

**PRELIMINARY CONSTRUCTION
COST ESTIMATE
(UPDATED)**

PROPOSED STORMWATER CULVERT WORKS AT

**93 & 98 HAMBLEDON ROAD
THE PONDS NSW 2769**

JOB NO. 5335

4 MAY 2017

CLIENT

Mr Atul Kumar
Managing Director
Signature Projects Australia Pty Ltd
Telephone: (02) 8316 4775
Email:
atul@signaturepropertydevelopers.com.au

QUANTITY SURVEYOR

Mr William Lau
Director
Hugh B Gage Pty Ltd
Suite 6, 374 Church Street
PARRAMATTA NSW 2150
Telephone: (02) 9890 1090
Fax: (02) 9890 1092

PROPOSED STORMWATER CULVERT WORKS AT
93 & 98 HAMBLEDON ROAD
THE PONDS NSW 2769

CONTENTS

	<u>PAGE NO.</u>
1. INTRODUCTION.....	3
2. DISCLAIMER.....	3
3. PRELIMINARY DEVELOPMENT SUMMARY.....	4
4. BASIS OF INITIAL COST ESTIMATE.....	6
5.10 General	
5.20 Documents	

1. INTRODUCTION

Hugh B Gage Pty Ltd has been instructed by Mr Atul Kumar of Signature Projects Australia Pty Ltd to undertake a Preliminary Cost Estimate for the proposed stormwater culvert at 93 & 98 Hambledon Road, The Ponds NSW 2769.

To this end, Hugh B Gage has carried out the following:-

1. Review of available relevant documents
2. Independent assessment of construction cost by adopting detailed measurement and pricing based on available documents, market price and/or relevant cost data from our Cost Data Bank of projects of similar nature and magnitude.

2. DISCLAIMER

This Preliminary Cost Estimate has been prepared for the exclusive use by Signature Projects Australia Pty Ltd for an indicative market construction cost of the proposed stormwater culvert works for internal feasibility purposes. Hugh B Gage Pty Ltd accepts no responsibility to third parties nor does it contemplate that this report can be relied upon by third parties. We invite other parties who may come into possession of this report to seek our written consent to them relying upon this report, and we reserve our rights to review the contents in the event that our consent is sought.

3. PRELIMINARY DEVELOPMENT COST SUMMARY

ITEM	
98 Hambledon Road (Signature Projects)	
Stormwater Culvert - Subject Site	\$1,159,371.00
Stormwater Culvert - South Boundary	\$72,135.00
Stormwater Culvert - Hambledon Road	Excluded
Preliminaries	\$160,096.00
Builder's Profit	\$97,413.00
TOTAL CONSTRUCTION COST (Excl. GST)	\$1,489,015.00
93 Hambledon Road (Universal Property Group)	
Stormwater Culvert - Subject Site	\$2,430,423.00
Stormwater Culvert - Hambledon Road	Excluded
Preliminaries	\$315,955.00
Builder's Profit	\$192,247.00
TOTAL CONSTRUCTION COST (Excl. GST)	\$2,938,625.00
TOTAL CONSTRUCTION COST (98 & 93 HAMBLEDON ROAD (Excl. GST)	\$4,427,640.00

Exclusions

The following items are **excluded** from our estimate:-

- Goods & Services Tax (GST)
- Cost escalation beyond May 2017
- Design and Contract Contingency
- All other costs related to the proposed subdivision works (including connection of future stormwater drainage pipes to new culvert)
- Marketing costs and legal fees
- Delay costs
- Upgrading of services
- Archaeological dig or study
- Rock excavation and latent conditions, if encountered
- Site remediation and removal of contaminated materials, if any

Exclusions – cont'd

- Costs related to neighbouring works
- Night work/work outside normal working hours
- Council & authorities fees, charges and contributions
- Consultants' fees
- Retaining walls
- Road restoration/reconstruction to affected road areas and construction of future roads (with the exception of Hambledon Road)
- Works related to existing stormwater drainage channel except stormwater culvert area
- Stormwater Culvert works on Hambledon Road

DRAFT

4. BASIS OF INITIAL COST ESTIMATE

5.10 General

For the completion of our Preliminary Construction Cost Estimate, we have made certain reasonable assumptions, as stated in our detailed estimate. Note that detailed engineering drawings or geotechnical investigation report were not made available at the time of this report. It is strongly suggested that our cost estimate be reviewed when the full set of design documents are made available.

5.20 Documents

Our Preliminary Construction Cost Estimate is based on the following documentation:-

- Contours, Details & Levels Plan Ref No. 1609 Sheets 1 - 4 dated 30 January 2016 prepared by D.J. Hore Pty Ltd
- Plan of Section 94 Works Dwg No. P98-C01-200 Issue P02 dated 18 July 2016 prepared by ARUP Pty Ltd
- Roadworks & Drainage Setout Plan No. P98-C01-201, 202 & 203 Issue P02 dated 18 July 2016 prepared by ARUP Pty Ltd
- Road Longitudinal Sections Dwg No. P98-C01-204, 205 & 206 Issue P02 dated 18 July 2016 prepared by ARUP Pty Ltd
- Drainage Culvert Longitudinal Sections, Special Pit Details & Slab Details Dwg No. P98-C01-300, 301 & 302 Issue P02 dated 18 July 2016 prepared by ARUP Pty Ltd
- Roadworks & Drainage Setout Plan No. P93-C01-200, 201, 202 & 203 Issue P01 dated 27 May 2016 prepared by ARUP Pty Ltd
- Road Longitudinal Sections Dwg No. P93-C01-204 & 205 Issue P01 dated 27 May 2016 prepared by ARUP Pty Ltd
- Drainage Culvert Longitudinal Section P93-C01-300 Issue P01 dated 27 May 2016 prepared by ARUP Pty Ltd

Yours faithfully
HUGH B GAGE PTY LIMITED

WILLIAM LAU AAIQS (No. 2283)
DIRECTOR

Encl: 1. Full Cost Estimate

PRELIMINARY COST ESTIMATE

Job Name : 5335R1 CULVERT	Job Description
Client's Name: Signature Projects Aus Pty Ltd	Conversion of drainage zone to low density residential - Stormwater culvert works (REV1)

Trd No.	Trade Description	Trade %	Cost/m2	Sub Total	Mark Up %	Trade Total
1	STORMWATER CULVERT - SUBJECT SITE & SOUTH BOUNDARY (98 HAMBLEDON ROAD) ----- SIGNATURE PROJECTS	27.81		1,231,506		1,231,506
2	PRELIMINARIES (13%)	3.62		160,096		160,096
3	BUILDER'S PROFIT (7%)	2.20		97,412		97,413
4	TOTAL CONSTRUCTION COST (98 HAMBLEDON ROAD)					<u>1,489,015</u>
5	STORMWATER CULVERT (93 HAMBLEDON ROAD) ----- UNIVERSAL PROPERTY GROUP	54.89		2,430,423		2,430,423
6	PRELIMINARIES (13%)	7.14		315,955		315,955
7	BUILDERS PROFIT (7%)	4.34		192,246		192,247
8	TOTAL CONSTRUCTION COST (EXCL. GST)					<u>2,938,625</u>
9	EXCLUSIONS					
		100.00		4,427,638		4,427,640

Final Total : \$ 4,427,640

Trade Breakup

Job Name :	5335R1 CULVERT	Job Description
Client's Name:	Signature Projects Aus Pty Ltd	Conversion of drainage zone to low density residential - Stormwater culvert works (REV1)

Item No.	Item Description	Quantity	Unit	Rate	Mark	Amount
					Up %	
<i>Trade : 1 STORMWATER CULVERT - SUBJECT SITE & SOUTH BOUNDARY (98 HAMBLEDON ROAD) ----- SIGNATURE PROJECTS</i>						
CULVERT WORKS ON SUBJECT SITE						
Site Clearance						
1	Clear the affected area and strip topsoil & stockpile top soil	1,978.00	m2	5.00		9,890.00
2	Allow for removal of existing guide posts, retaining walls, turning head, headwall	1.00	Item	5,000.00		5,000.00
Excavation						
3	Excavate trench in material OTR	2,726.00	m3	10.00		27,260.00
4	Note: Assume excavate half open channel		Note			
Concrete Works						
5	300mm thick reinforced concrete base to 2.1m x 1.2m x 2 No. box culvert	540.00	m2	250.00		135,000.00
6	300mm thick reinforced concrete base to 2.4m x 1.2m x 2 No. box culvert	394.00	m2	250.00		98,500.00
7	Supply and lay 2.1m x 1.2m [2 No.] reinforced concrete box culvert	199.00	m	2,100.00		417,900.00
8	Ditto to 2.4m x 1.2m [2 No.]	131.00	m	2,300.00		301,300.00
Culvert Connection Structures						
9	Culvert junction structure	2.00	No	35,000.00		70,000.00
10	Culvert intermediate connection structure	4.00	No	15,000.00		60,000.00
Miscellaenous						
11	Backfill and compaction	1,124.00	m3	5.00		5,620.00
12	Replace topsoil	1,978.00	m2	3.00		5,934.00
13	Allow for hydromulch/spray seeding	1,978.00	m2	1.50		2,967.00
14	Allow Provisional Sum for adjustment of services	1.00	Item	10,000.00		10,000.00
15	Allow Provisional Sum for dewatering	1.00	Item	10,000.00		10,000.00
16	Subtotal					<u>1,159,371.00</u>
CULVERT WORKS CONNECTION (SOUTH)						
Excavation						
17	Excavate trench in material OTR	288.00	m3	10.00		2,880.00
Culvert Connection Structures						
18	Culvert intermediate connection structure	1.00	No	30,000.00		30,000.00
Concrete Works						
19	300mm thick reinforced concrete base to 2.4 x 0.75m box culvert	32.00	m2	250.00		8,000.00
20	Supply and lay 2.4m x 0.75m reinforced concrete box culvert as temporary connection to new box culvert [1 No.]	10.00	m	2,000.00		20,000.00
Miscellaneous						
21	Backfill and compaction	251.00	m3	5.00		1,255.00

Trade Breakup

Job Name : <u>5335R1 CULVERT</u>	Job Description
Client's Name: <u>Signature Projects Aus Pty Ltd</u>	Conversion of drainage zone to low density residential - Stormwater culvert works (REV1)

Item No.	Item Description	Quantity	Unit	Rate	Mark Up %	Amount
Trade : 1 <u>STORMWATER CULVERT - SUBJECT SITE & SOUTH BOUNDARY (98 HAMBLEDON ROAD) ----- SIGNATURE PROJECTS</u> <i>(Continued)</i>						
22	Allow for brick walls to be relocated from existing pit (EX6/901) and divert flow to new box culvert	1.00	Item	10,000.00		10,000.00
23	Connection of stormwater drainage from Barrington Street extension to new culvert					EXCL
24	Note: Stormwater drainage pits & pipes and connection to new culvert from Barrington Street extension to be included in Civil Works as part of Residential Subdivision Stage		Note			
25	Subtotal					<u>72,135.00</u>
<u>STORMWATER CULVERT - SUBJECT SITE & SOUTH BOUNDARY (98 HAMBLEDON ROAD) ----- SIGNATURE PROJECTS</u>						Total : <u>1,231,506.00</u>
Trade : 2 <u>PRELIMINARIES (13%)</u>						
<u>PRELIMINARIES (13%)</u>						Total :
Trade : 3 <u>BUILDER'S PROFIT (7%)</u>						
<u>BUILDER'S PROFIT (7%)</u>						Total :
Trade : 4 <u>TOTAL CONSTRUCTION COST (98 HAMBLEDON ROAD)</u>						
<u>TOTAL CONSTRUCTION COST (98 HAMBLEDON ROAD)</u>						Total :
Trade : 5 <u>STORMWATER CULVERT (93 HAMBLEDON ROAD) ----- UNIVERSAL PROPERTY GROUP</u>						
<u>CULVERT WORKS ON SUBJECT SITE</u>						
Site Clearance						
1	Clear the affected area and strip topsoil & stockpile top soil	5,975.00	m2	5.00		29,875.00
2	Allow for demolition of existing shed and removal of trees in the affected area	1.00	Item	5,000.00		5,000.00
3	Allow Provisional Sum to dewater, remove unsuitable material and backfill existing dam	1.00	Item	15,000.00		15,000.00
Excavation						
4	Excavate trench in material OTR	5,475.00	m3	10.00		54,750.00
Concrete Works						
5	300mm thick reinforced concrete base to 2.1m x 1.2m x 2 No. box culvert	964.00	m2	250.00		241,000.00

Trade Breakup

Job Name :	5335R1 CULVERT	Job Description
Client's Name:	Signature Projects Aus Pty Ltd	Conversion of drainage zone to low density residential - Stormwater culvert works (REV1)

Item No.	Item Description	Quantity	Unit	Rate	Mark	Amount
					Up %	
<i>Trade : 5 STORMWATER CULVERT (93 HAMBLEDON ROAD) ----- UNIVERSAL</i> <i>(Continued)</i>						
<u>PROPERTY GROUP</u>						
6	300mm thick reinforced concrete base to 2.4m x 1.2m x 2 No. box culvert	1,157.00	m2	250.00		289,250.00
7	Supply and lay 2.1m x 1.2m [2 No.] reinforced concrete box culvert	355.00	m	2,100.00		745,500.00
8	Ditto to 2.4m x 1.2m [2 No.]	384.00	m	2,300.00		883,200.00
Culvert Connection Structures						
9	Culvert intermediate connection structure	4.00	No	15,000.00		60,000.00
10	Sealed Junction Pit	1.00	No	10,000.00		10,000.00
11	Sone pitched headwall (outlet)	1.00	No	50,000.00		50,000.00
Miscellaenous						
12	Backfill and compaction	1,992.00	m3	5.00		9,960.00
13	Replace topsoil	5,975.00	m2	3.00		17,925.00
14	Allow for hydromulch/spray seeding	5,975.00	m2	1.50		8,962.50
15	Allow Provisional Sum for adjustment of services	1.00	Item	10,000.00		10,000.00
16	Subtotal					<u>2,430,422.50</u>
<u>STORMWATER CULVERT (93 HAMBLEDON ROAD) ----- UNIVERSAL</u>						Total :
<u>PROPERTY GROUP</u>						2,430,422.50
<i>Trade : 6 PRELIMINARIES (13%)</i>						
<u>PRELIMINARIES (13%)</u>						Total :
<i>Trade : 7 BUILDERS PROFIT (7%)</i>						
1	<u>BUILDERS PROFIT (7%)</u>					Total :
<i>Trade : 8 TOTAL CONSTRUCTION COST (EXCL. GST)</i>						
1	<u>TOTAL CONSTRUCTION COST (EXCL. GST)</u>					Total :
<i>Trade : 9 EXCLUSIONS</i>						
1	Cost escalation beyond March 2017		Note			
2	Design & Contract Contingency		Note			
3	All other costs related to the proposed subdivision works (including connection of future stormwater drainage pipes to new culvert)		Note			
4	Marketing costs and legal fees		Note			
5	Delay costs		Note			

Trade Breakup

Job Name :	<u>5335RI CULVERT</u>	<u>Job Description</u>
Client's Name:	<u>Signature Projects Aus Pty Ltd</u>	Conversion of drainage zone to low density residential - Stormwater culvert works (REV1)

Item No.	Item Description	Quantity	Unit	Rate	Mark Up %	Amount
<i>Trade : 9 EXCLUSIONS</i>						<i>(Continued)</i>
6	Upgrading of services		Note			
7	Archaeological dig or study		Note			
8	Rock excavation, if encountered		Note			
9	Site remediation and removal of contaminated materials, if any		Note			
10	Costs related to neighbouring works		Note			
11	Night work/work outside the normal working hours		Note			
12	Council & authorities fees, charges & contributions		Note			
13	Consultants' fees		Note			
14	Retaining walls		Note			
15	Road restoration/reconstruction to affected road areas and construction of future roads (with the exception of Hambledon Road)		Note			
16	Landscaping/other works related to existing stormwater drainage channel, if required		Note			
17	Stormwater culvert works on Hambledon Road		Note			
EXCLUSIONS					Total :	

OPTION 1: OVERLAND FLOW PATH OPTION - PAYABLE BY COUNCIL

Note: All figures are excluding GST

A COUNCIL'S S94 CONTRIBUTION ALLOWANCE	
1 Cost for culvert under future road	\$626,000 As noted in S94 contributions Plan No 20, Appendix A7 of 19, Page 36, Site No F2.4.
2 Cost for 28m wide landscaped open channel	\$1,796,000 As noted in S94 contributions Plan No 20, Appendix A7 of 19, Page 36, Site No F2.5.
3 Sub-Total	\$2,422,000
4 CPI - All Groups Sydney	102.4% Dec. Qtr 2016 = 110.9/108.3 base
5 Total S94 Contribution Allowance	\$2,480,146

B COUNCIL'S LAND ACQUISITION COST SAVINGS	
1 Lot 72 DP 28833	4,905 m ²
2	
3 Total land area	4,905 m ²
4 Land acquisition cost savings	\$2,060,100 Using current land rates of \$420/m ²
5 TOTAL SECTION 94 ALLOWANCE FOR OVERLAND FLOW PATH OPTION	\$4,540,246

OPTION 2: BOX CULVERT OPTION CALCULATIONS

Note: All figures are excluding GST

1 Construction of box culvert	\$2,938,625	Per Hugh B Gage cost estimate dated 4 May 2017
2 Consultants	\$88,159	Assume 3% of construction cost
3 Supervision	\$60,000	3% of construction cost as noted in S94 contributions Plan No 20 Page 26 (maximum \$60,000 as advised by Council)
4 Sub Total	\$3,086,784	
5 20% Contingency	\$617,357	As requested by Council
6 Total	\$3,704,141	

7 TOTAL SAVING TO COUNCIL'S SECTION 94 CONTRIBUTIONS PLAN	\$836,105	Section 94 allowance for overland flow option including land acquisition less cost of box culvert option
---	------------------	--

OPTION 1: OVERLAND FLOW PATH OPTION - PAYABLE BY COUNCIL

Note: All figures are excluding GST

A COUNCIL'S S94 CONTRIBUTION ALLOWANCE	
1 Cost for gross pollutant trap at inlet to channel	\$228,000 As noted in S94 contributions Plan No 20, Appendix A7 of 19, Page 39, Site No F2.7.
2 Cost for 28m wide landscaped open channel	\$1,925,000 As noted in S94 contributions Plan No 20, Appendix A7 of 19, Page 36, Site No F2.6.
3 Sub-Total	\$2,153,000
4 CPI - All Groups Sydney	102.4% Dec. Qtr 2016 = 110.9/108.3 base
5 Total S94 Contribution Allowance	\$2,204,688

B COUNCIL'S LAND ACQUISITION COST SAVINGS	
1 Lot 2 DP 1193235	3,088 m2
2 Lot 30 DP 1209414	1,071 m2
3 Total land area	4,159 m2
4 Land acquisition cost savings	\$1,746,780 Using current land rates of \$420/m2

5 TOTAL SECTION 94 ALLOWANCE FOR OVERLAND FLOW PATH OPTION **\$3,951,468**

OPTION 2: BOX CULVERT OPTION CALCULATIONS

Note: All figures are excluding GST

1 Construction of box culvert	\$1,489,015 Per Hugh B Gage cost estimate dated 4 May 2017
2 Consultants	\$44,670 Assume 3% of construction cost
3 Supervision	\$44,670 3% of construction cost as noted in S94 contributions Plan No 20 Page 26 (maximum \$60,000 as advised by Council)
4 Sub Total	\$1,578,356
5 20% Contingency	\$315,671 As requested by Council
6 Total	\$1,894,027

7 TOTAL SAVING TO COUNCIL'S SECTION 94 CONTRIBUTIONS PLAN **\$2,057,441** Section 94 allowance for overland flow option including land acquisition less cost of box culvert option