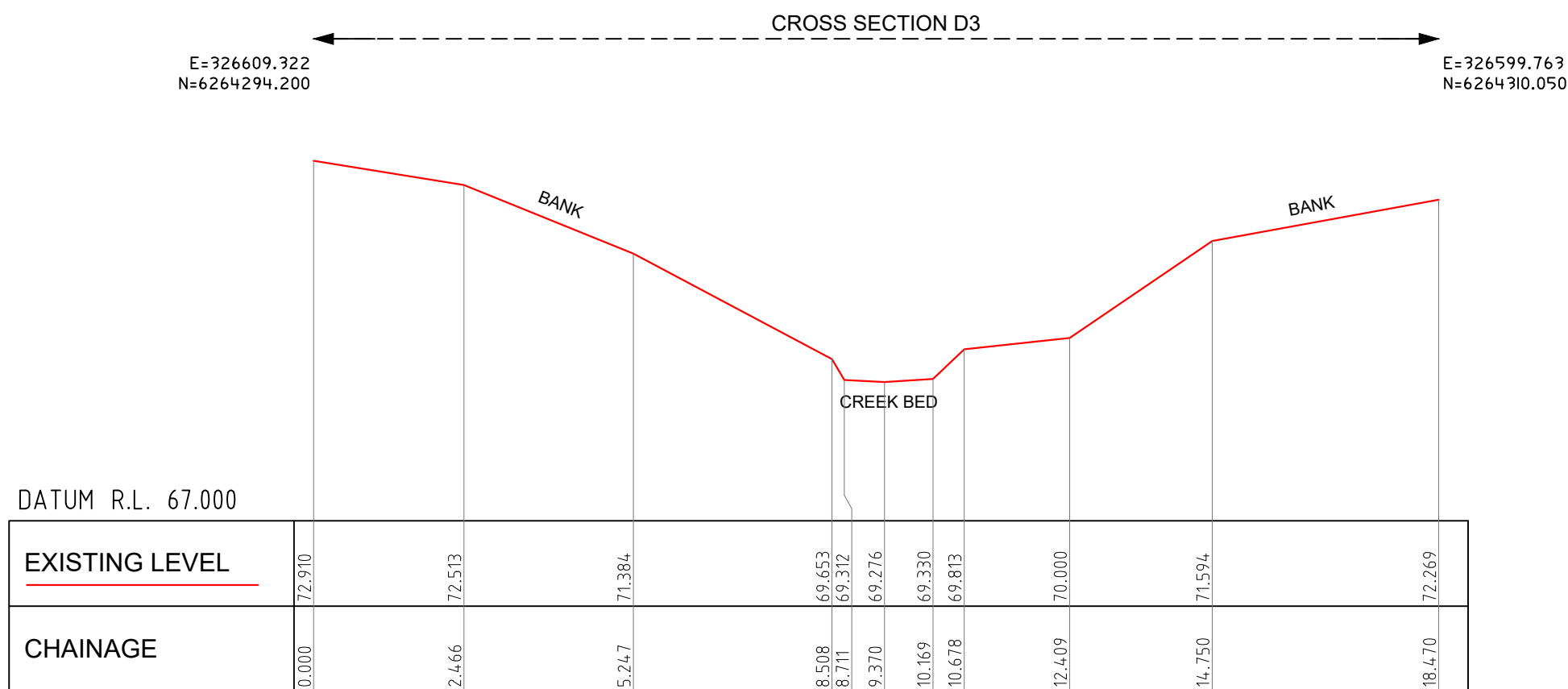
SCALE 1:100 AT A1
ALL DISTANCES IN METRES



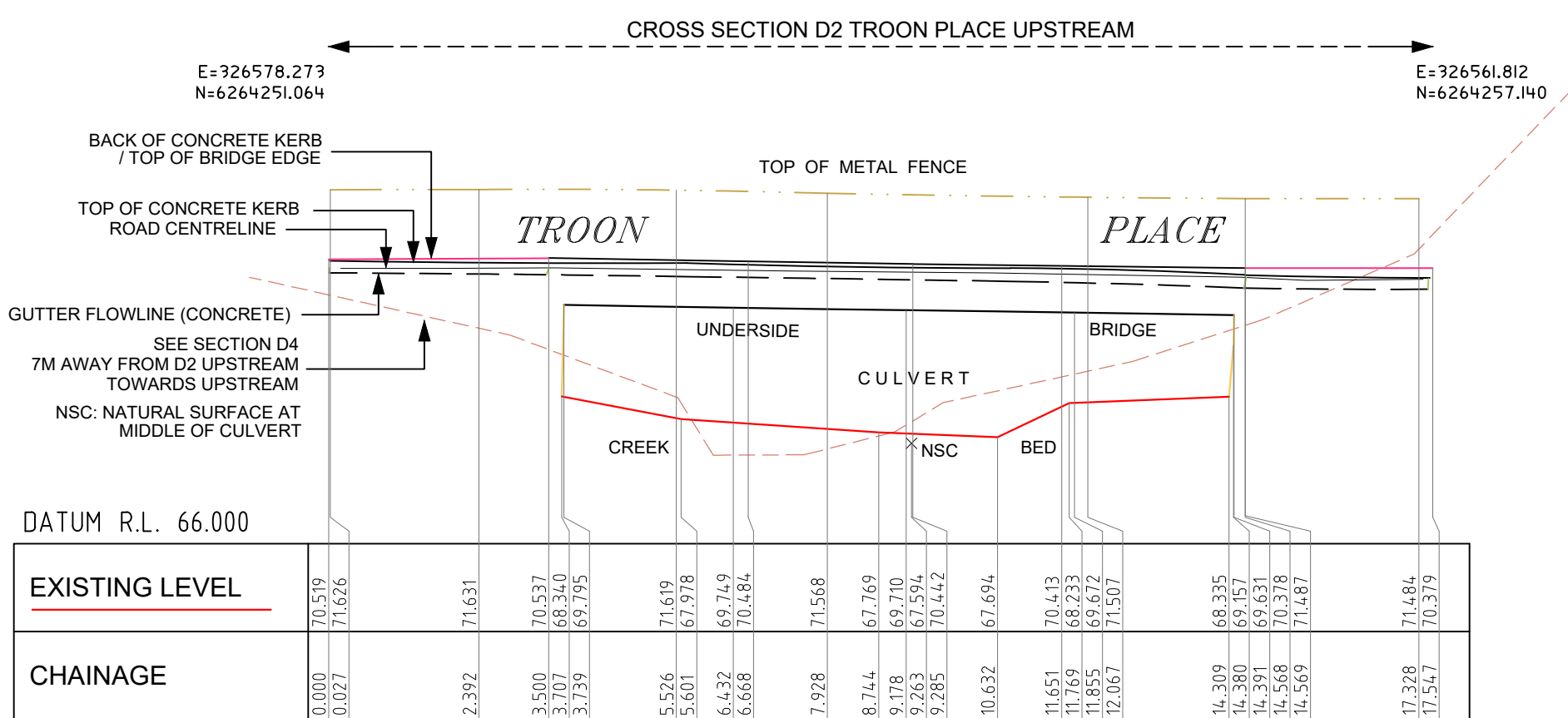
QUADRANT CLOSE AND TROON PLACE CREEK CROSS SECTION LOCALITY PLAN
NOT TO SCALE



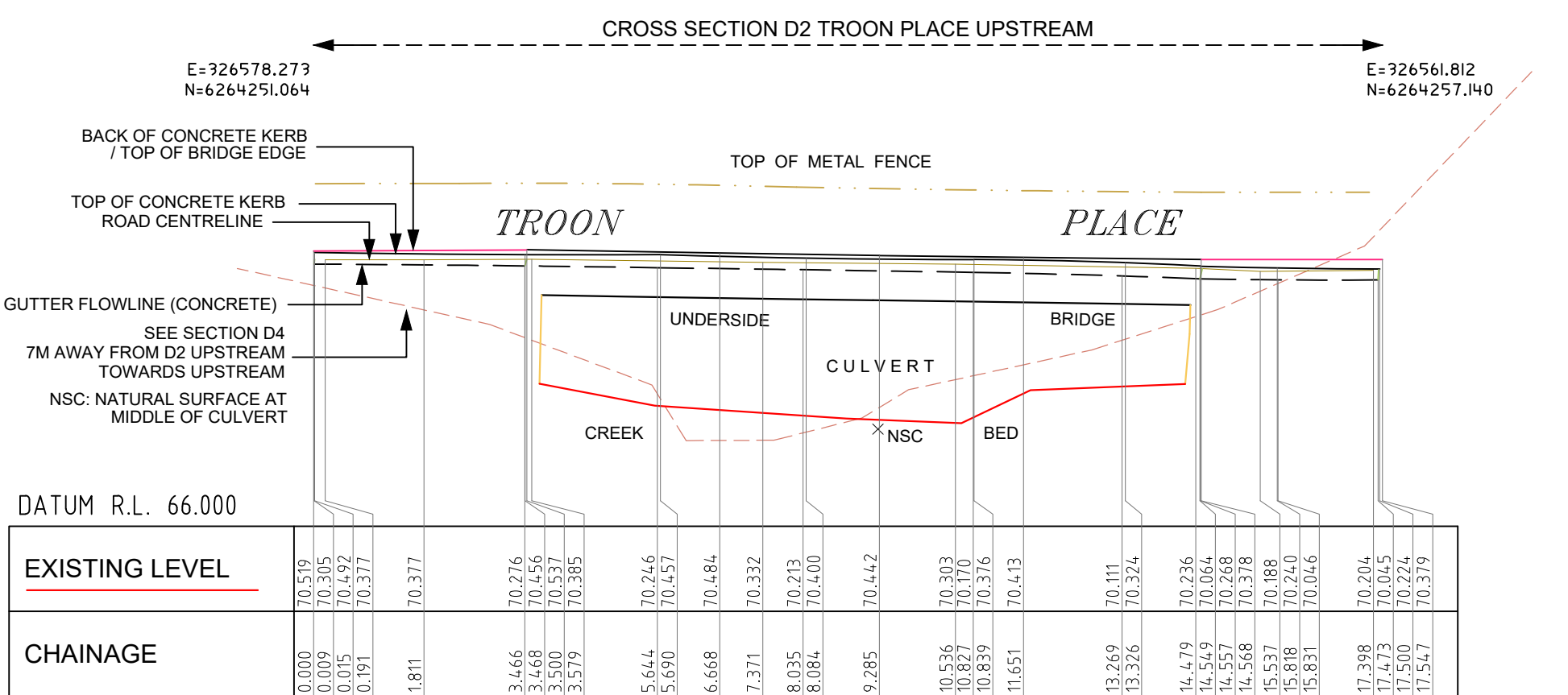
CROSS SECTION D1 - STRUCTURE - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



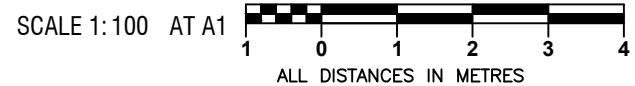
CROSS SECTION D3 (6M AWAY FROM SEC D1 TOWARDS DOWNSTREAM) - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION D2 TROON PLACE BRIDGE UPSTREAM
STRUCTURE & NATURAL SURFACE - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



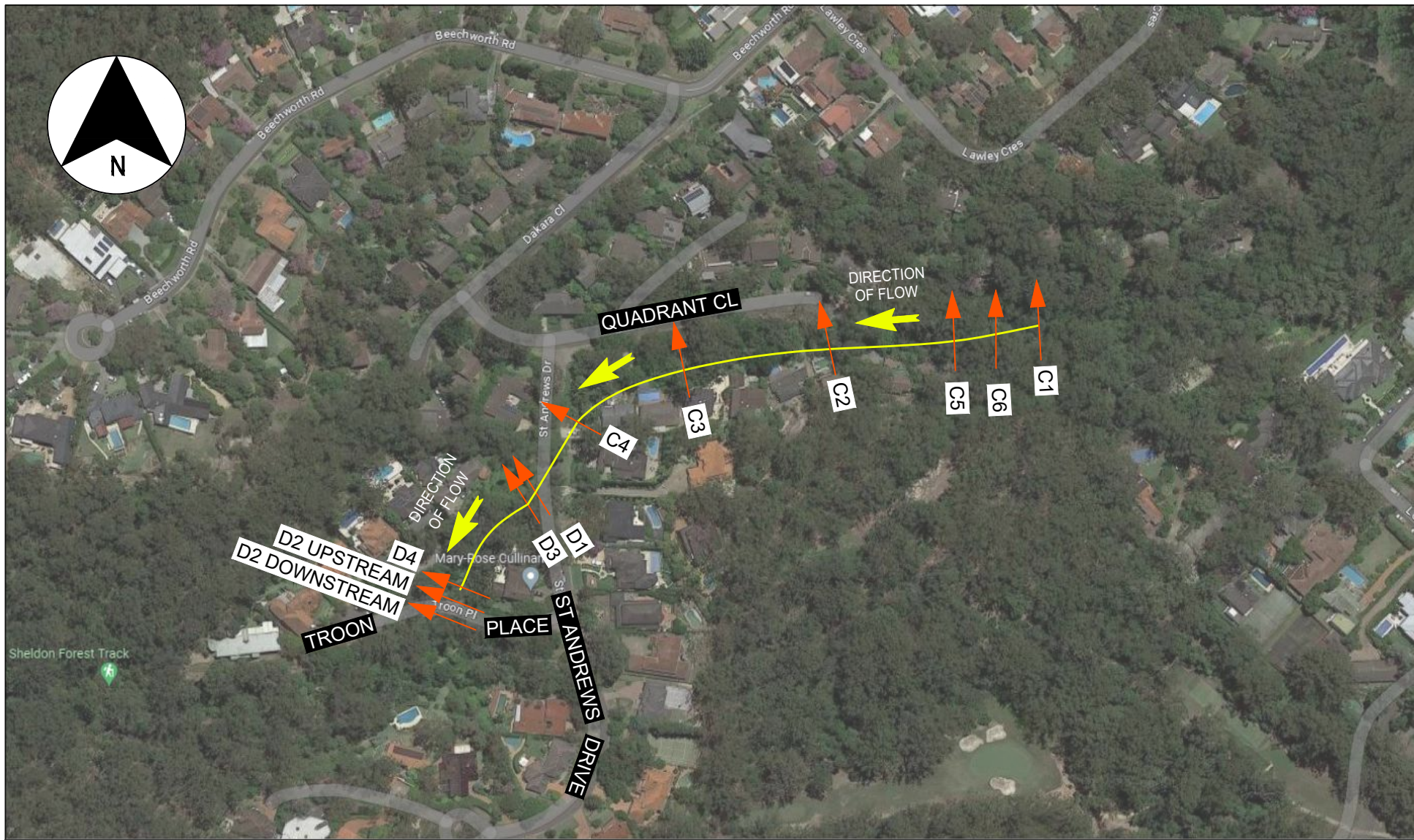
CROSS SECTION D2 TROON PLACE BRIDGE UPSTREAM
ROAD & KERB - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



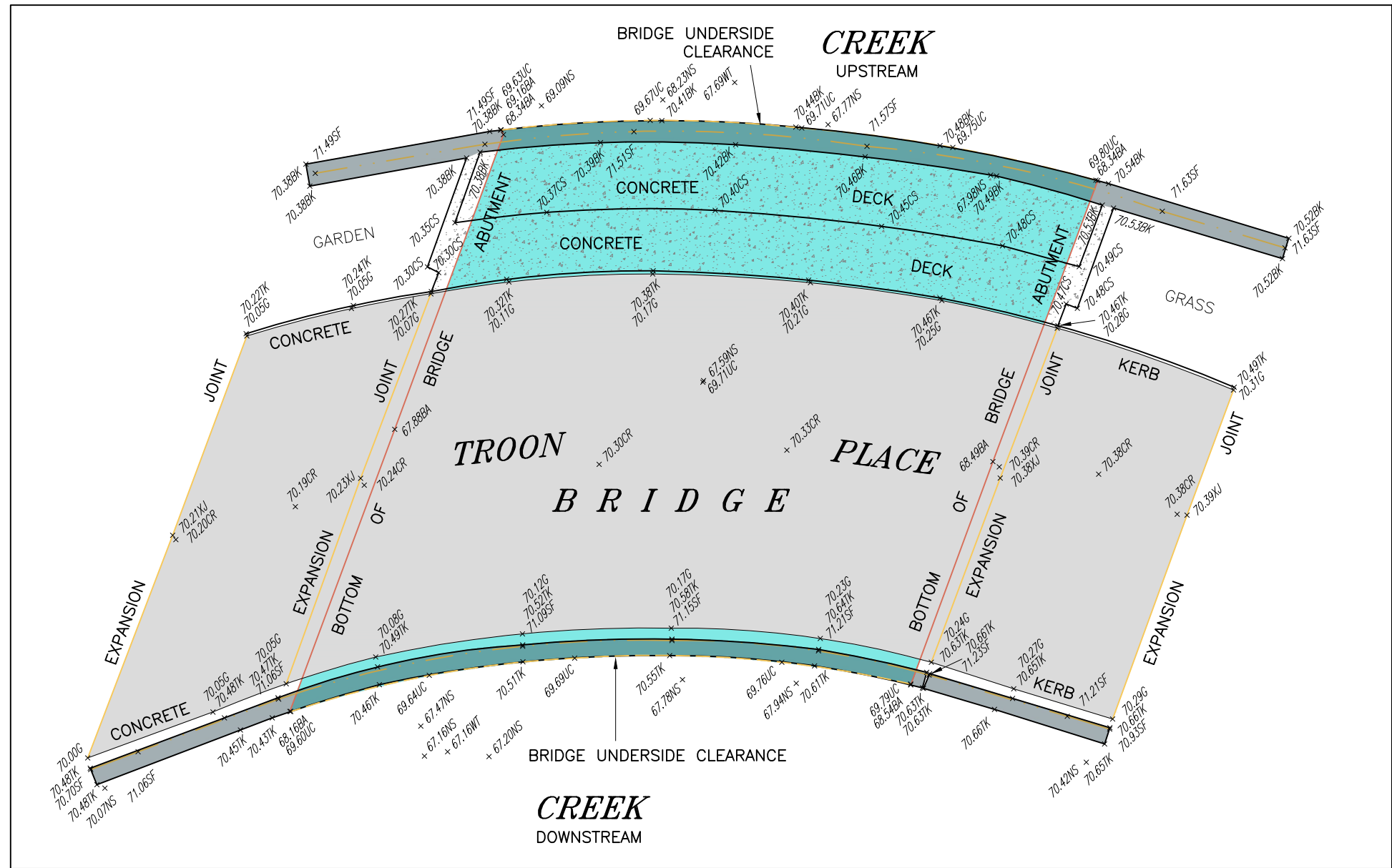
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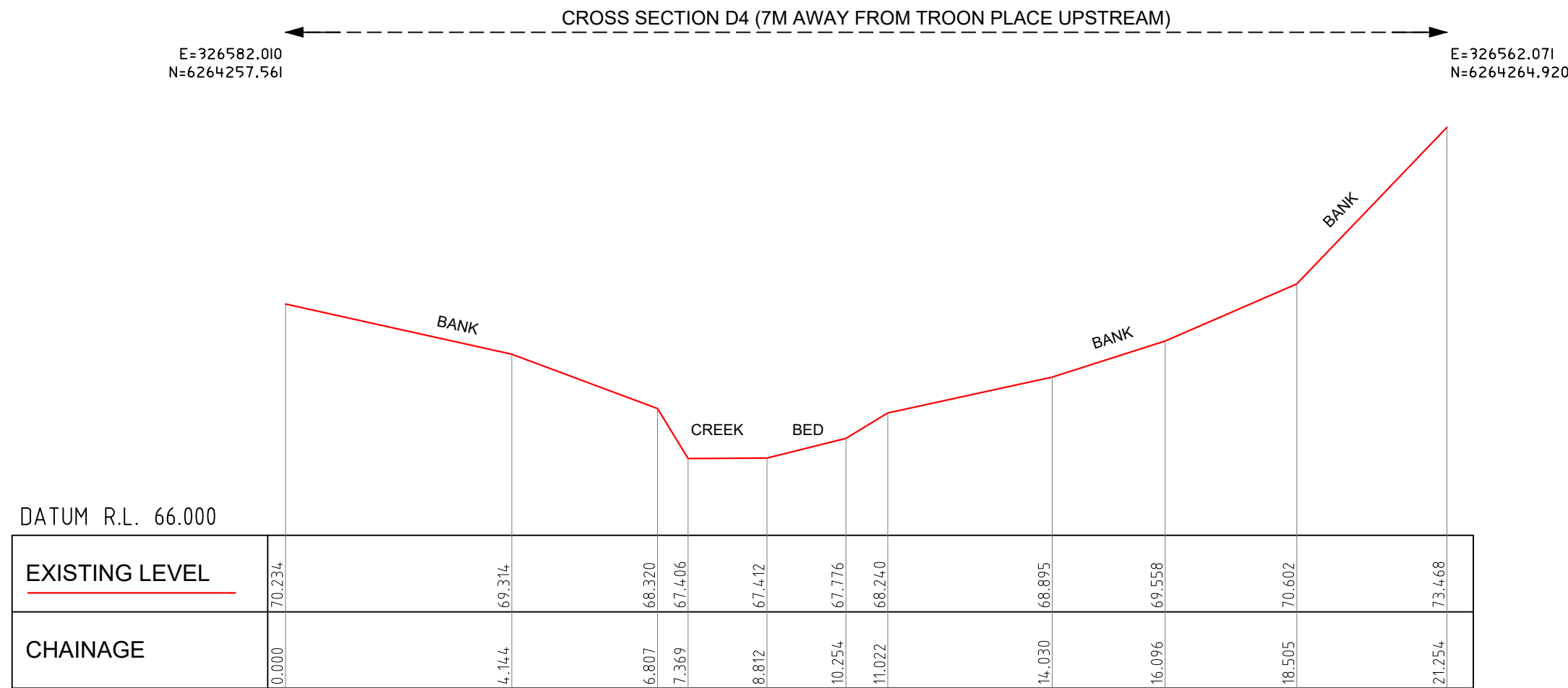


QUADRANT CLOSE AND TROON PLACE CREEK CROSS SECTION LOCALITY PLAN
NOT TO SCALE

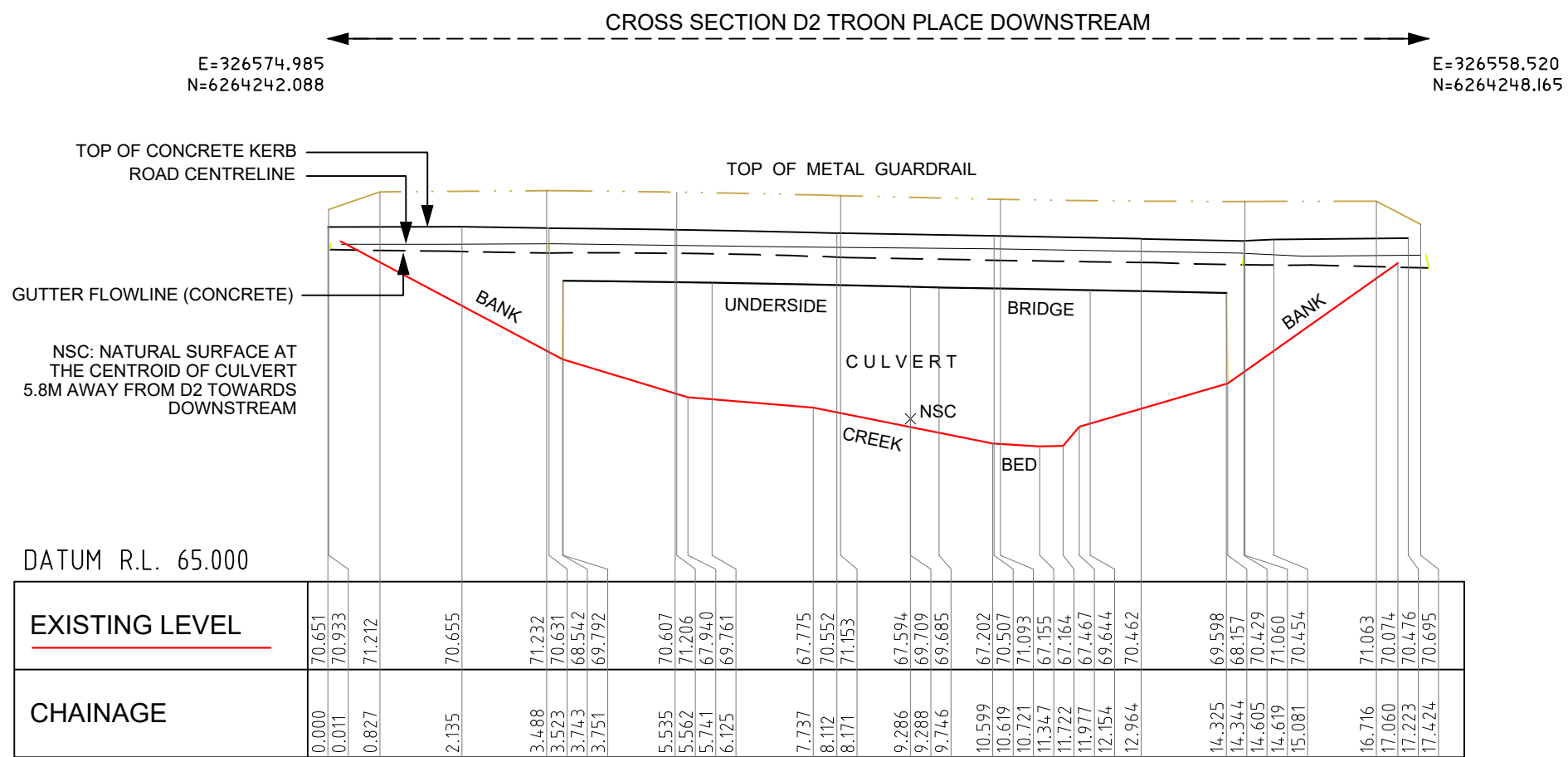


TROON PLACE BRIDGE PLAN VIEW
SCALE 1:100

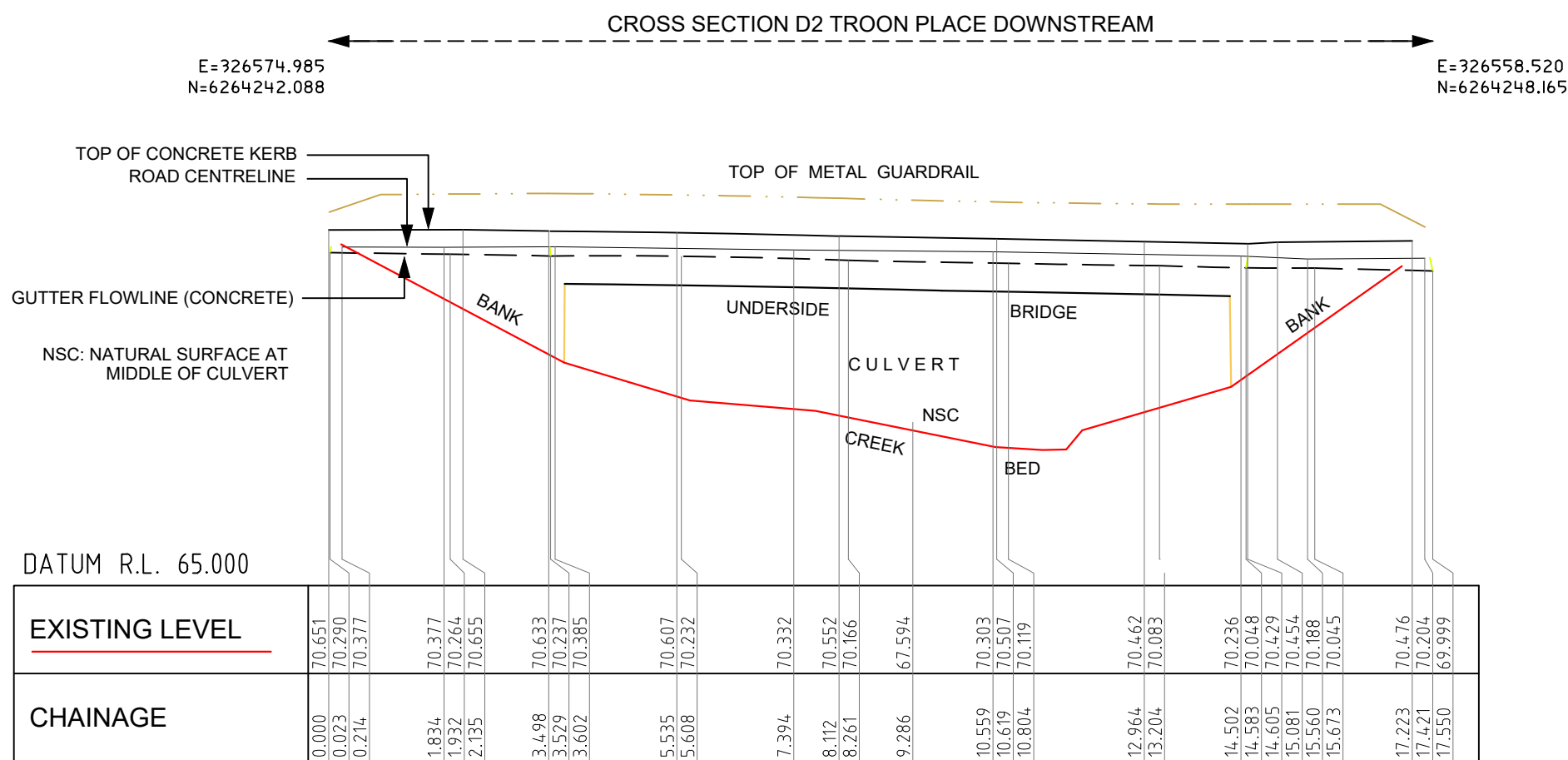
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CROSS SECTION D4 (7M AWAY FROM SEC D2 BRIDGE UPSTREAM) - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION D2 TROON PLACE BRIDGE DOWNSTREAM
STRUCTURE & NATURAL SURFACE - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION D2 TROON PLACE BRIDGE DOWNSTREAM
ROAD & KERB - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100

LEGEND			
*90.72	SURVEY SHOT R.L.	---	METAL SAFETY FENCE/GUARDRAIL
91.498	BACK OF KERB (CONC.) R.L.	---	BRIDGE UNDERSIDE CLEARANCE
91.237	TOP OF KERB (CONC.) R.L.	---	BRIDGE EXPANSION JOINT
91.132	GUTTER FLOW LINE (CONC.) R.L.	---	BOTTOM OF BRIDGE ABUTMENT
91.563	CONCRETE SLAB R.L.	---	BRIDGE UNDERSIDE CLEARANCE
94.719	METAL SAFETY FENCE/GUARDRAIL R.L.	---	ROAD CARRIAGEWAY
90.865	NATURAL SURVEY SHOT R.L.	---	CONCRETE SURFACE
90.248	WATER EDGE R.L.	---	BRIDGE EDGE/BACK OF KERB
91.282	CROWN OF ROAD R.L.	---	
92.790	BRIDGE UNDERSIDE CLEARANCE R.L.	---	
90.968	BOTTOM OF BRIDGE ABUTMENT R.L.	---	
91.296	BRIDGE EXPANSION JOINT R.L.	---	

SCALE 1:100 AT A1
ALL DISTANCES IN METRES

REV.	AMENDMENTS	DATE
B	HEIGHTS AMENDMENT	07/09/23
A	FINAL ISSUE	16/08/23

HORIZONTAL DATUM:
CO-ORDINATE SYSTEM: M.G.A.2020
MARKS ADOPTED:
GNSS

VERTICAL DATUM:
DATUM: A.H.D.
B.M. ADOPTED: GNSS P.M.50185
R.L. 139.623
SOURCE: S.C.I.M.S.

CLIENT:
WMA WATER
LEVEL 2, 160 CLARENCE STREET
SYDNEY NSW 2000

PLAN:
PLAN SHOWING LANE COVE NORTHERN
CATCHMENTS FLOOD SURVEY
CROSS SECTIONS C AND D

A1

LGA: KU-RING-GAI			SHEET 4 OF 6	
SURVEYED B.B.	DRAWN K.S.	CHECKED S.N.	APPROVED S.N.	
SURVEY REFERENCE 36444		SCALE 1: 100	DATE 07/09/2023	
DRAWING NUMBER 36444-XSEC-SITE C-D.DWG			REV. B	



PHOTO C1 - DOWNSTREAM



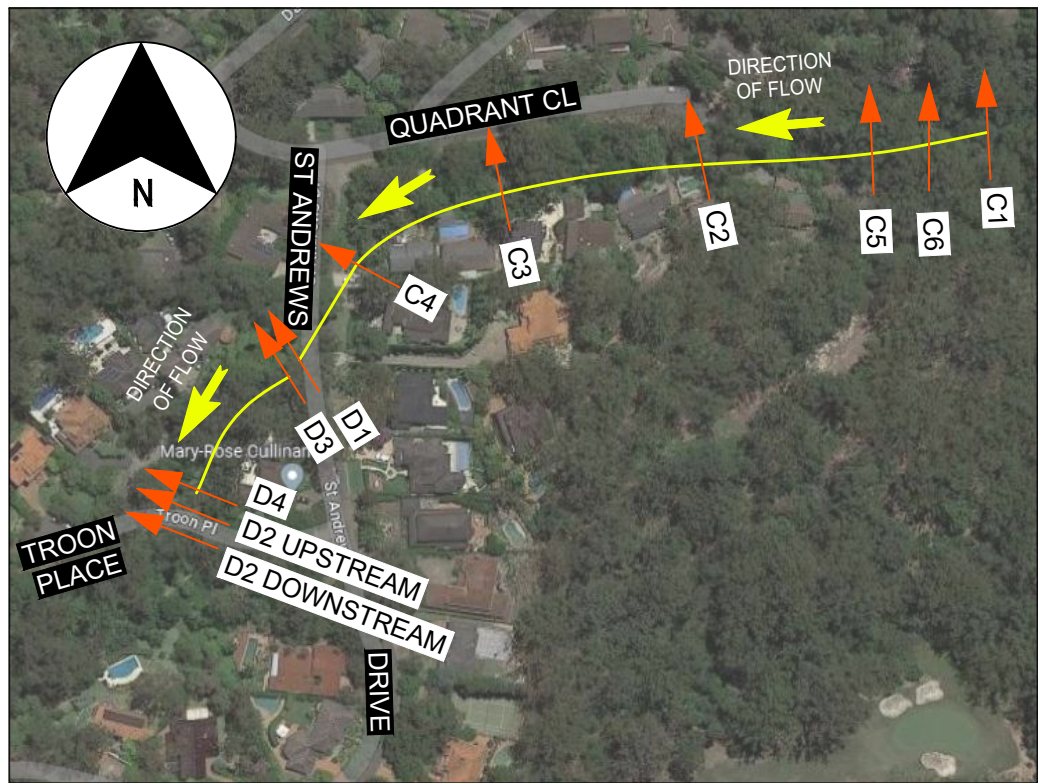
PHOTO C5 - UPSTREAM



PHOTO C2 - UPSTREAM



PHOTO C4 - UPSTREAM



QUADRANT CL & TROON PL CREEK CROSS SECTION LOCALITY PLAN



PHOTO C1 - UPSTREAM



PHOTO C5 WATERWAY



PHOTO C3 - DOWNSTREAM



PHOTO C4 - DOWNSTREAM



PHOTO C4 CULVERT - UPSTREAM



PHOTO C1 WATERWAY



PHOTO C2 - DOWNSTREAM



PHOTO C3 - UPSTREAM



PHOTO C4 WATERWAY



PHOTO C4 CULVERT - DOWNSTREAM



PHOTO C5 - DOWNSTREAM



PHOTO C2 WATERWAY



PHOTO C3 WATERWAY



PHOTO C4 CULVERT WATERWAY



PHOTO D1 CULVERT - DOWNSTREAM



PHOTO D1 CULVERT HEADWALL - UPSTREAM



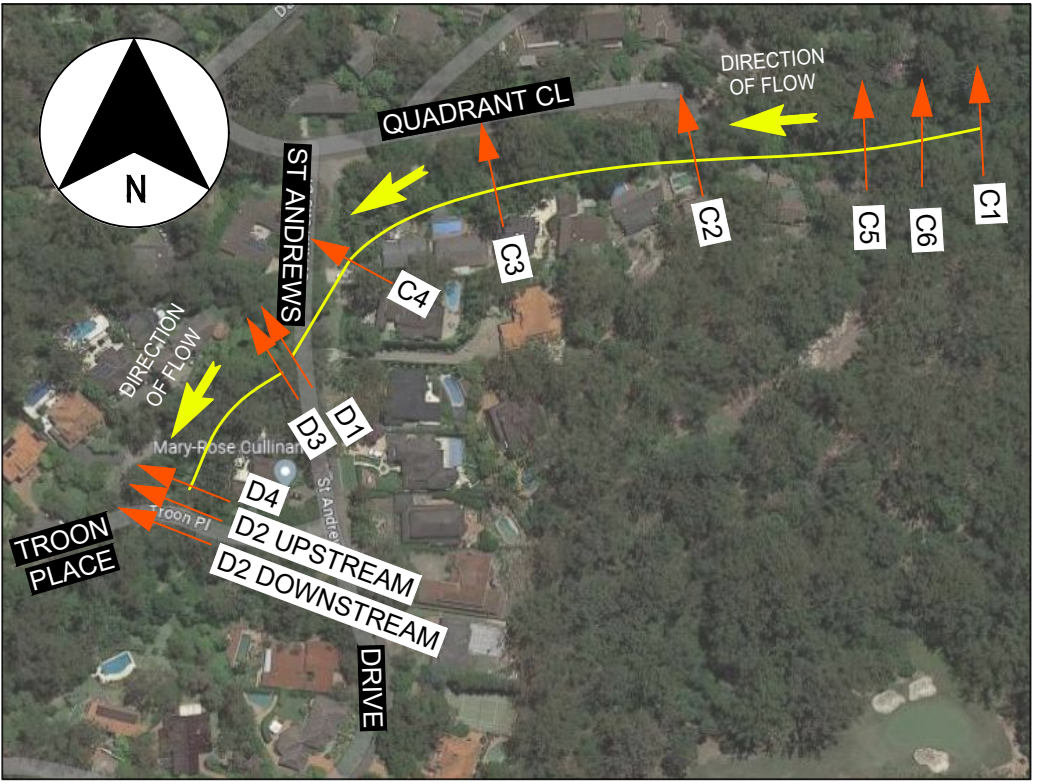
PHOTO D1 WATERWAY



PHOTO D2 TROON PLACE BRIDGE - DOWNSTREAM



PHOTO D2 TROON PLACE BRIDGE - TOP



QUADRANT CL & TROON PL CREEK CROSS SECTION LOCALITY PLAN



PHOTO D1 CULVERT - UPSTREAM



PHOTO D2 TROON PLACE BRIDGE - DOWNSTREAM



PHOTO D2 TROON PLACE BRIDGE - UPSTREAM



PHOTO D3 - UPSTREAM



PHOTO D1 - DOWNSTREAM



PHOTO D2 TROON PLACE BRIDGE - UPSTREAM



PHOTO D2 TROON PLACE BRIDGE - TOP - UPSTREAM



PHOTO D3 WATERWAY



PHOTO D1 - UPSTREAM



PHOTO D2 TROON PLACE BRIDGE - WATERWAY



PHOTO D2 TROON PLACE BRIDGE - TOP - DOWNSTREAM



PHOTO D3 - DOWNSTREAM

B	HEIGHTS AMENDMENT	07/09/23
A	FINAL ISSUE	16/08/23
REV.	AMENDMENTS	DATE

HORIZONTAL DATUM:
CO-ORDINATE SYSTEM: M.G.A.2020
MARKS ADOPTED:
GNSS

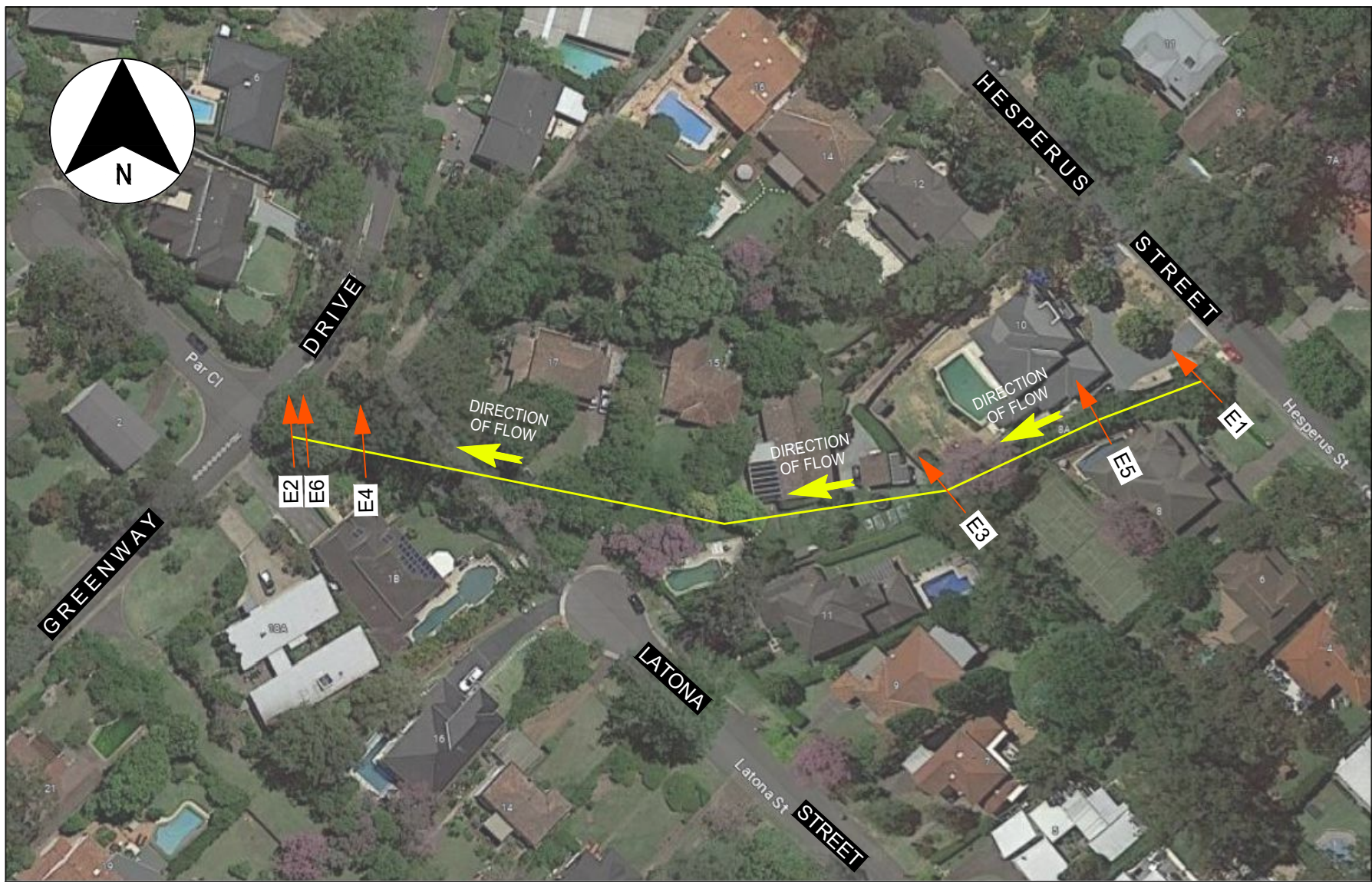
VERTICAL DATUM:
DATUM: A.H.D.
B.M. ADOPTED: GNSS P.M.50185
R.L.: 139.623
SOURCE: S.C.I.M.S.

CLIENT:
WMA WATER
LEVEL 2, 160 CLARENCE STREET
SYDNEY NSW 2000

PLAN:
PLAN SHOWING LANE COVE NORTHERN
CATCHMENTS FLOOD SURVEY
CROSS SECTIONS C AND D

A1

LGA: KU-RING-GAI		SHEET 6 OF 6	
SURVEYED B.B.	DRAWN K.S.	CHECKED S.N.	APPROVED S.N.
SURVEY REFERENCE 36444		SCALE NTS	DATE 07/09/2023
DRAWING NUMBER 36444-XSEC-SITE C-D.DWG			REV. B

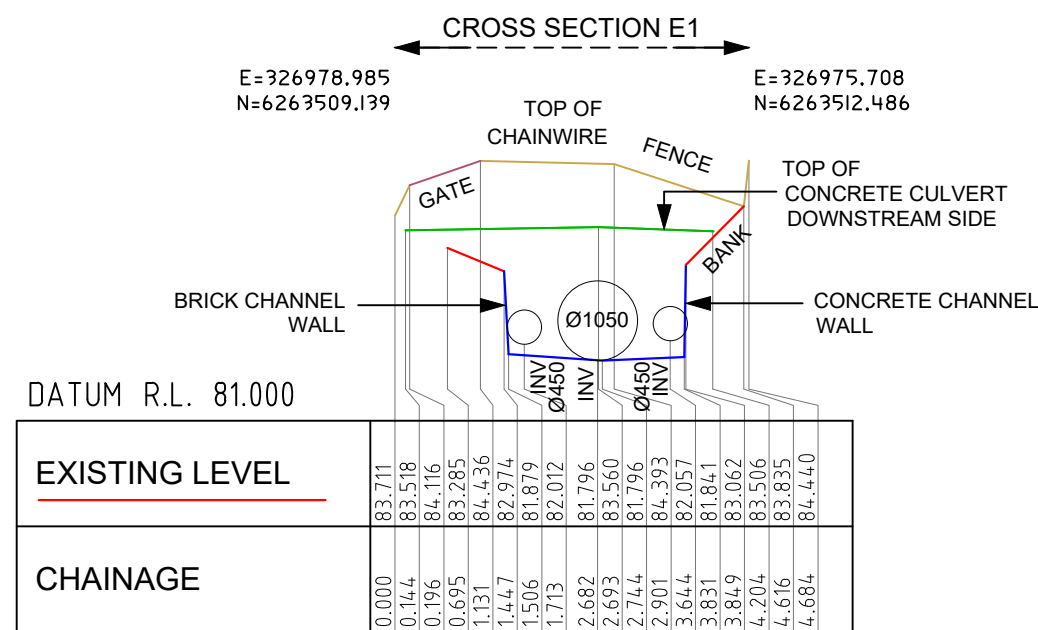


HESPERUS STREET TO GREENWAY DRIVE CROSS SECTION LOCALITY PLAN
NOT TO SCALE

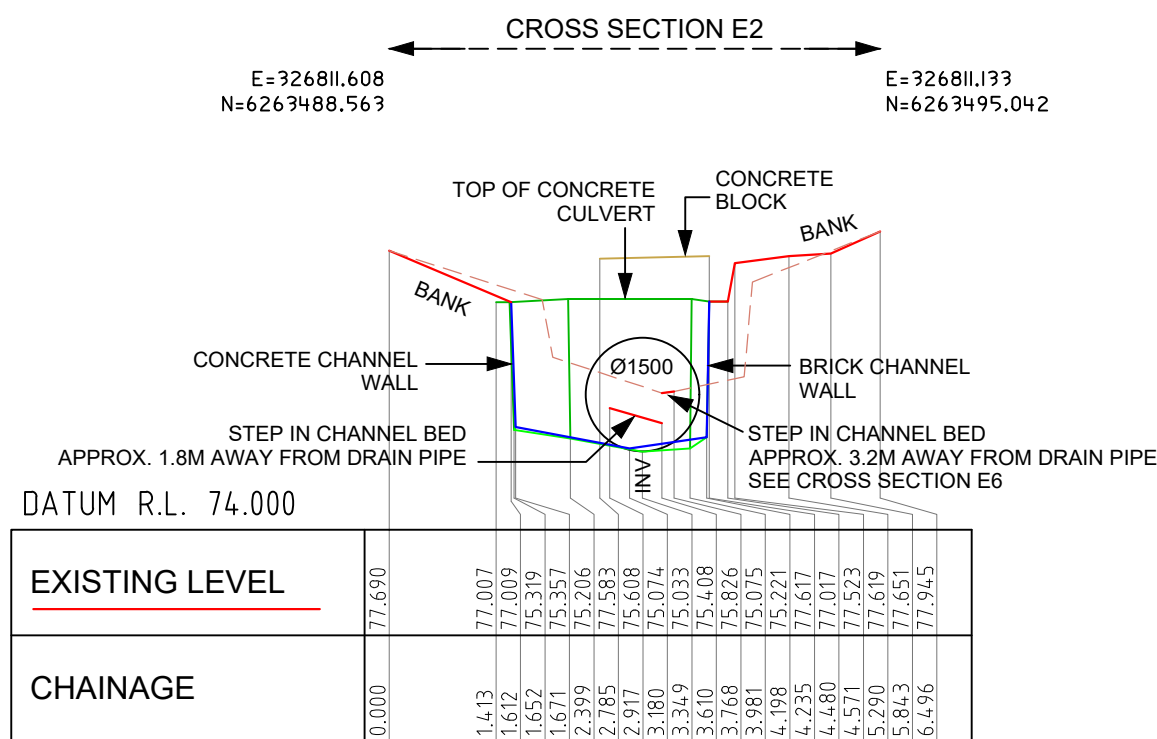
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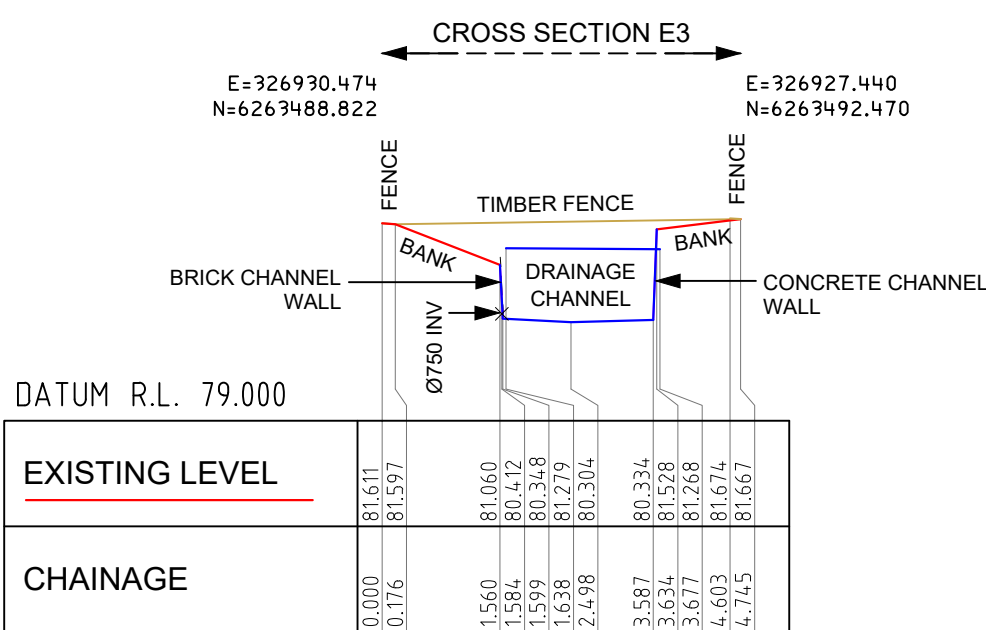
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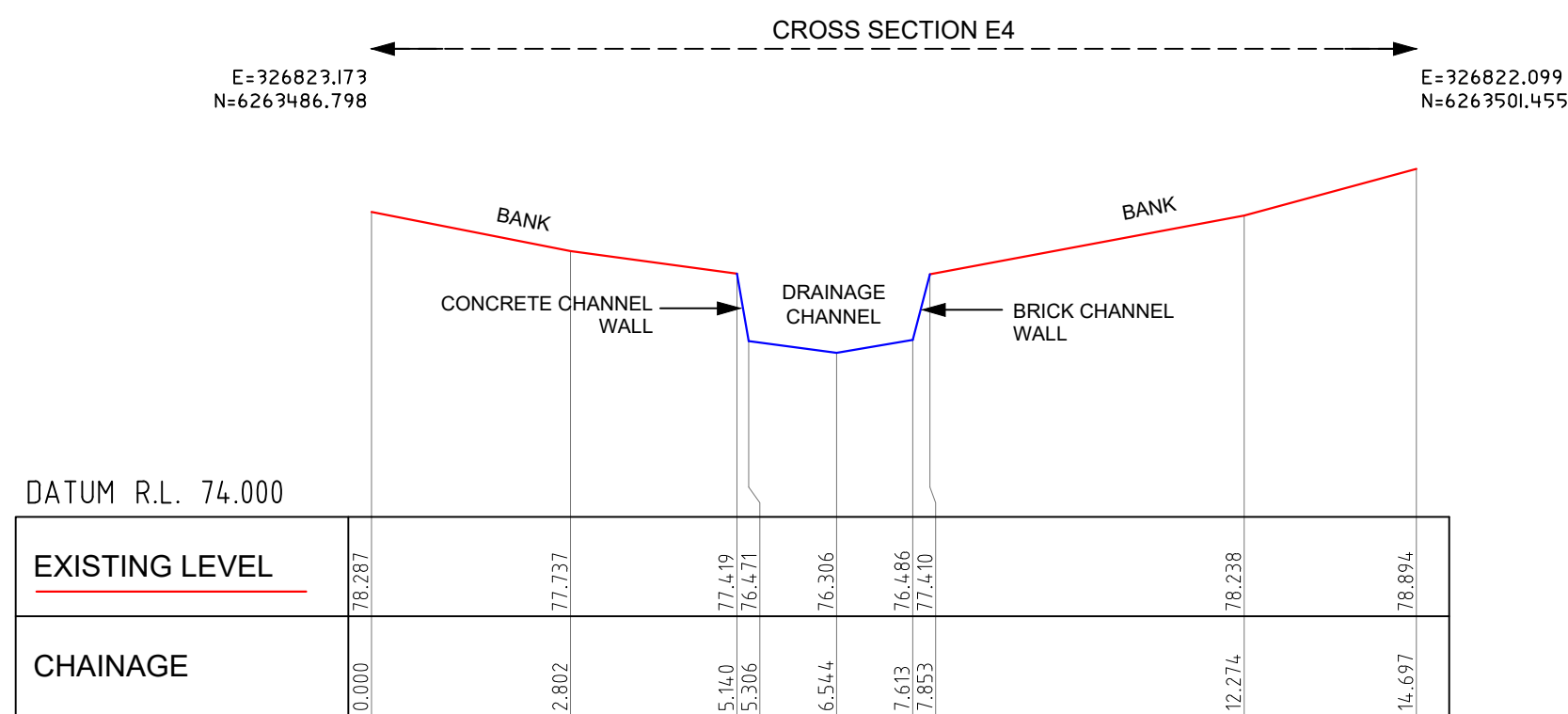
CROSS SECTION E1 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



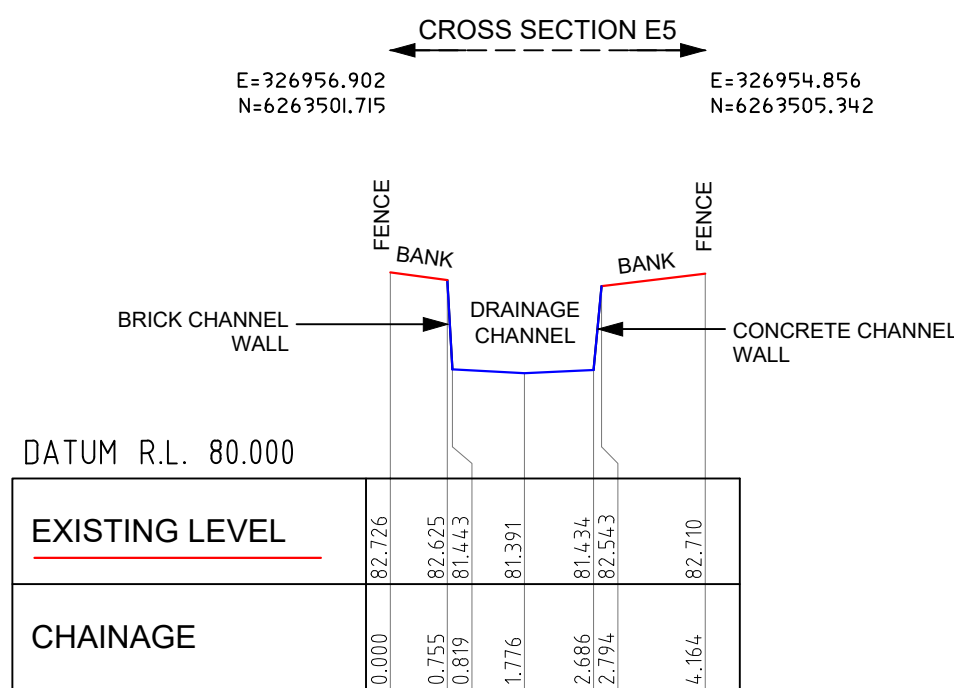
CROSS SECTION E2 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



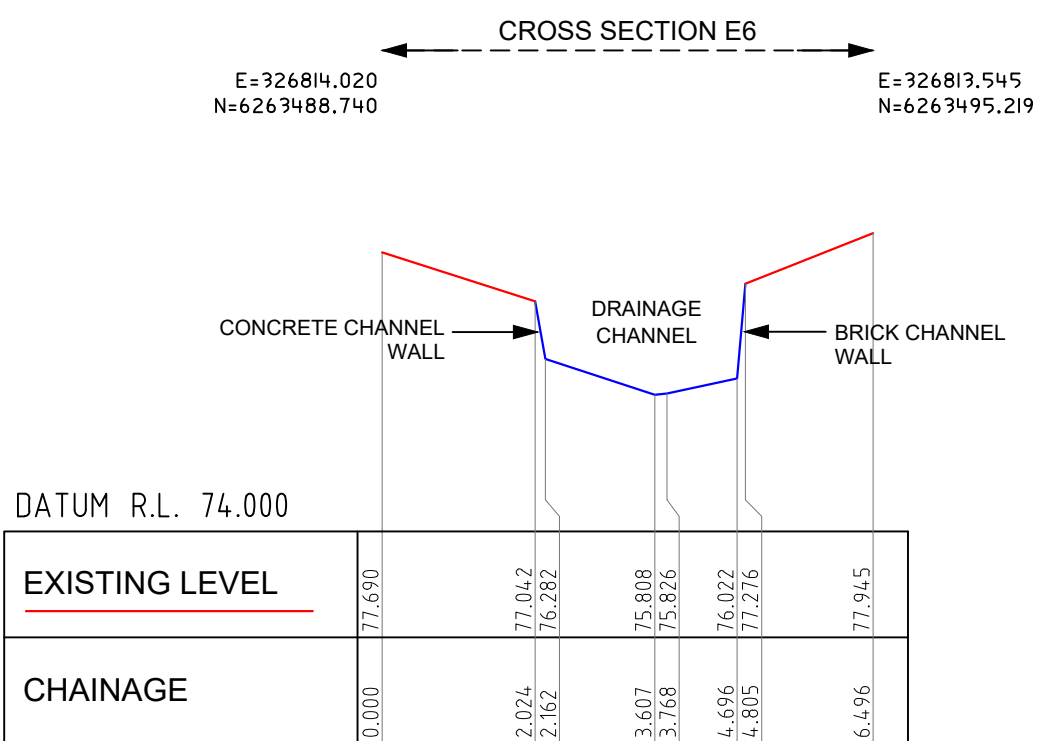
CROSS SECTION E3 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION E4 (10M AWAY FROM SEC E1 TOWARDS UPSTREAM) - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION E5 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION E6 - (APPROX. 3.2M AWAY FROM DRAIN PIPE
IN SECTION E2 TOWARDS UPSTREAM) - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100

SCALE 1:100 AT A1
ALL DISTANCES IN METRES



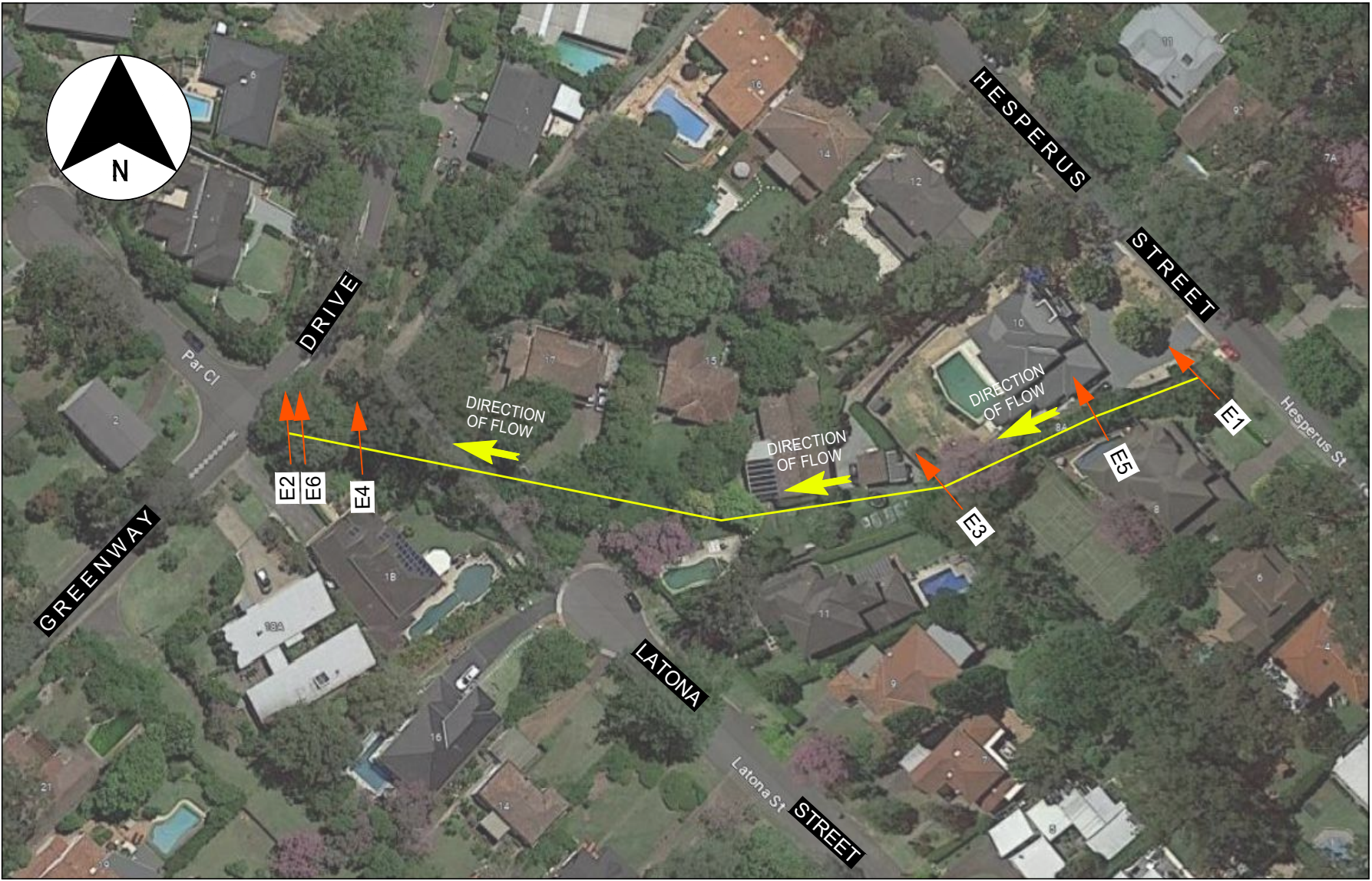
PHOTO E1 CULVERT - DOWNSTREAM



PHOTO E2 CULVERT - DOWNSTREAM



PHOTO E2 WATERWAY



HESPERUS STREET TO GREENWAY DRIVE CROSS SECTION LOCALITY PLAN
NOT TO SCALE



PHOTO E1 CULVERT - UPSTREAM



PHOTO E2 CULVERT - UPSTREAM



PHOTO E3 - DOWNSTREAM



PHOTO E1 - DOWNSTREAM



PHOTO E2 - DOWNSTREAM



PHOTO E3 - UPSTREAM



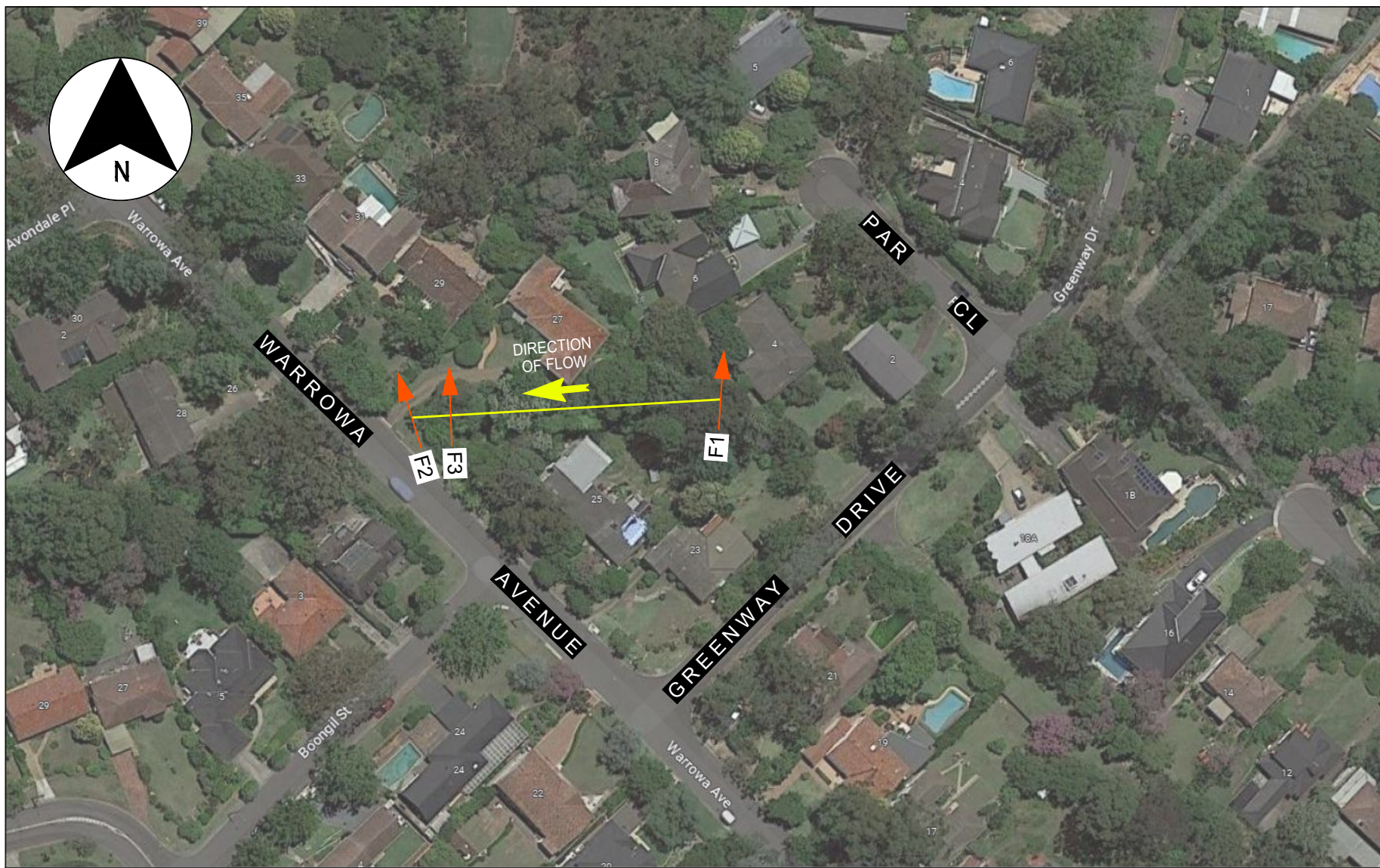
PHOTO E1 - UPSTREAM



PHOTO E2 - UPSTREAM



PHOTO E3 - DRAINAGE PIPE

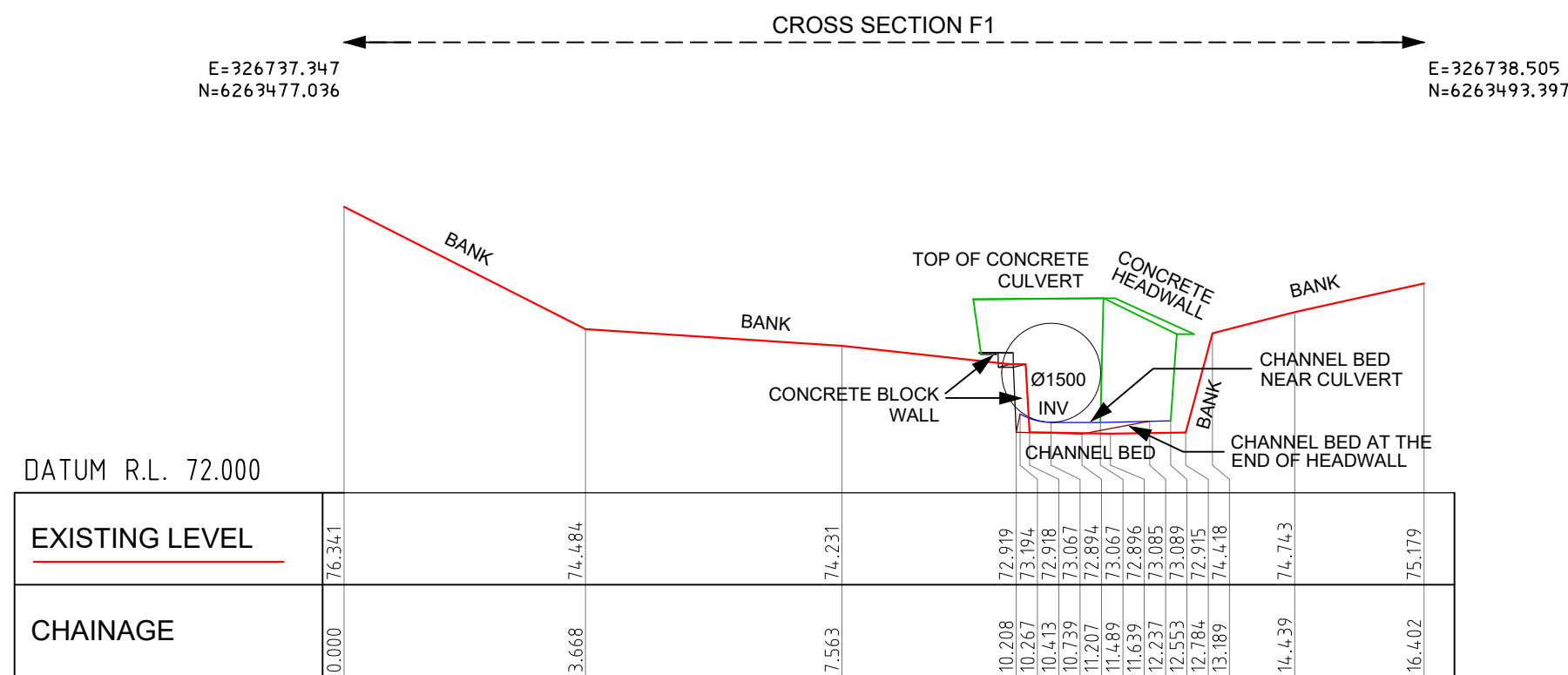


GREENWAY DRIVE WEST CROSS SECTION LOCALITY PLAN
NOT TO SCALE

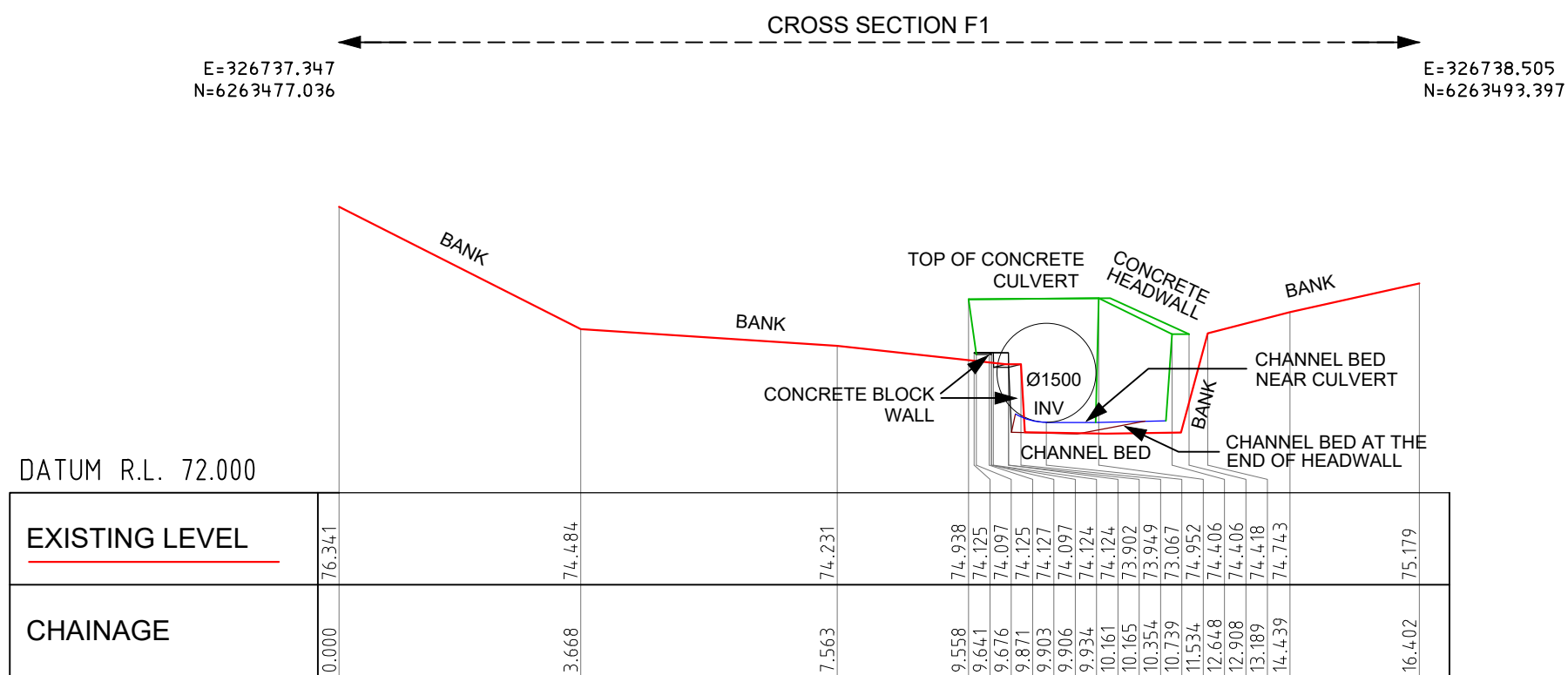
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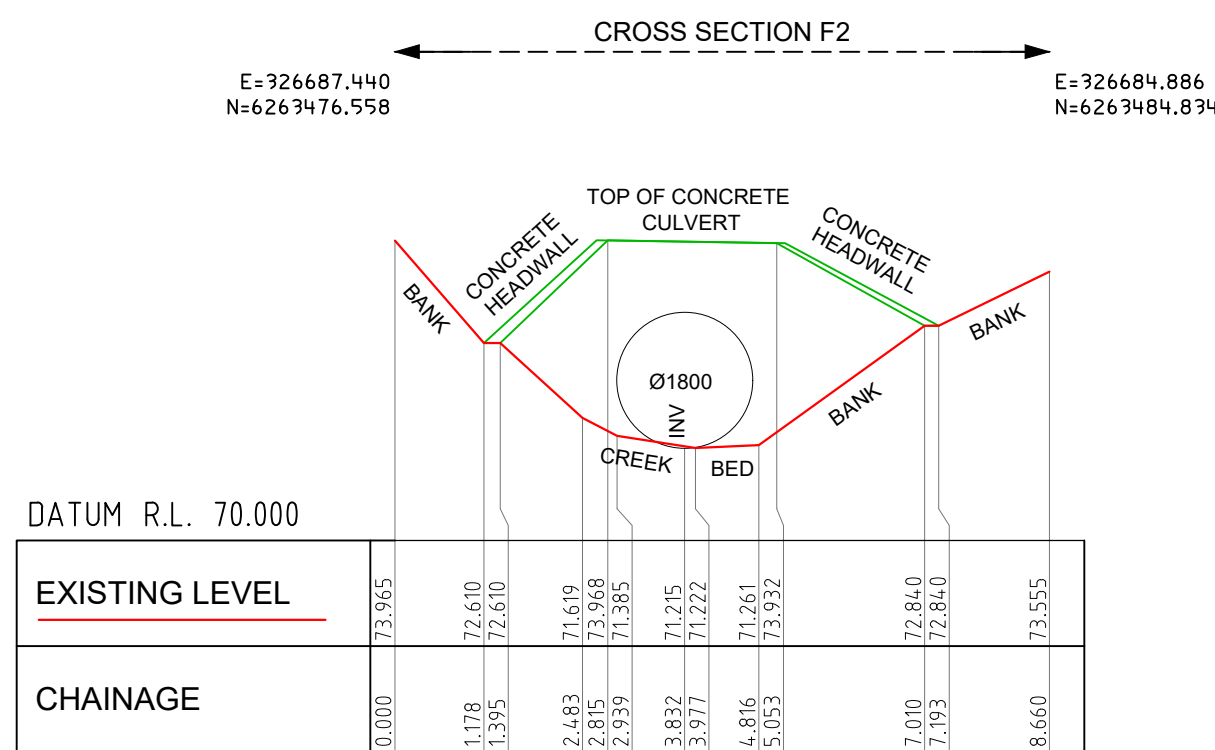
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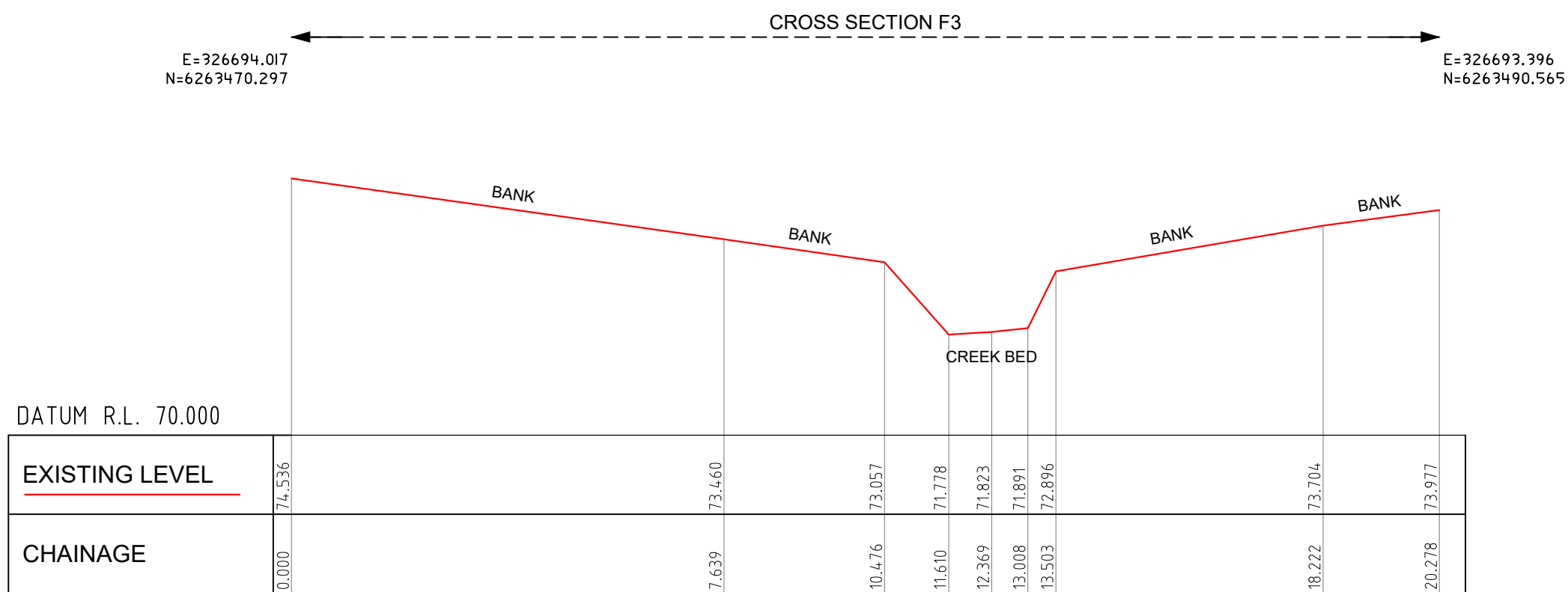
CROSS SECTION F1 (NATURAL SURFACE) - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION F1 (STRUCTURE) - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION F2 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION F3 (7M AWAY FROM F2 TOWARDS UPSTREAM) - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100

SCALE 1:100 AT A1

1 0 1 2 3 4

ALL DISTANCES IN METRES



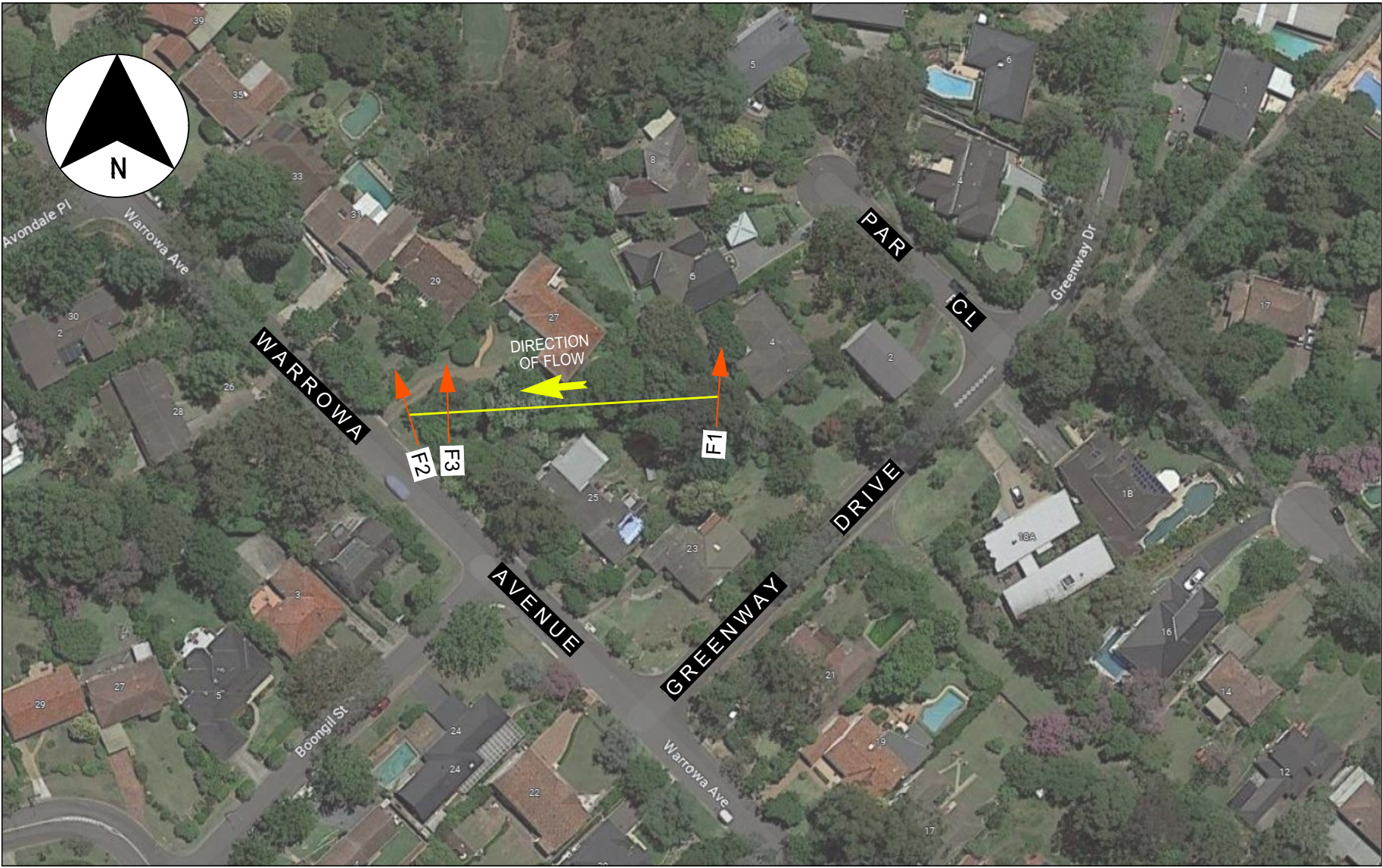
PHOTO F1 CULVERT - DOWNSTREAM



PHOTO F1 - UPSTREAM



PHOTO F2 CULVERT - UPSTREAM



GREENWAY DRIVE WEST CROSS SECTION LOCALITY PLAN
NOT TO SCALE



PHOTO F1 CULVERT - UPSTREAM



PHOTO F1 WATERWAY



PHOTO E2 CULVERT WATERWAY



PHOTO F1 CULVERT WATERWAY



PHOTO F2 CULVERT - DOWNSTREAM



PHOTO F2 - DOWNSTREAM



PHOTO F2 WATERWAY



PHOTO BETWEEN F1 & F3 - DOWNSTREAM



PHOTO F1 - DOWNSTREAM



PHOTO F2 CULVERT - DOWNSTREAM



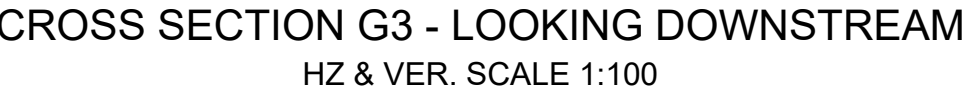
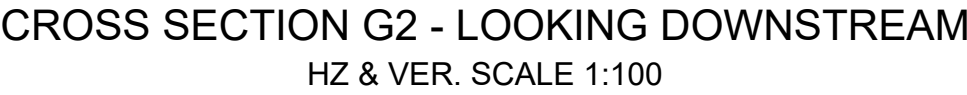
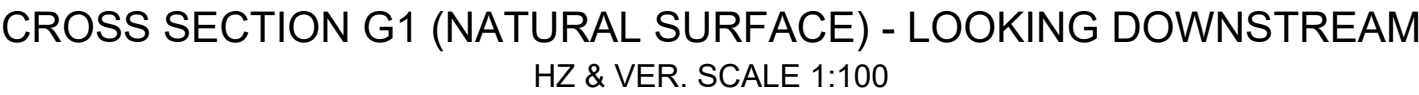
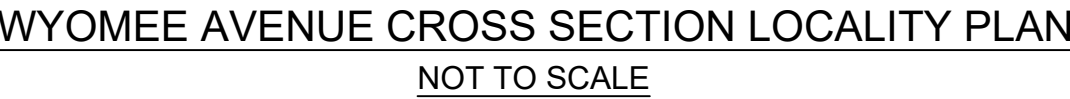
PHOTO F2 - UPSTREAM



PHOTO BETWEEN F1 & F3



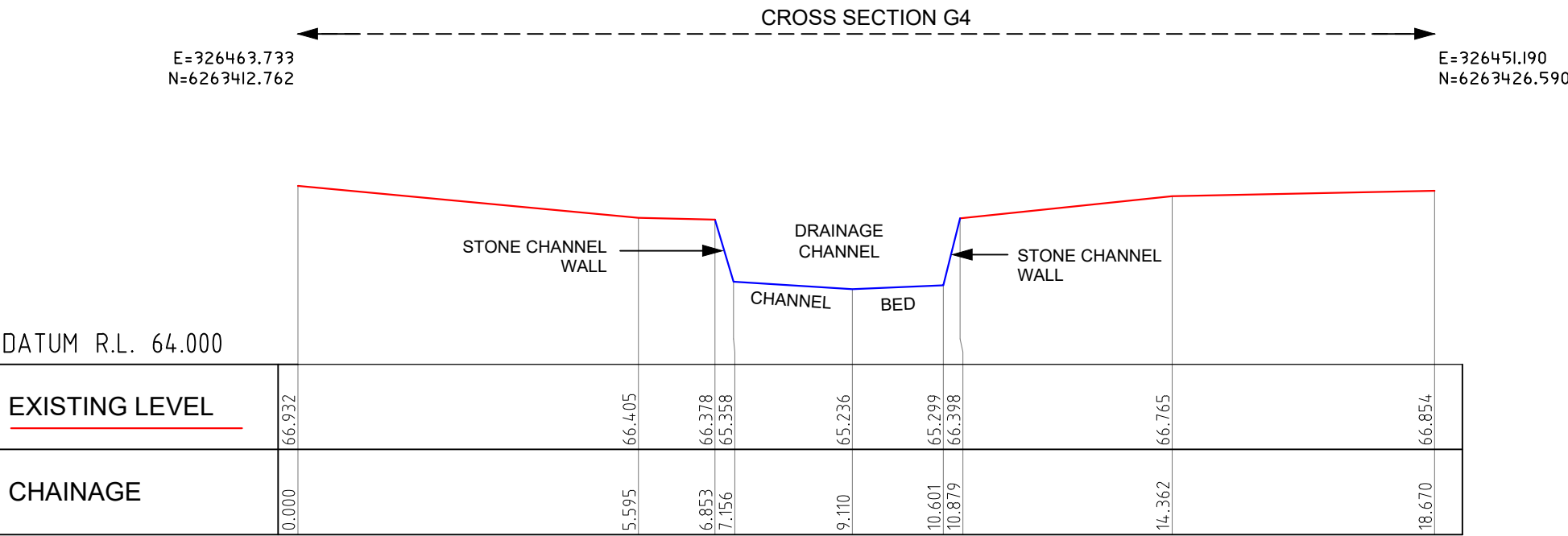
PHOTO BETWEEN F1 & F3 - UPSTREAM



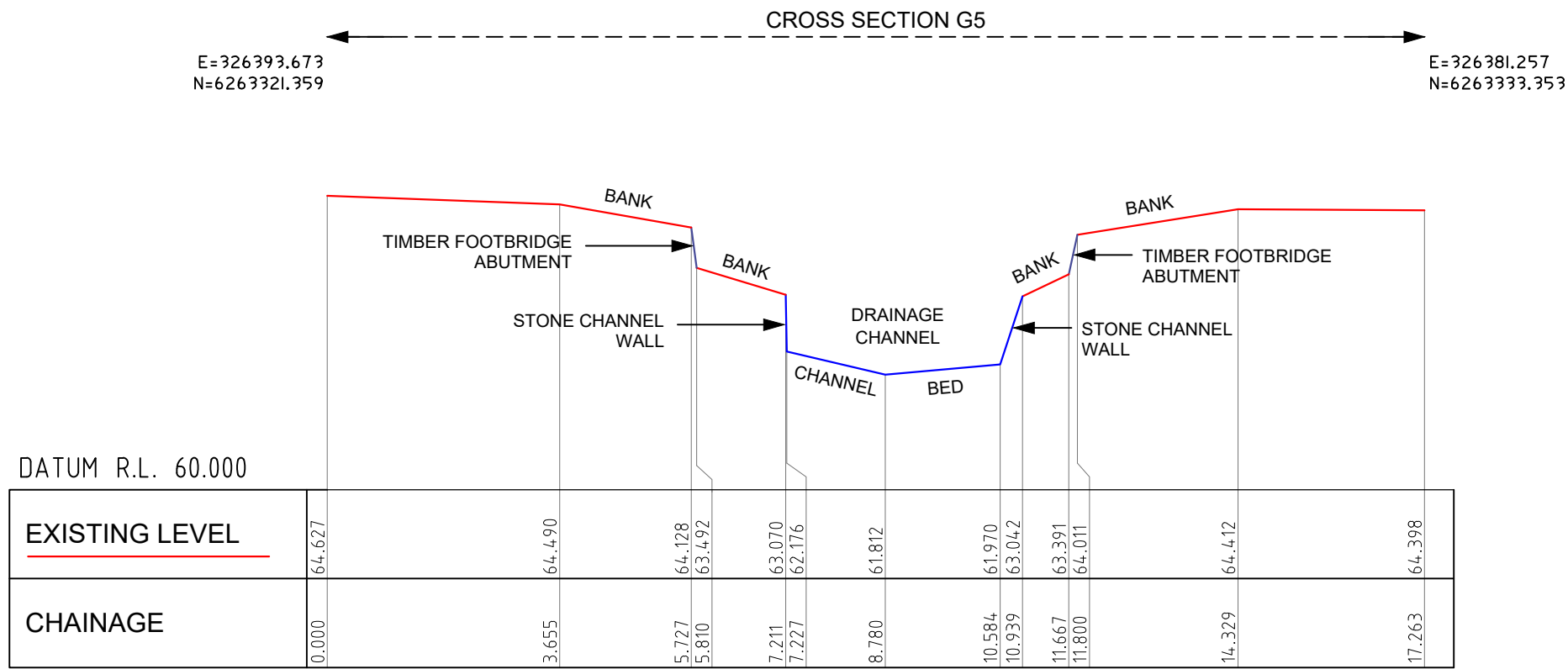
A1	LGA: LANE COVE		SHEET 1 OF 5	
	SURVEYED B.B.	DRAWN K.S.	CHECKED S.N.	APPROVED S.N.
	SURVEY REFERENCE 36444		SCALE 1: 100	DATE 23/08/2023
	DRAWING NUMBER 36444-XSEC-SITE G.DWG			REV. A



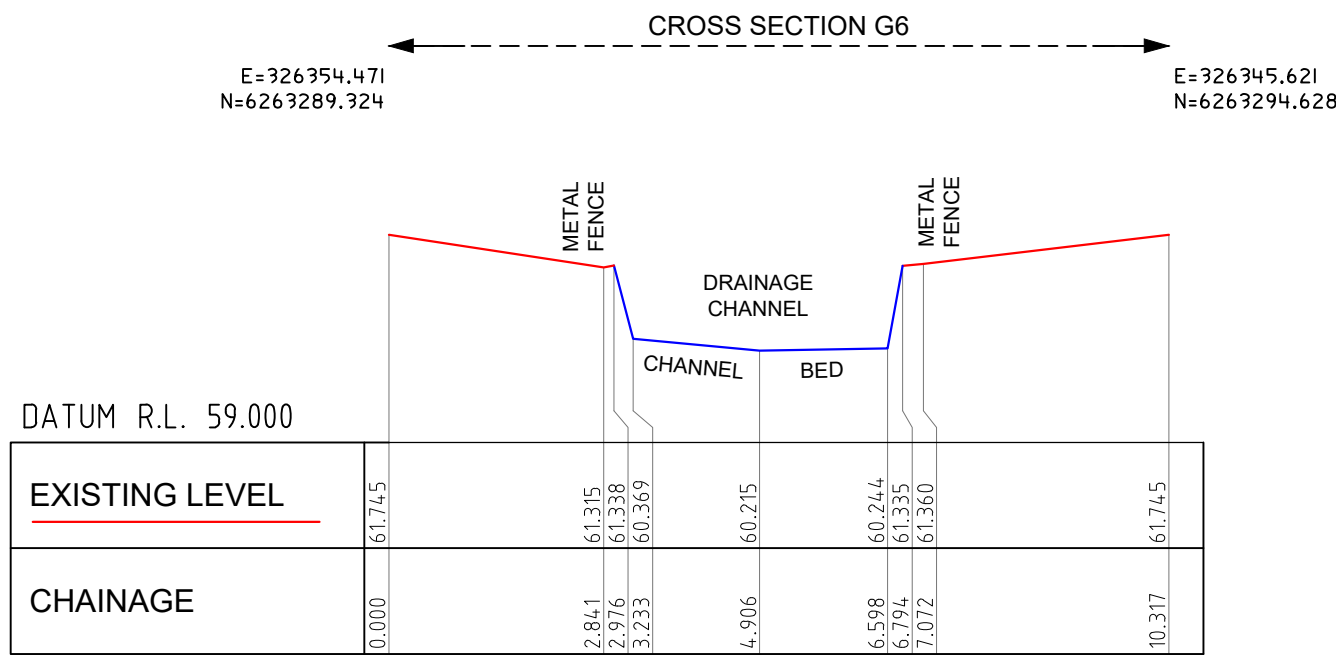
WYOMEER AVENUE CROSS SECTION LOCALITY PLAN
NOT TO SCALE



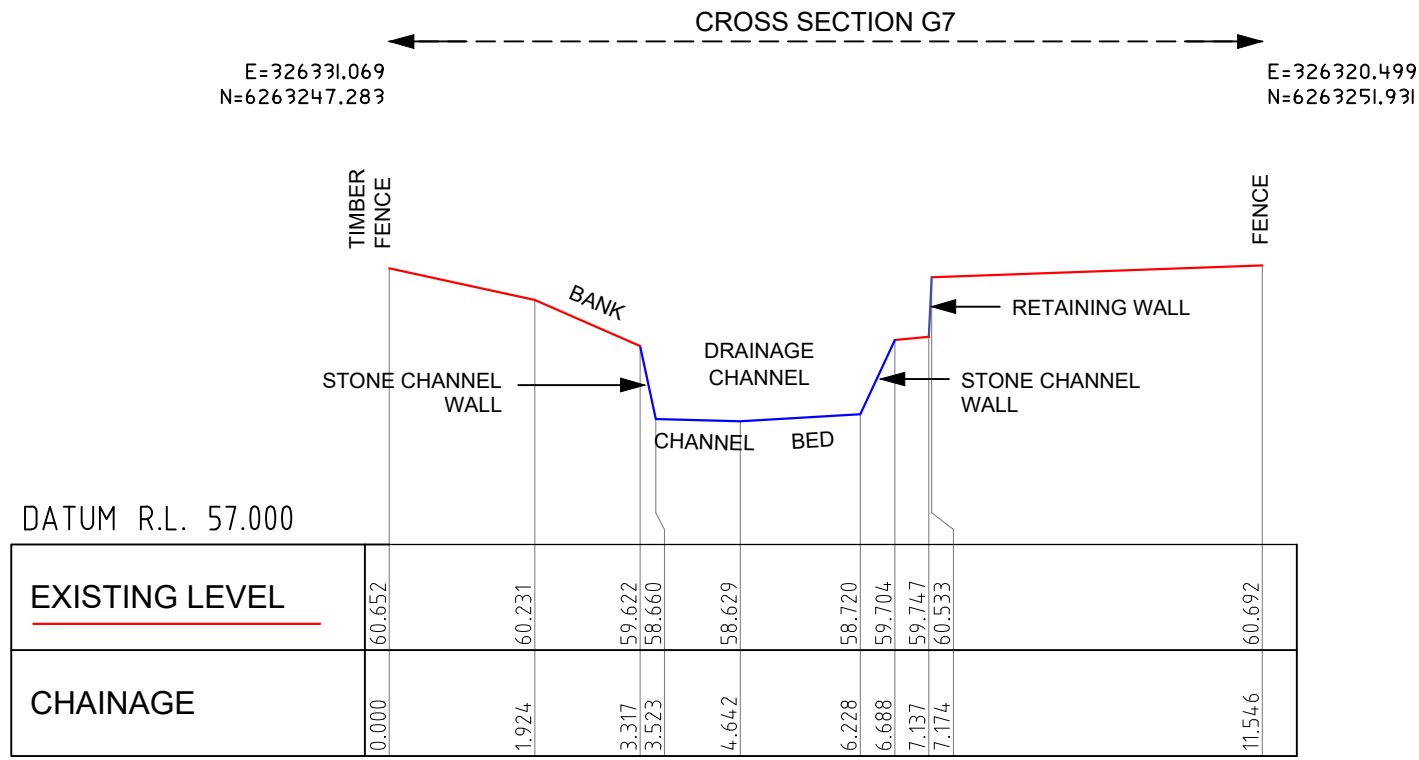
CROSS SECTION G4- LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION G5 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION G6 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION G7 - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100

Notes:

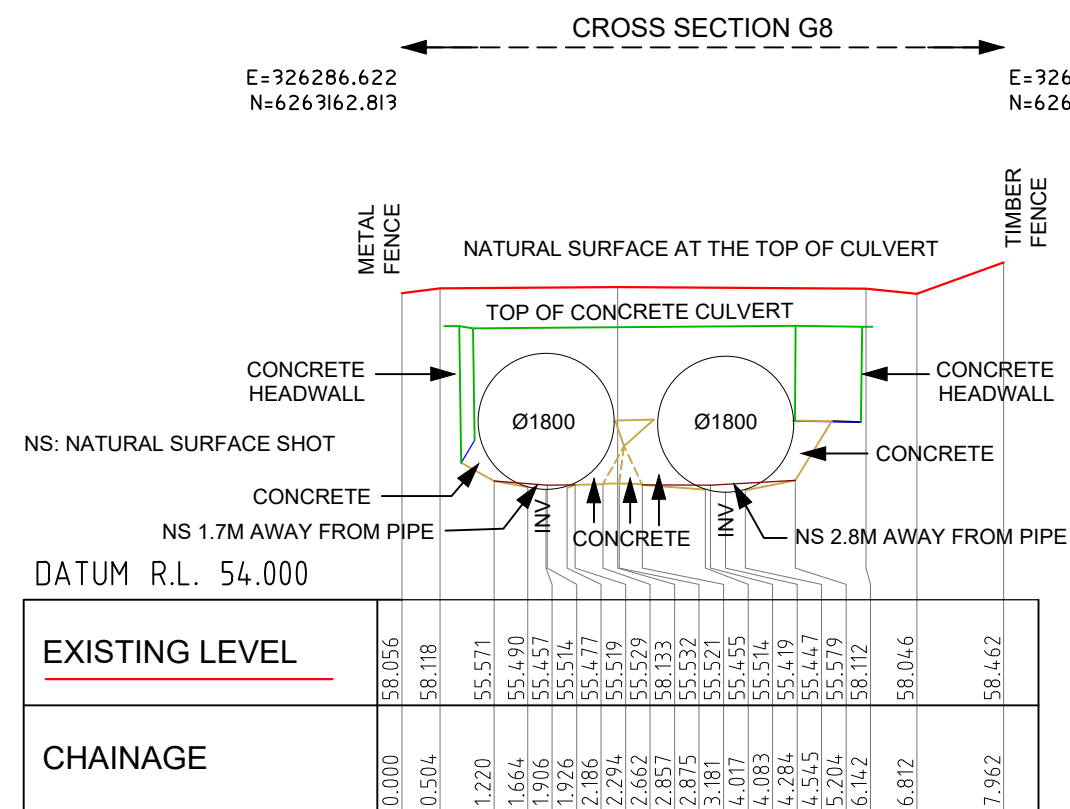
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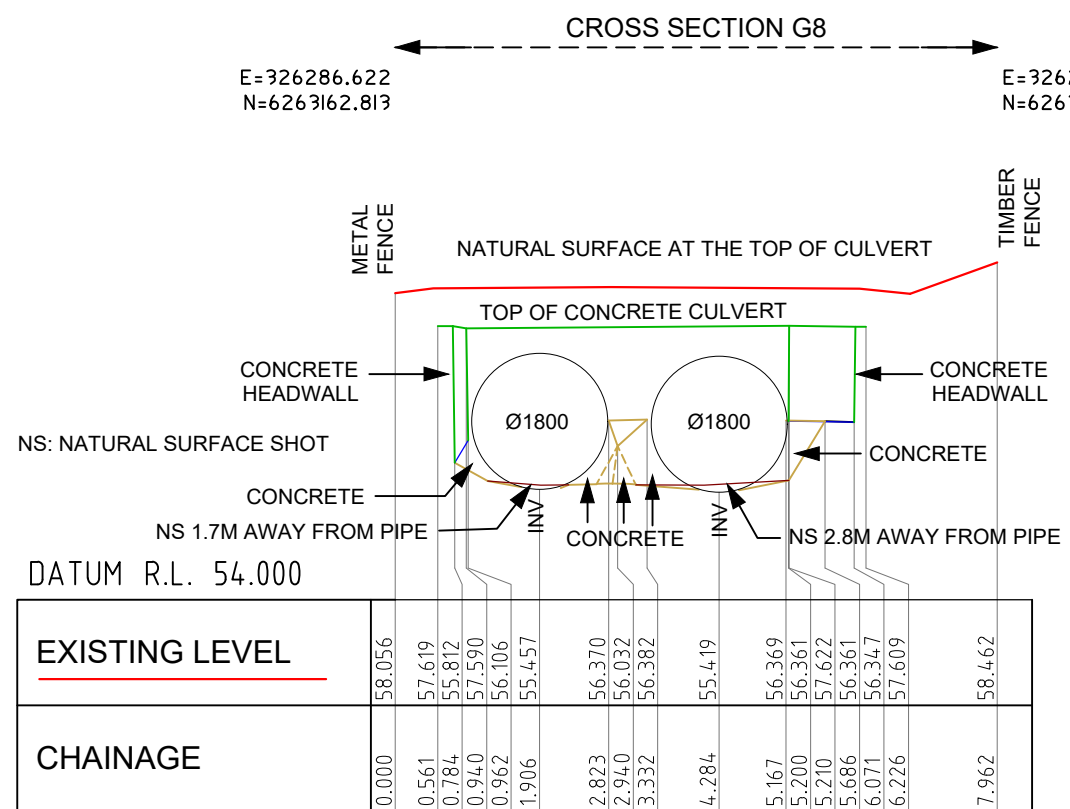




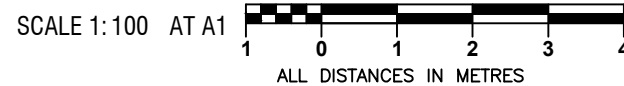
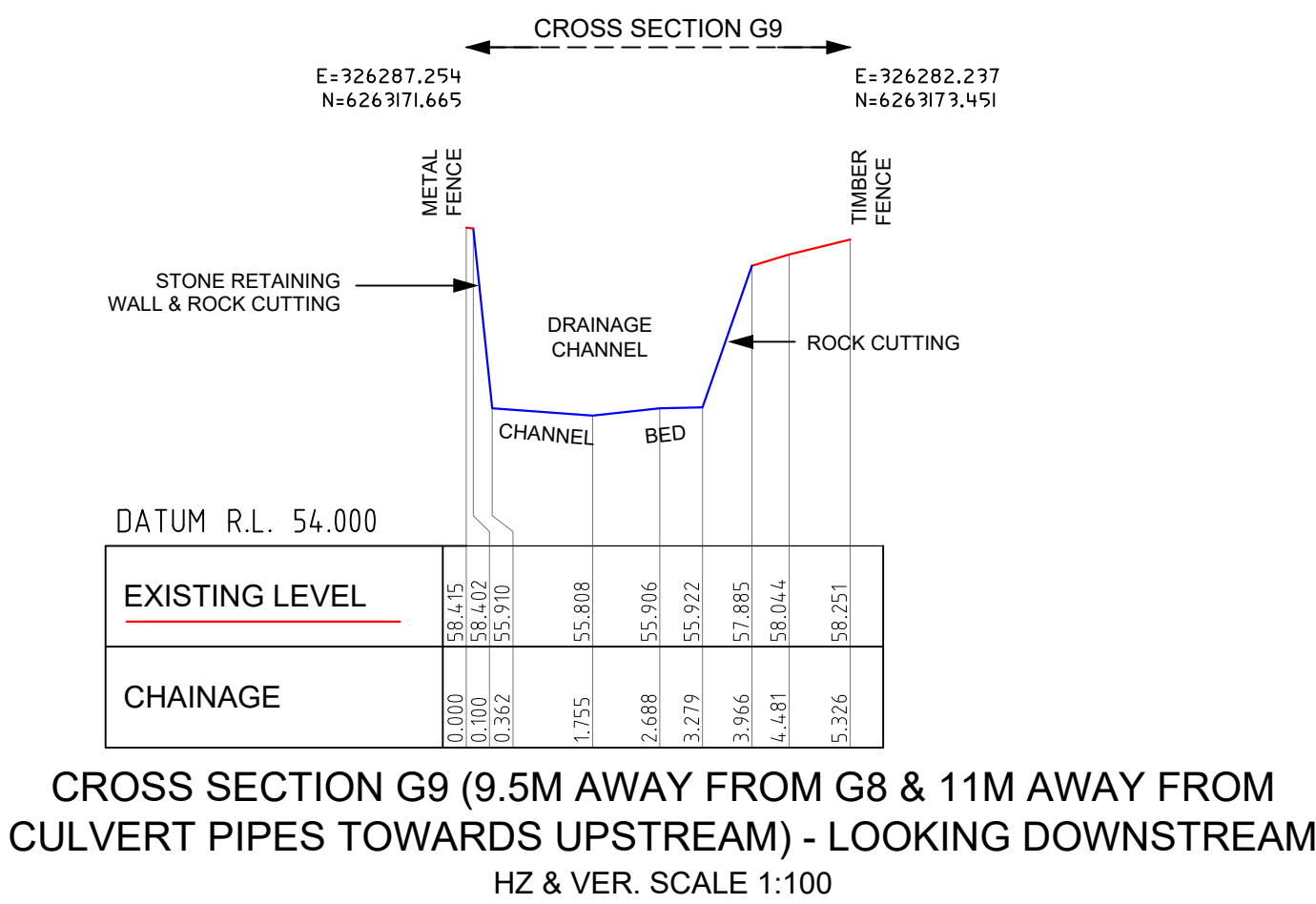
WYOMEER AVENUE CROSS SECTION LOCALITY PLAN
NOT TO SCALE



CROSS SECTION G8 (NATURAL SURFACE & CHANNEL BED) - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



CROSS SECTION G8 (STRUCTURE) - LOOKING DOWNSTREAM
HZ & VER. SCALE 1:100



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PHOTO G1 CULVERT - DOWNSTREAM



PHOTO G1 - UPSTREAM



PHOTO G2 WATERWAY



WYOMEER AVENUE CROSS SECTION LOCALITY PLAN
NOT TO SCALE



PHOTO G1 CULVERT - UPSTREAM



PHOTO G1 WATERWAY



PHOTO G3 - DOWNSTREAM



PHOTO G1 CULVERT WATERWAY



PHOTO G2 - DOWNSTREAM



PHOTO G3 - UPSTREAM



PHOTO G4 - DOWNSTREAM



PHOTO G4 WATERWAY



PHOTO G1 - DOWNSTREAM



PHOTO G2 - UPSTREAM



PHOTO G3 WATERWAY



PHOTO G4 - UPSTREAM



PHOTO G5 - DOWNSTREAM



PHOTO G5 - UPSTREAM



PHOTO G6 WATERWAY



PHOTO G8 CULVERT - DOWNSTREAM



WYOMEER AVENUE CROSS SECTION LOCALITY PLAN
NOT TO SCALE



PHOTO G5 WATERWAY



PHOTO G7 - DOWNSTREAM



PHOTO G8 CULVERT - UPSTREAM



PHOTO G6 - DOWNSTREAM



PHOTO G7 - UPSTREAM



PHOTO G8 - DOWNSTREAM



PHOTO G6 - UPSTREAM



PHOTO G7 WATERWAY



PHOTO G8 - DONCASTER AVE



PHOTO G8 WATERWAY