

OPPORTUNITY TO UPGRADE EXISTING FOOTPATHS TO BE AESTHETICALLY APPEALING PAVERS AND FOR THE KERB TYPES TO BE UPGRADED.

SIGNALISED INTERSECTION UPGRADE WITH TRAFFIC LIGHTS PHASED FOR BUS PRIORITY.

GEOMETRIC REALIGNMENT OF TRAFFIC LANES TO BETTER ALIGN WITH EXISTING MACQUARIE STREET PUBLIC TRAFFIC LANES.

SIGNALISED INTERSECTION UPGRADE WITH TRAFFIC LIGHTS PHASED FOR BUS PRIORITY

NEW PARALLEL PARKING IN OLD SOUTHBOUND TRAFFIC LANE INCREASES LOCAL PARKING BY 8 NO. CAR SPOTS.

3 NO. PRIVATE DRIVEWAYS IMPROVES STORAGE CAPACITY.

CENTRAL CHEVRON PAINTED TRAFFIC ISLAND

NEW PARALLEL PARKING IMPROVES SAFETY BY REMOVING ANGLE PARKING AND REVERSING MOVEMENT INTO THROUGH TRAFFIC.

SIGNALISED INTERSECTION UPGRADE WITH TRAFFIC LIGHTS PHASED FOR BUS PRIORITY.

IMPROVED PEDESTRIANISATION OF ELBODEN STREET WITH WIDER STREET SCAPES AND PEDESTRIAN CROSSINGS PROVIDES A 'HIGH STREET' FEEL TO SOUTH HOBART.

MAINTAIN EXISTING PATHS.

PAINTED ISLAND CENTRAL MEDIAN PROVIDES PROVISION FOR DAVEY ST. PROPERTY OWNERS TO TURN RIGHT ONTO DAVEY ST.

REMOVED EXISTING LEFT HAND TURN LANE AND PROVIDE UPGRADED LEFT TURN SLIP LANE THAT PROVIDES ADDITIONAL STORAGE CAPACITY OFF THE SOUTHERN OUTLET.

PRIORITY BUS LANE (BLUE HATCH) TYPICAL.

SIGNALISED INTERSECTION UPGRADE WITH TRAFFIC LIGHTS PHASED FOR BUS PRIORITY

ITS: CCTV CAMERA
ITS: VMS (CANTILEVER)

ITS: BUSWAY CONTROL SIGN

ITS: CCTV CAMERA

ITS: IN-PAVEMENT LIGHTING TO SHOW LANE CLOSURE

SOUTHERN OUTLET

ITS: DATA STATION

ITS: BUSWAY CONTROL SIGN (AT ENTRY POINT TO TIDAL LANE)

ITS: AID CAMERA

ITS: LUMS (AT ENTRY POINT TO TIDAL LANE)

FOR CONTINUATION REFER TO DRG No. 2008

Department of State Growth		CONTRACT No.		DRAWING		SHEET No.	
HOBART SOUTHERN OUTLET		--		IS174300 - OPTION 2.dwg		PRINTED DATE	
KINGSTON TO MACQUARIE STREET						16-Jan-17 2:14 PM	
PROJECT 1 - OPTION 2 - STAGE 1A - AT-GRADE TIDAL FLOW INTERSECTION				REGISTRATION NUMBER		2010	
SOUTHERN OUTLET, DAVEY ST AND MACQUARIE ST.				A01771		REVISION B	
SHEET 10 OF 10							
No.		Amendment Description		Initials		Date	
A3 original		This sheet may be prepared using colour and may be incomplete if copied					

SCALES

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SCALE 1:1000

JACOBS

ENGINEERING ARCHITECTURE

Tasmanian Government

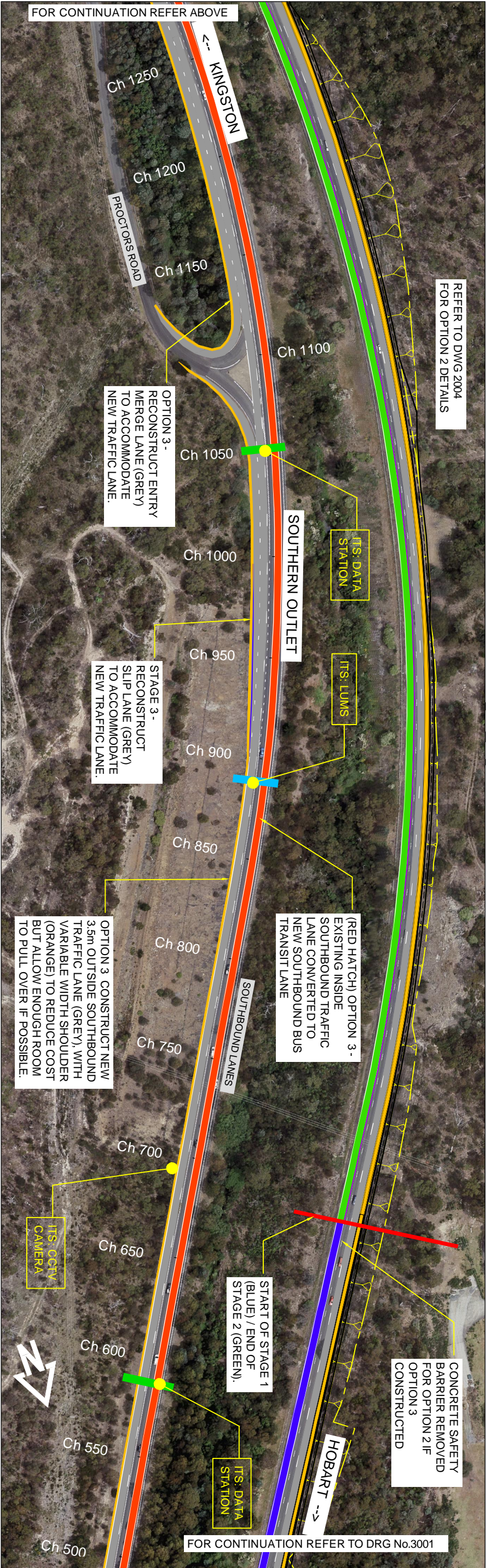
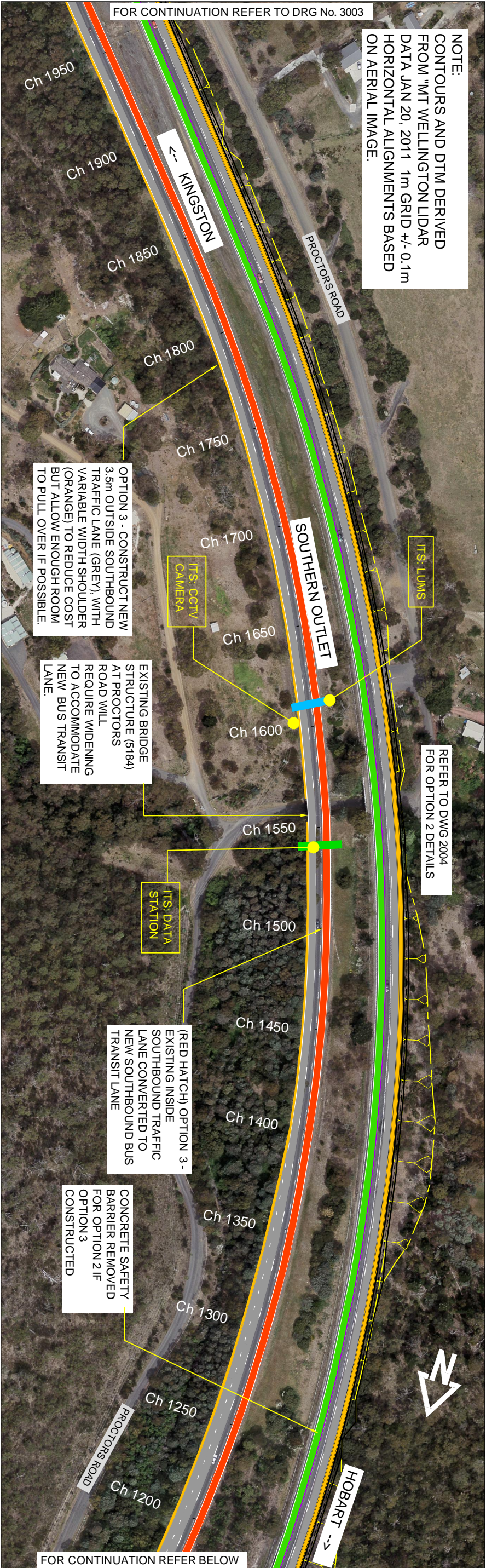
DESIGNED

REVIEWED

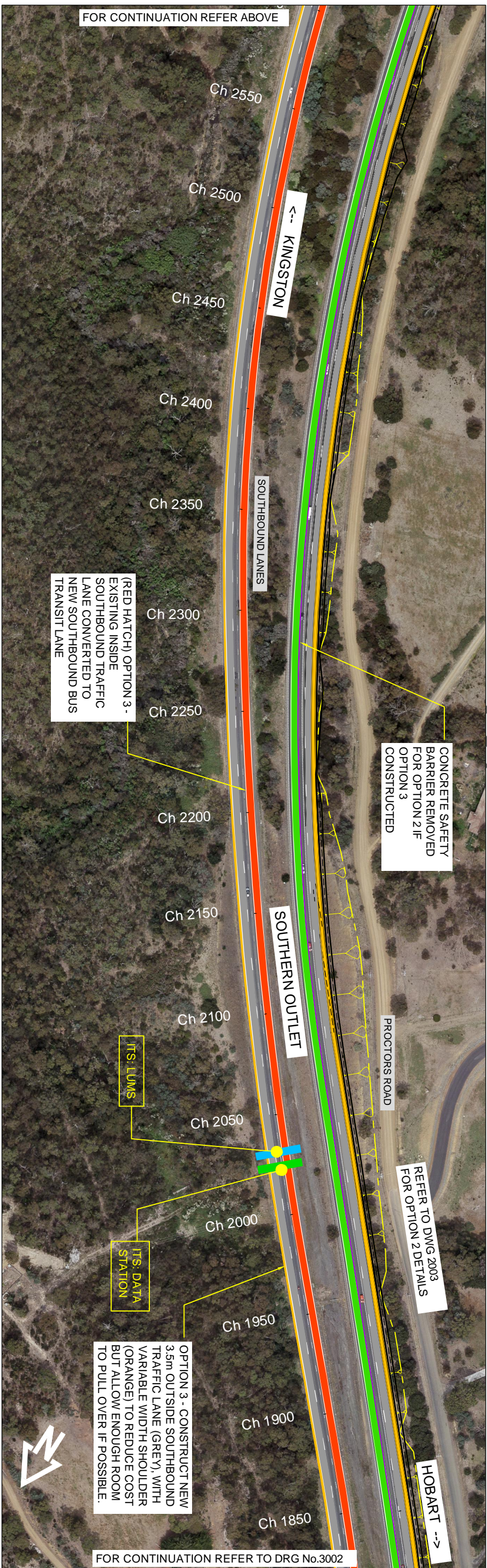
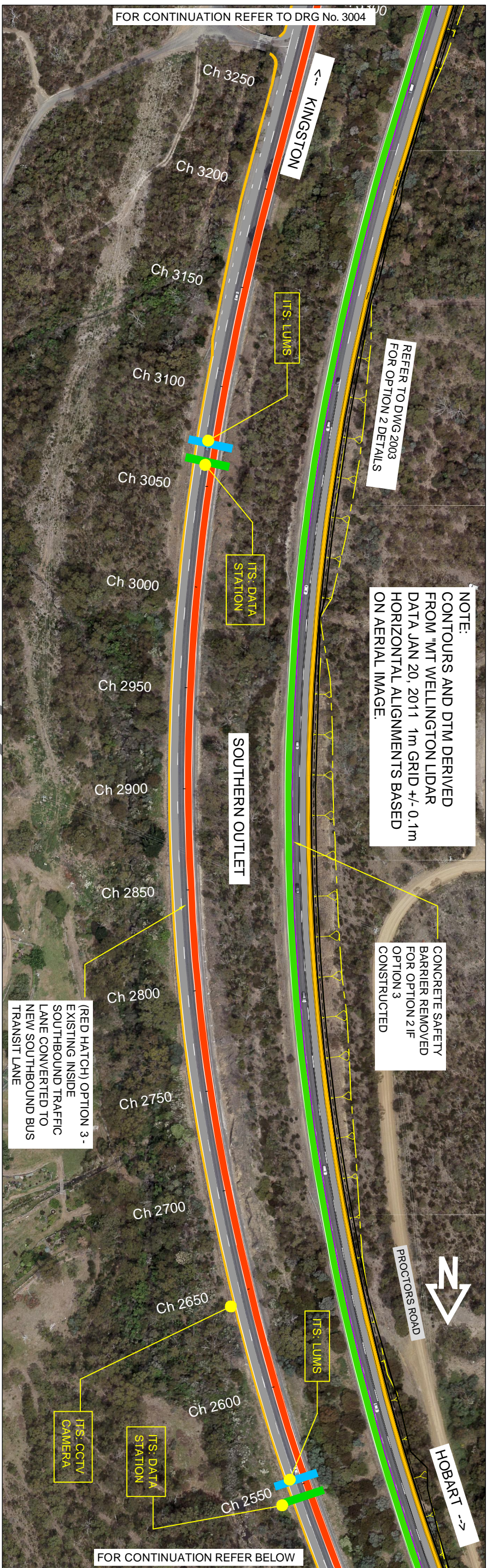
Appendix C. Concept Drawings Project 1 - Option 3

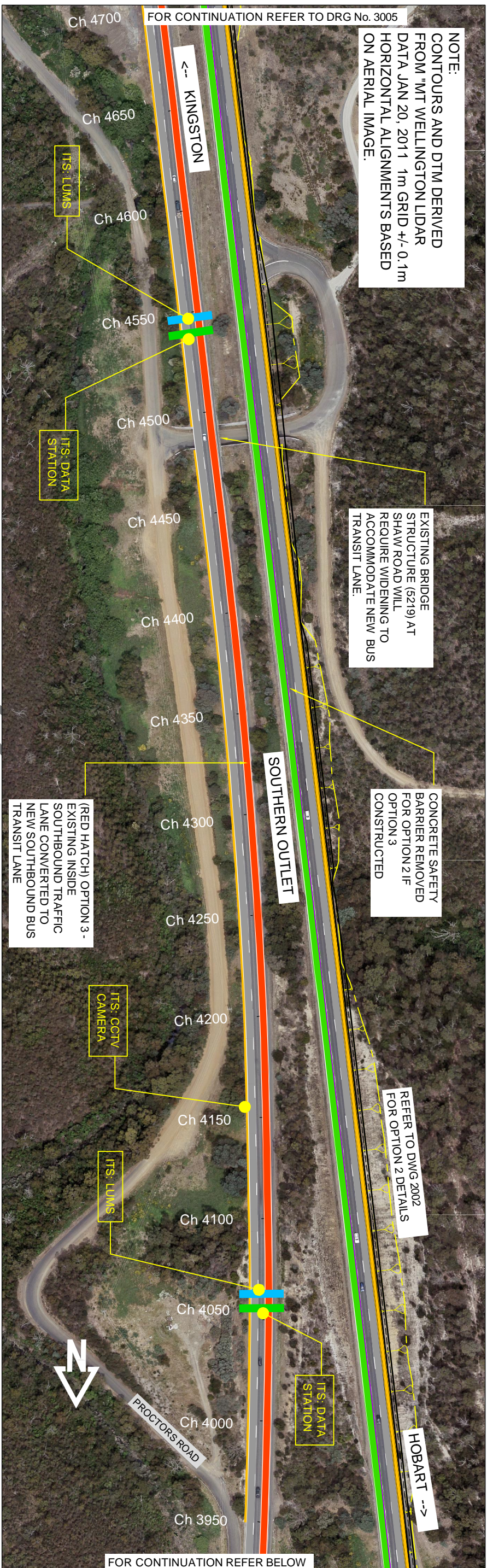
Released under RTI

NOTE:
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DATA JAN 20, 2011 1m GRID +/- 0.1m
HORIZONTAL ALIGNMENTS BASED
ON AERIAL IMAGE.



SCALES		DESIGNED		REVIEWED		Department of State Growth		CONTRACT No.		DRAWING		PRINTED DATE		SHEET No.	
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Amendment Description		Initials		Date											
A3 original		This sheet may be prepared using colour and may be incomplete if copied		Coordinate System: GDA/MGA 55		Height Datum: AHD 83									



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Appendix D. Concept Drawings Project 2 – Alternative ‘A’

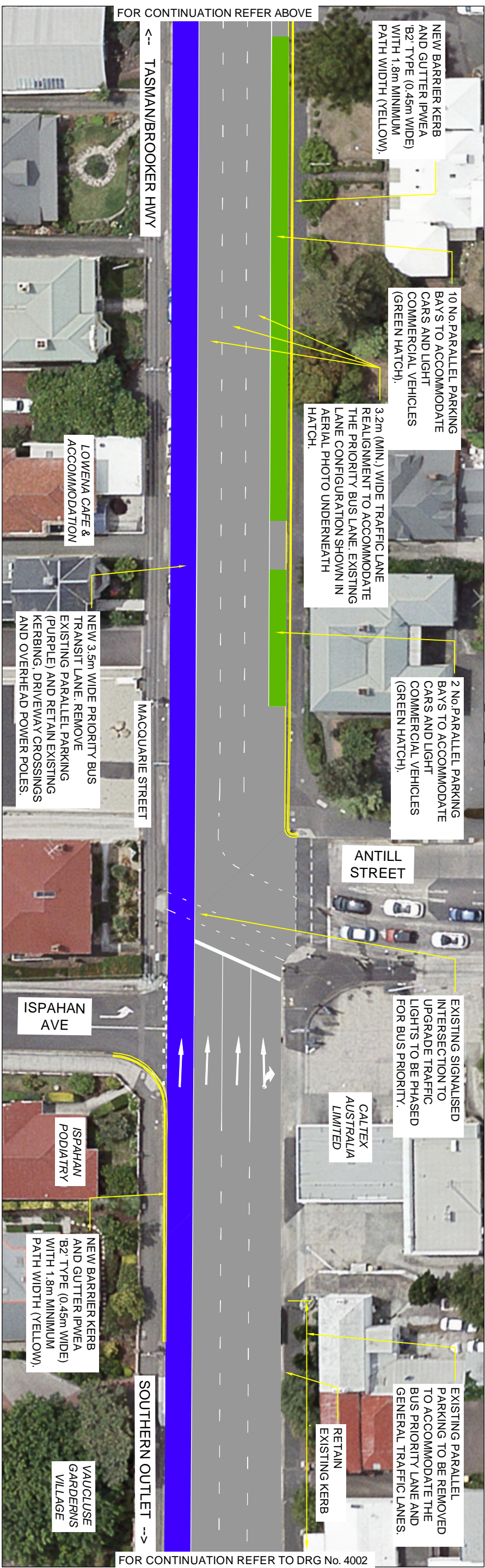
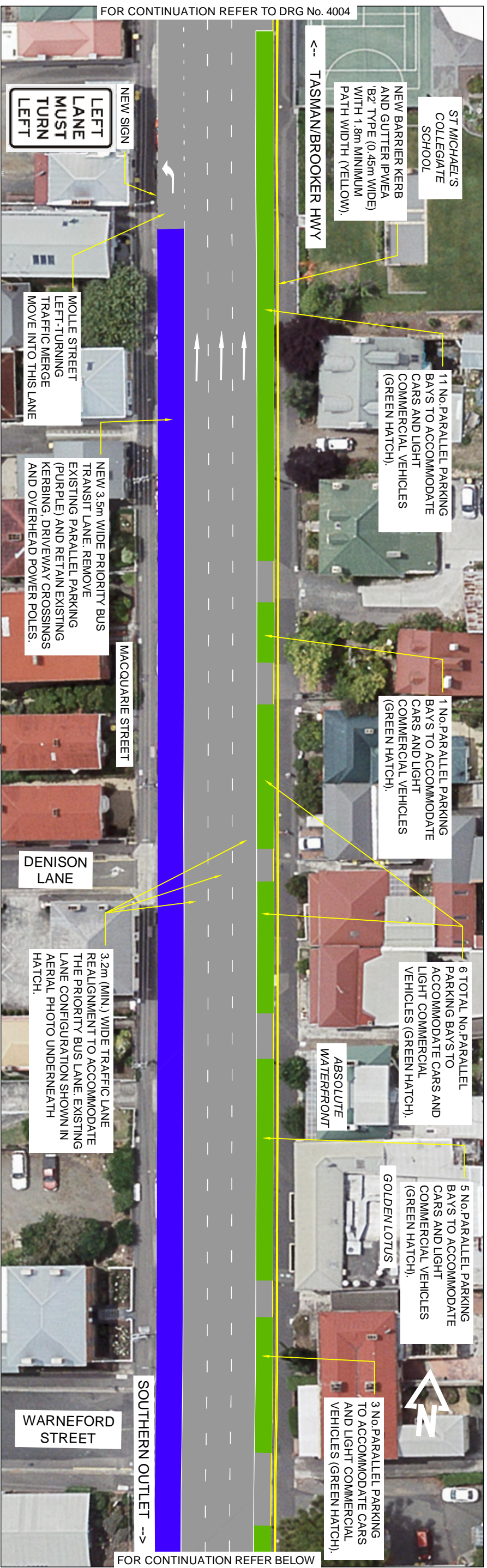
Released under RTI

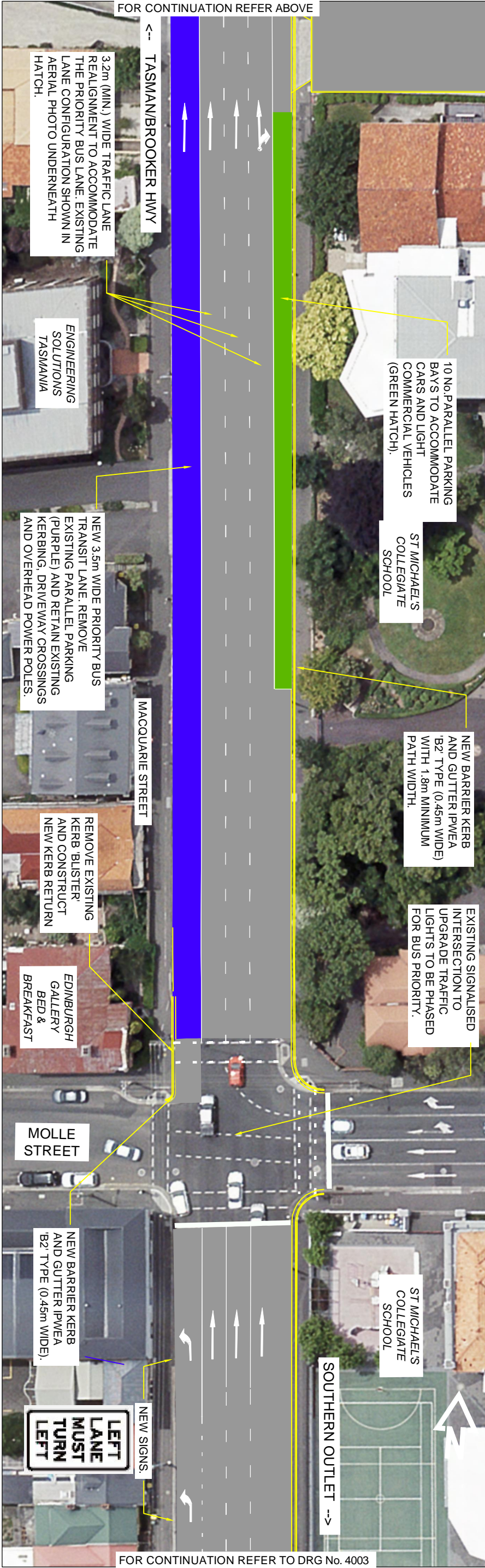


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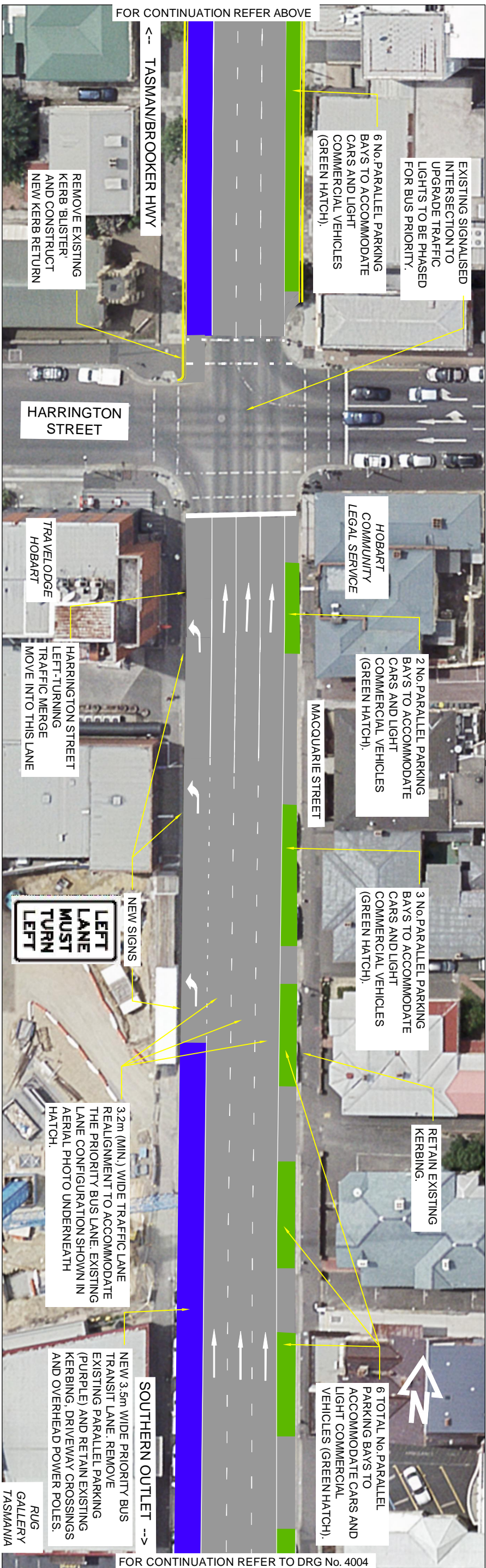
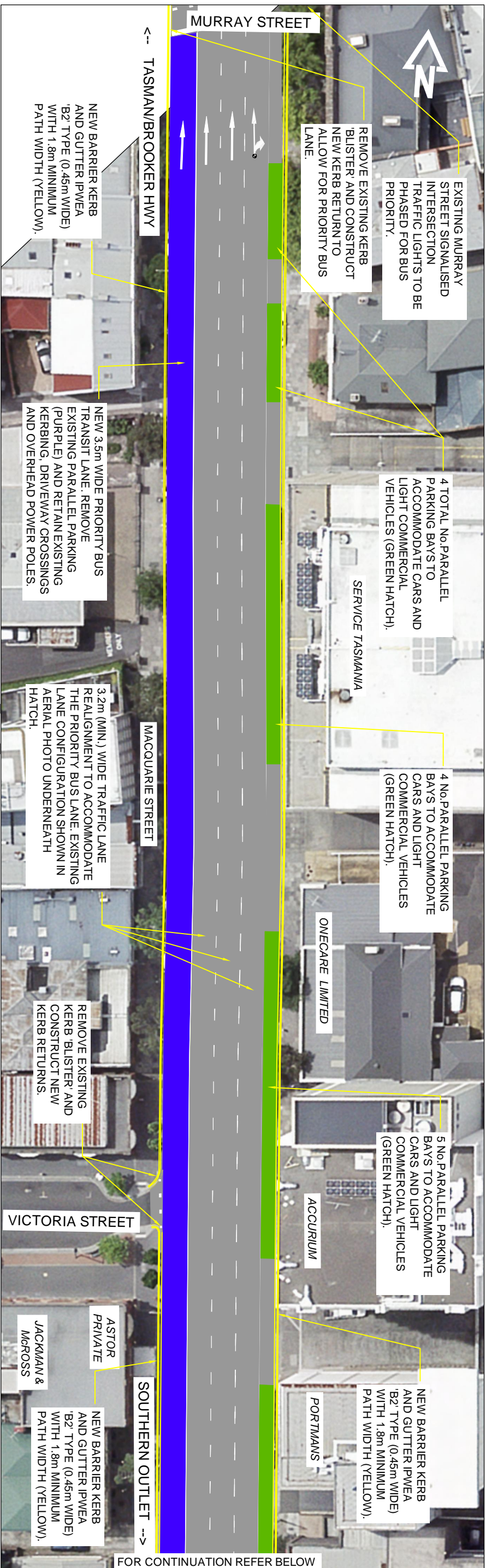
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			MACQUARIE STREET			REGISTRATION NUMBER		
			ALTERNATIVE A - MACQUARIE STREET 'LEFT-HAND SIDE'			A01771		
			PRIORITY TRANSIT BUS LANE					
			SHEET 2 OF 5					
No.	Amendment Description	Initials	Date					REVISION B
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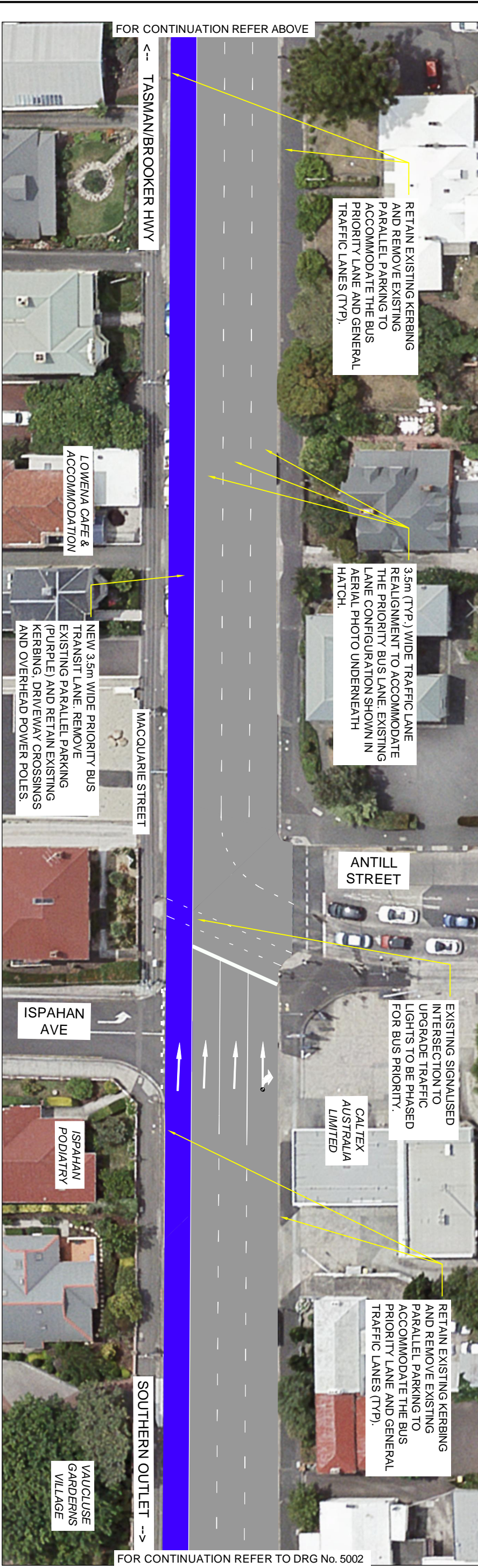
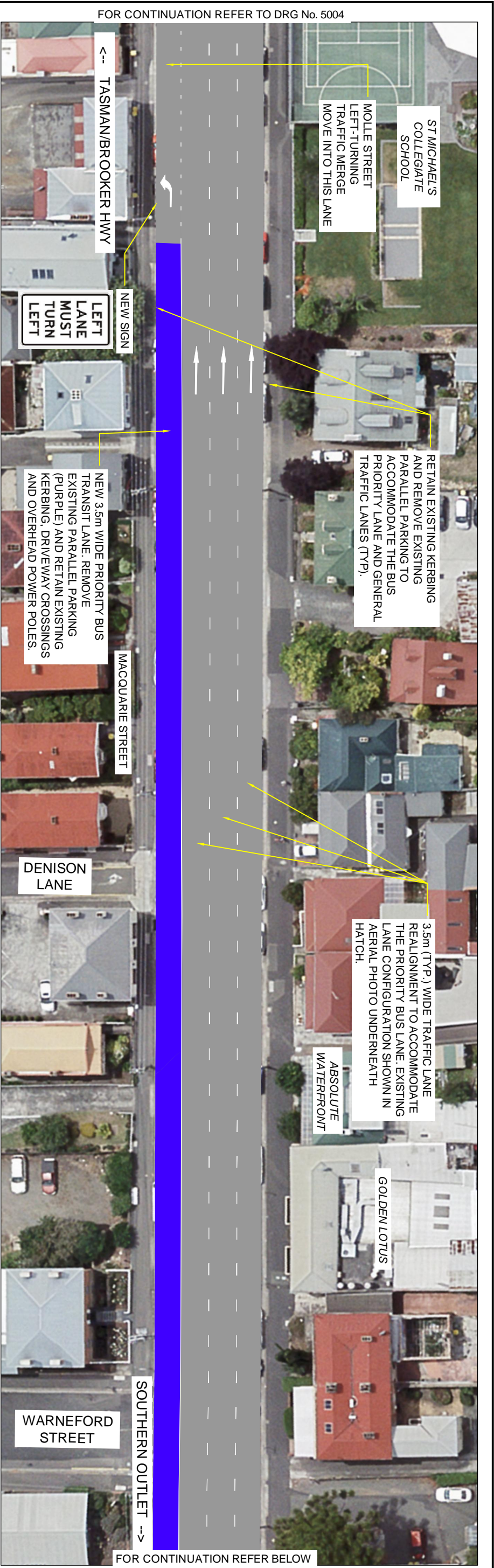


SCALES				Department of State Growth				SHEET No.	
				HOBART SOUTHERN OUTLET				CONTRACT No.	
				MACQUARIE STREET				DRAWING	
				PRIORITY TRANSIT BUS LANE				PRINTED DATE	
				SHEET 4 OF 5				4004	
				SHEET 4 OF 5				REVISION B	
No.	Amendment Description	Initials	Date	DESIGNED				REGISTERED	
				REVIEWED				A01771	
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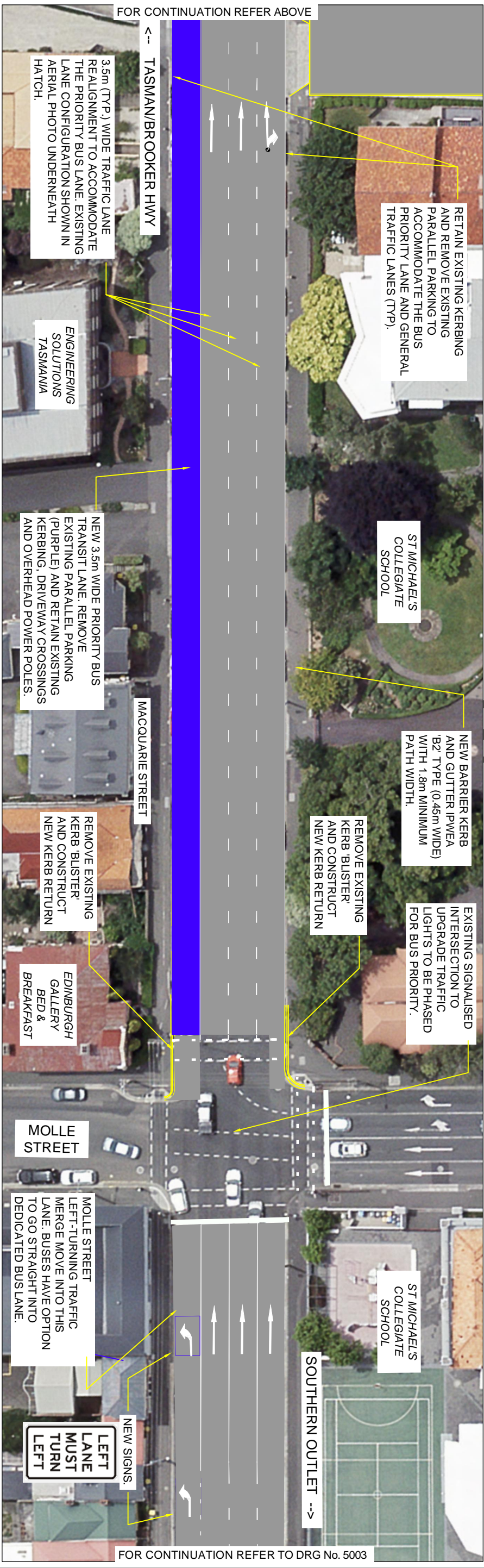
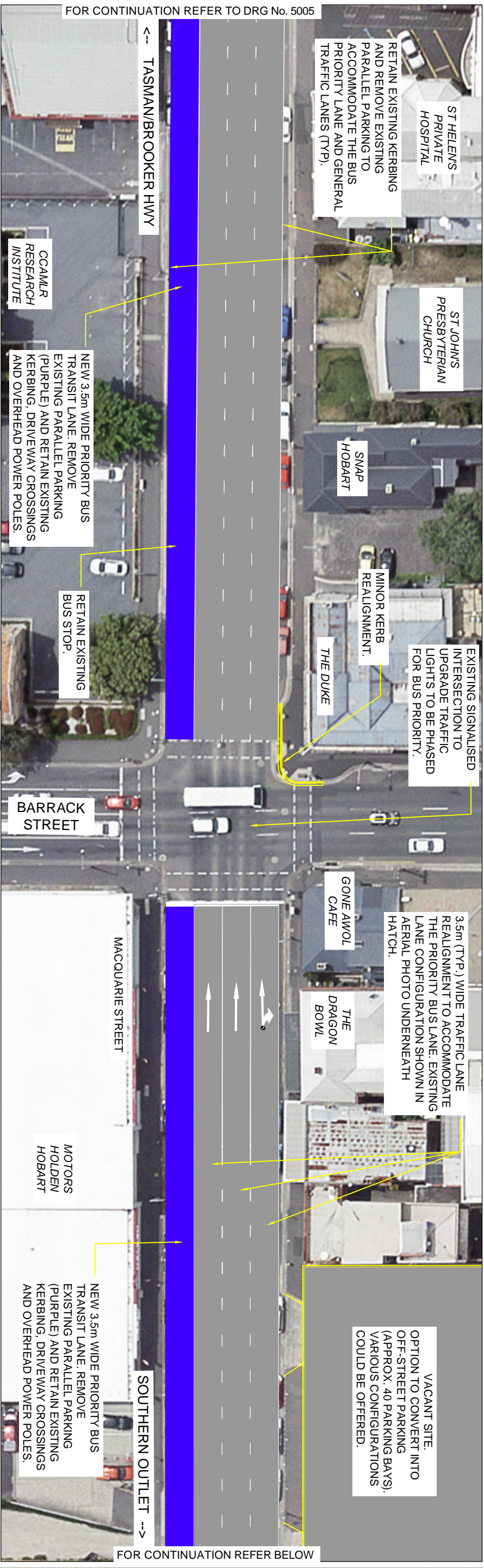
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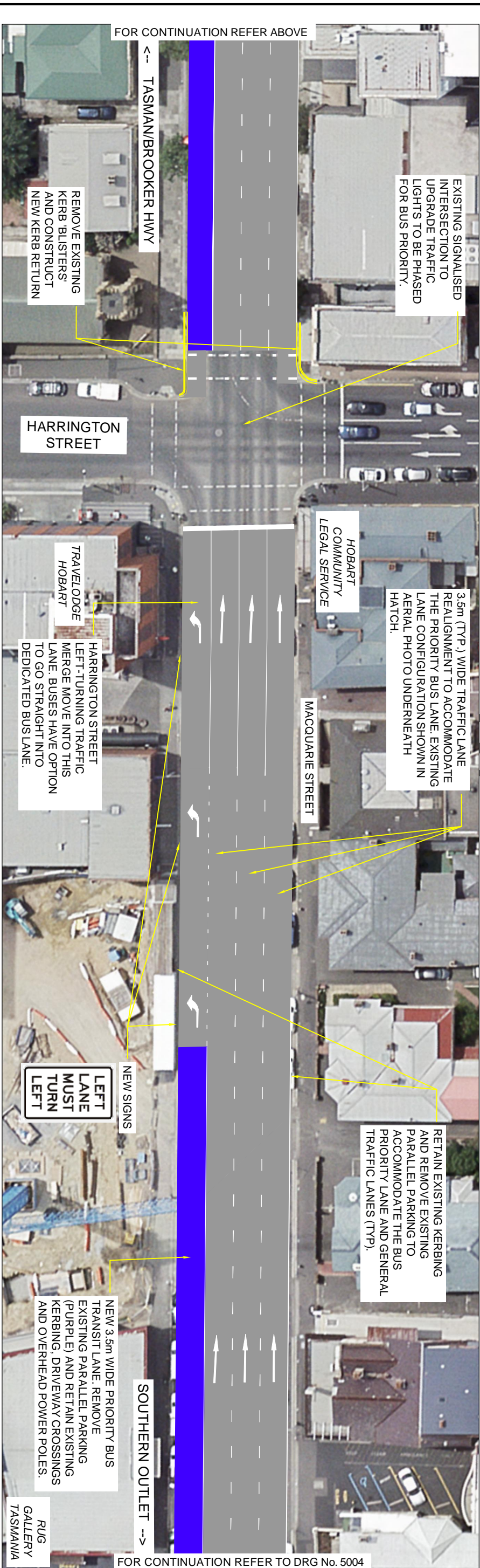
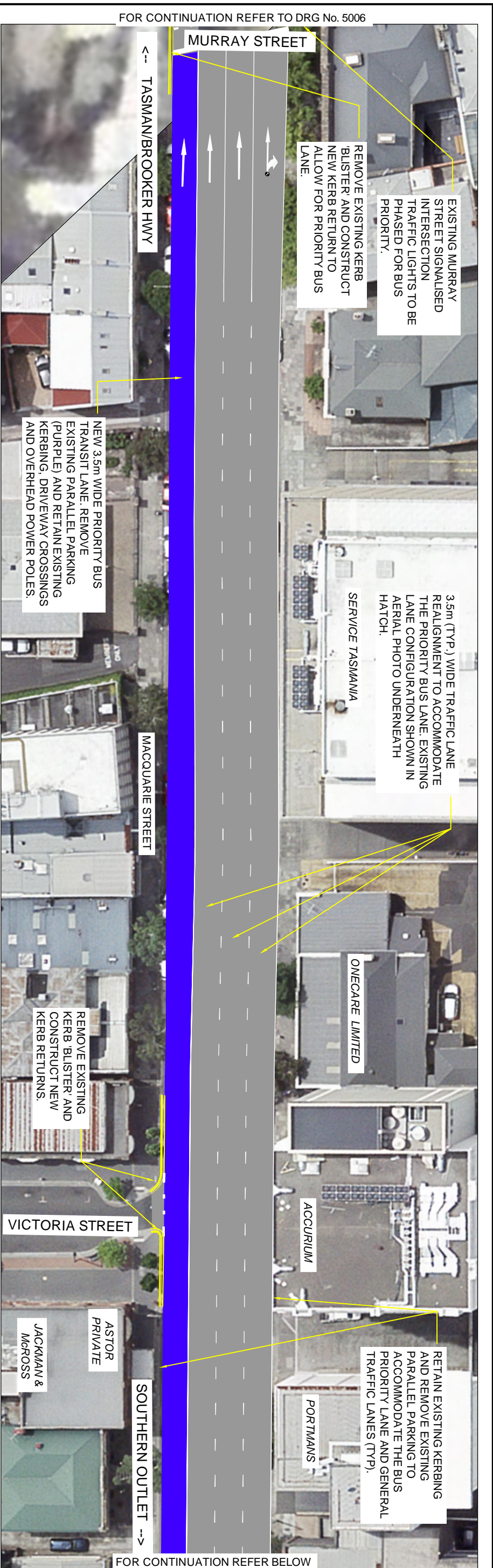
Appendix E. Concept Drawings Project 2 – Alternative ‘B’



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S.36		S.36	
Department of State Growth		HOBART SOUTHERN OUTLET MACQUARIE STREET PRIORITY TRANSIT BUS LANE SHEET 3 OF 6	
CONTRACT No.		DRAWING	
-- 18174300 - MACQUARIE_ALTERNATIVE B		PRINTED DATE	
REGISTRATION NUMBER		A0171	
SHEET No.		5003	
REVISION B		REVISION B	

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		SCALES				SHEET No.	
No.	Amendment Description		Initials	Date			
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 <small>JACOBS Engineering & Construction 100 St Georges Road Melbourne VIC 3000 Australia Tel: +61 (0)3 9592 9000 Fax: +61 (0)3 9592 9001 Email: info@jacobs.com.au</small>				 <small>Tasmanian Government</small>			
DESIGNED S.36				Department of State Growth HOBBART SOUTHERN OUTLET MACQUARIE STREET ALTERNATIVE B - MACQUARIE STREET EXISTING KERBS RETAINED PRIORITY TRANSIT BUS LANE SHEET 5 OF 6			
REVIEWED S.36							
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				A0171			



FOR CONTINUATION REFER TO DRAWING No. ???? (ALTERNATIVE A) / 4004 ALTERNATIVE B)

SCALES			
No.	Amendment Description	Initials	Date
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DESIGNED . . . S.36		Tasmanian Government	
REVIEWED . . . S.36		JACOBS	
Department of State Growth		HOBART SOUTHERN OUTLET MACQUARIE STREET	
ALTERNATIVE B - MACQUARIE STREET 'EXISTING KERBS RETAINED' PRIORITY TRANSIT BUS LANE		SHEET 6 OF 6	
CONTRACT No.	DRAWING	PRINTED DATE	SHEET No.
-- 1S174300 - MACQUARIE_ALTERNATIVE B	REGISTRATION NUMBER	17, 11.25 PM	5006
			REVISION B

Appendix F. Cost Estimates (P50/P90) and Risk Assessment

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Department of State Growth - Southern Outlet Bus Lanes

Project Name:

Southern Outlet Bus Lanes - Project 1 - Option
1 - Stage 1 - Alternate 'A' At Grade Option

Project Phase:

Early Planning / Concept Options

Brief reference number

2220-1-39

Project completion:

State Growth Project Number

054758/1

2020 (assumed)

Consultant Project number

IS174300

Date

7/11/2016

Description of Scope

Early planning phase concept design and high level cost estimate of proposed north bound bus lanes for the Southern Outlet from south of Olinda Grove to Hobart CBD - Northbound bus lane on the left hand side with At Grade Macquarie/Davey Street Intersection

Rates:

Rates are based on State Growth supplied rates for previous projects and past experience. The rates are subject to change depending on market conditions, and market rates may differ considerably to those adopted in the Cost Estimate.

Quantities:

Quantities have been taken from the high level Concept Designs.

Escalation:

A 3.5% escalation rate has been applied to activities outside of the 2016/2017 construction season.

Summary of results:

Base Estimate (Owners Cost + Construction Cost)
Inherent risk allowance
Contingent risk allowance
Base Estimate + Contingency (Inherent + Contingent)
Total contingency % above base estimate
Escalation (Nominal - applied to base case + contingency)
Total Out turn

\$	19,970,000.00
P50	P90
\$ 1,950,802	\$ 3,887,055
\$ 2,255,100	\$ 4,290,211
\$ 24,175,902	\$ 28,147,266
21%	41%
\$ 2,452,332	\$ 2,810,516
\$ 26,600,000	\$ 31,000,000

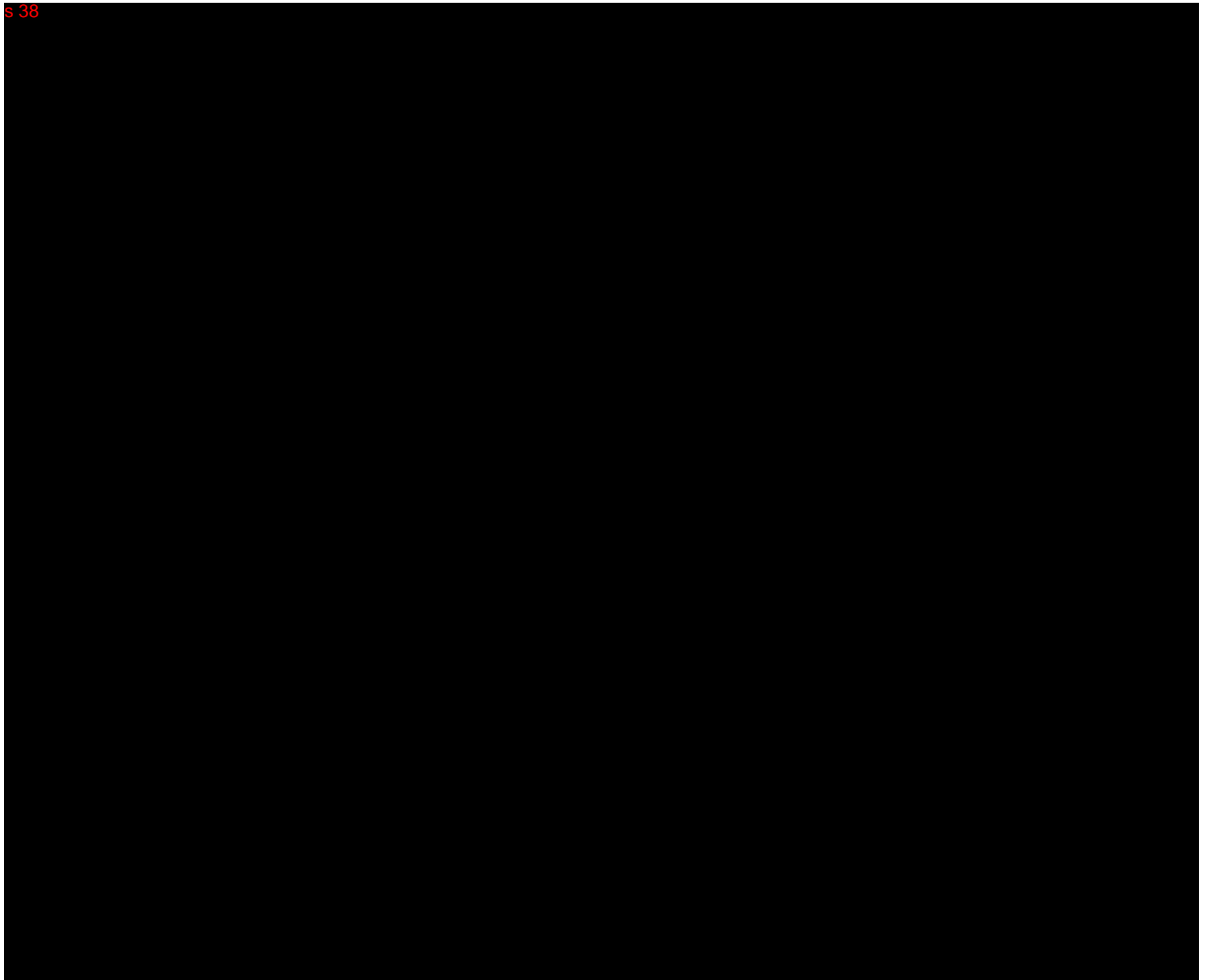
Total Out turn Cost

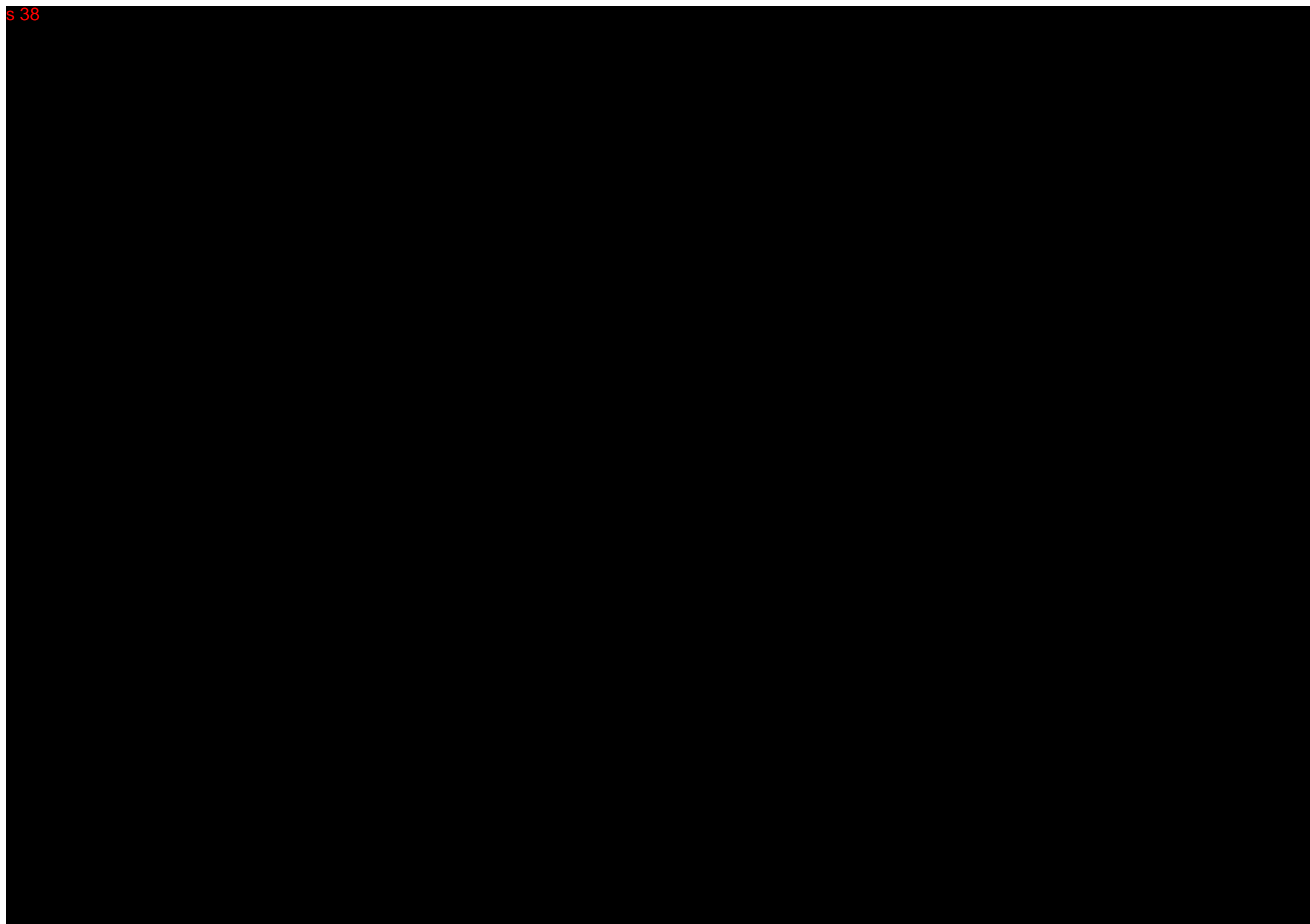
P50	P90
\$ 26,600,000	\$ 31,000,000

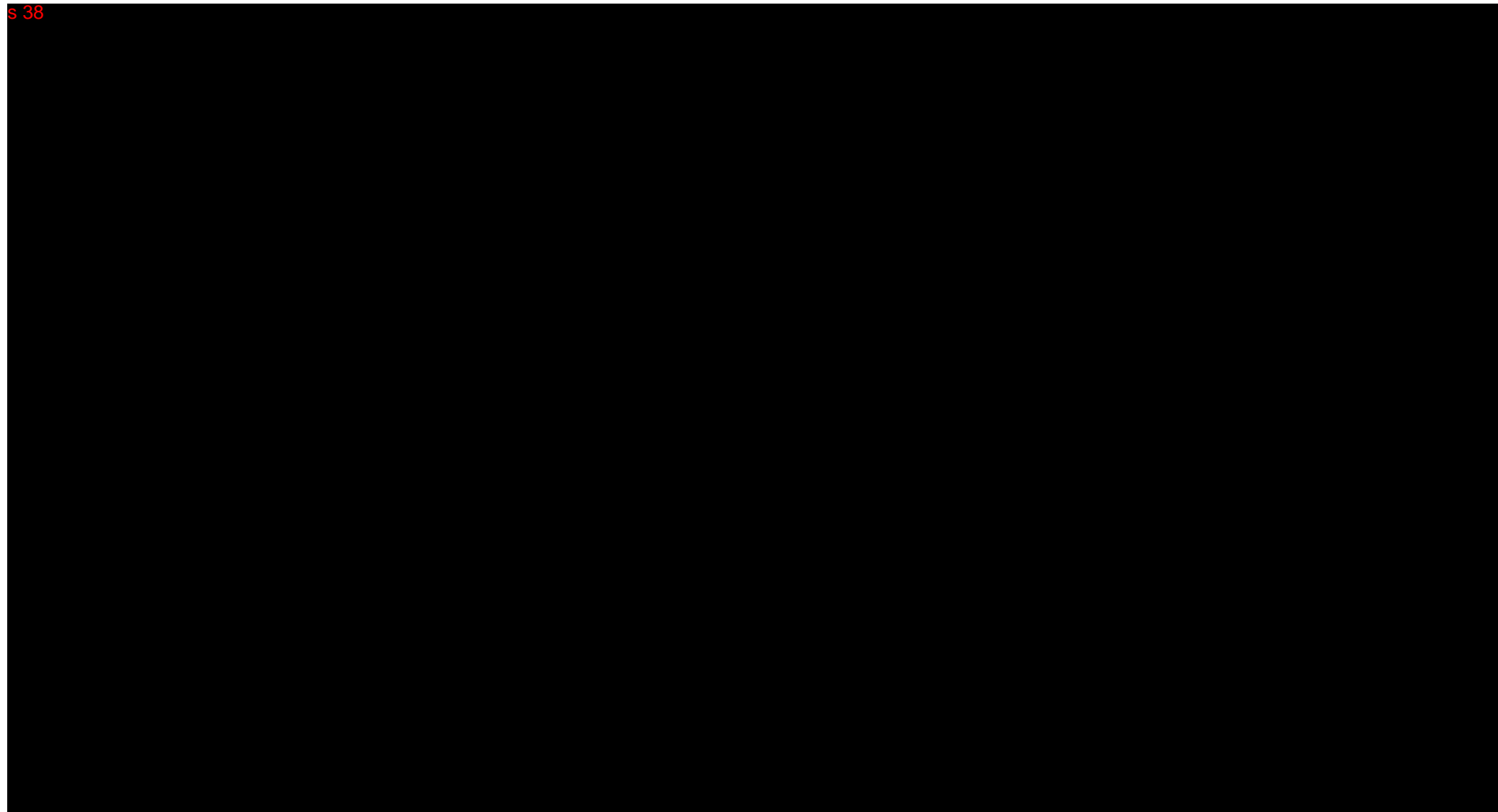
Overall Cash Flow

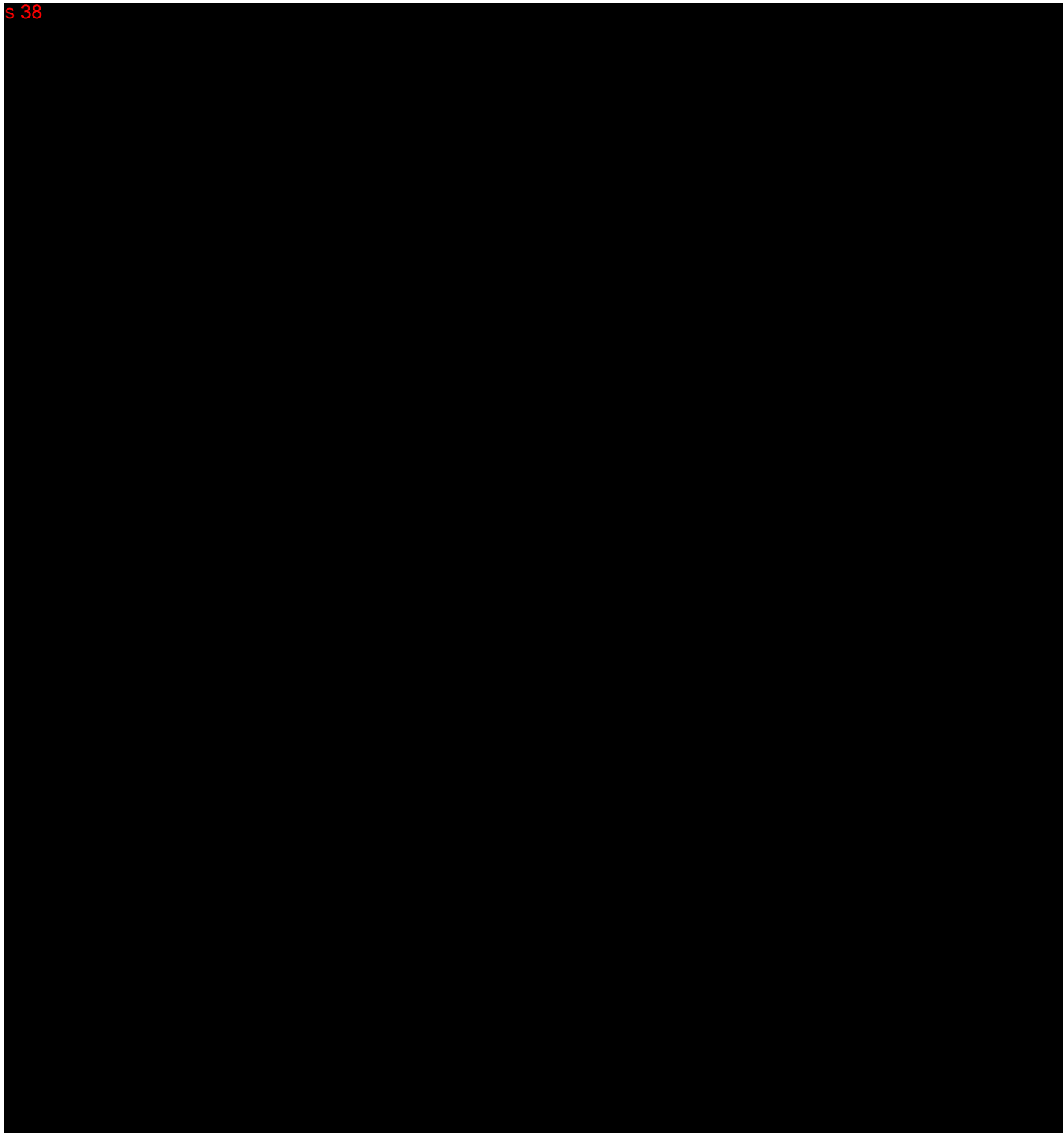
	Financial Year			
P50 Cash Flow	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 400,000	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 1,850,000	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 17,720,000
Inherent Risk	\$ -	\$ 195,080	\$ 780,321	\$ 975,401
Contingent Risk	\$ -	\$ 225,510	\$ 451,020	\$ 1,578,570
Escalation costs (nominal)	\$ -	\$ 28,721	\$ 219,468	\$ 2,204,143
Sub-Total (annual)	\$ -	\$ 850,000	\$ 3,300,000	\$ 22,480,000
Accumulative Total	\$ -	\$ 850,000	\$ 4,150,000	\$ 26,630,000

	Financial Year			
P90 Cash Flow	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 400,000.00	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 1,850,000.00	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 17,720,000.00
Inherent Risk	\$ -	\$ 388,705.48	\$ 1,554,821.91	\$ 1,943,527.38
Contingent Risk	\$ -	\$ 429,021.12	\$ 858,042.23	\$ 3,003,147.81
Escalation costs (nominal)	\$ -	\$ 42,620.43	\$ 303,622.50	\$ 2,464,272.76
Sub-Total (annual)	\$ -	\$ 1,260,000	\$ 4,570,000	\$ 25,130,000
Accumulative Total	\$ -	\$ 1,260,000	\$ 5,830,000	\$ 30,960,000









Contract Value Estimations for:

Project Name	Southern Outlet Bus Lanes - Project 1 - Option 1 - Stage 1 - Alternate 'A' At Grade Option	
Brief reference number	2220-1-39	Project completion:
State Growth Project Number	054758/1	2020 (assumed)
Consultant Project number	IS174300	
Date	7/11/16	
Assumptions		
CPI	2.0%	
Real escalation	1.5%	
Nominal escalation	3.5%	

Southern Outlet Bus Lanes - Project 1 - Option 1 - Stage 1 - Alternate 'A' At Grade O

Project Cash Flow

Totals

P50 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping		\$ 400,000			
Project Development			\$ 1,850,000		
Project Delivery (incl. CA)				\$ 17,720,000	
Inherent Risk		\$ 195,080	\$ 780,321	\$ 975,400.89	
Contingent Risk		\$ 225,510	\$ 451,020	\$ 1,578,570.18	
Escalation costs (nominal)		\$ 28,721	\$ 219,468	\$ 2,204,143	
Sub-Total (annual)	\$ -	\$ 850,000	\$ 3,300,000	\$ 22,480,000	\$ -
Accumulative Total	\$ -	\$ 850,000	\$ 4,150,000	\$ 26,630,000	\$ -

P90 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping	\$ -	\$ 400,000	\$ -	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 1,850,000	\$ -	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 17,720,000	\$ -
Inherent Risk	\$ -	\$ 388,705	\$ 1,554,822	\$ 1,943,527.38	
Contingent Risk	\$ -	\$ 429,021	\$ 858,042	\$ 3,003,147.81	
Escalation costs (nominal)	\$ -	\$ 42,620	\$ 303,622	\$ 2,464,273	
Sub-Total (annual)	\$ -	\$ 1,260,000	\$ 4,570,000	\$ 25,130,000	\$ -
Accumulative Total	\$ -	\$ 1,260,000	\$ 5,830,000	\$ 30,960,000	\$ -

Released under

Department of State Growth - Southern Outlet Bus Lanes

Project Name: Southern Outlet Bus Lanes -Project 1 - Option 1 - Stage 1 - Alternate 'B' Grade Separated

Project Phase: Early Planning / Concept Options

Brief reference number 2220-1-39 Project completion: 2020 (assumed)
 State Growth Project Number 054758/1
 Consultant Project number IS174300
 Date 7/11/2016

Description of Scope

Early planning phase concept design and high level cost estimate of proposed north bound bus lanes for the Southern Outlet from south of Olinda Grove to Hobart CBD - Northbound bus lane on the left hand side with Grade Separated Macquarie/Davey Street Interchange

Rates:

Rates are based on State Growth supplied rates for previous projects and past experience. The rates are subject to change depending on market conditions, and market rates may differ considerably to those adopted in the Cost Estimate.

Quantities:

Quantities have been taken from the high level Concept Designs.

Escalation:

A 3.5% escalation rate has been applied to activities outside of the 2016/2017 construction season.

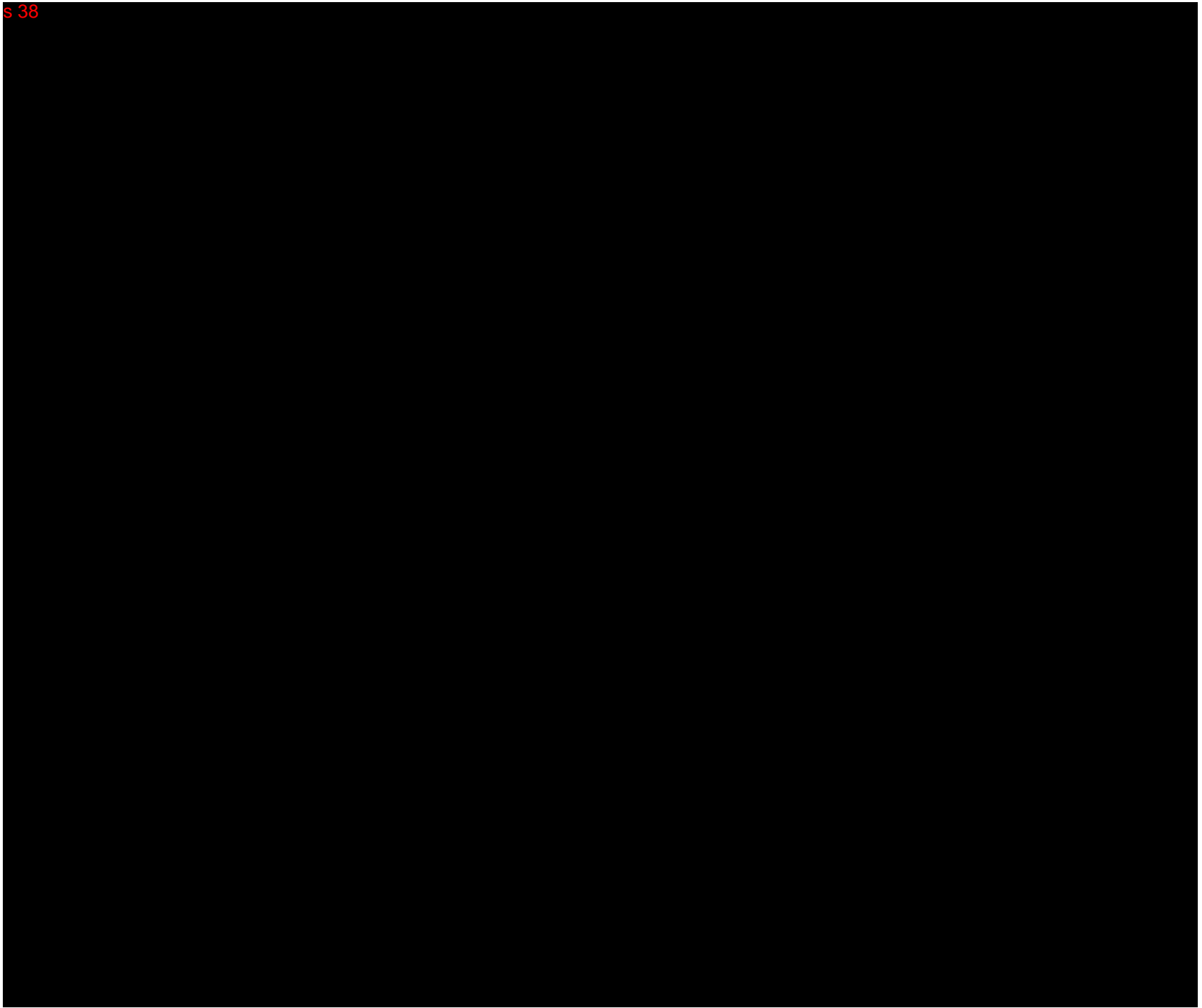
Summary of results:

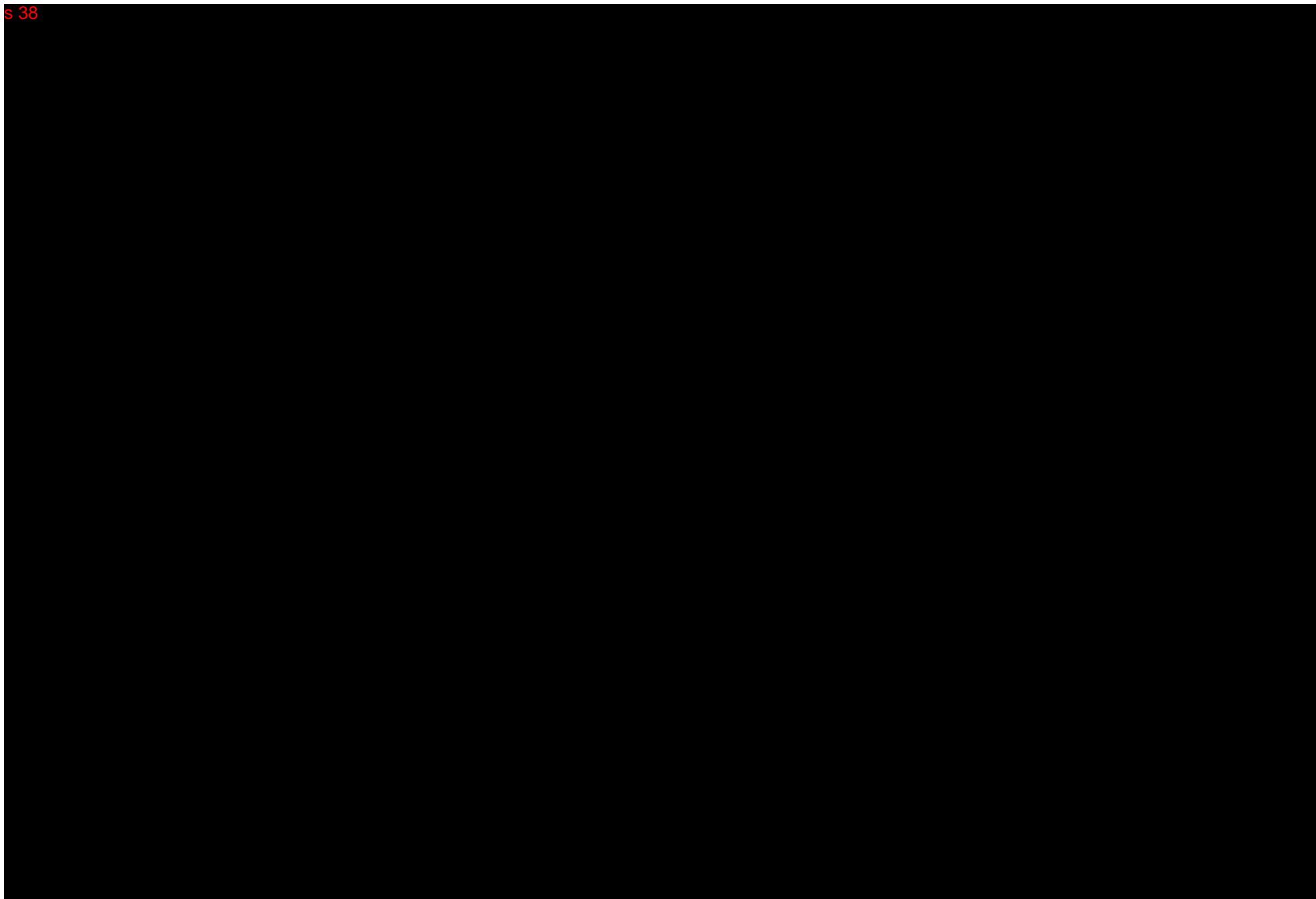
Base Estimate (Owners Cost + Construction Cost)	\$ 27,690,000.00
Inherent risk allowance	P50 P90
Contingent risk allowance	\$ 2,511,166 \$ 5,346,698
Base Estimate + Contingency (Inherent + Contingent)	\$ 2,279,708 \$ 4,286,694
Total contingency % above base estimate	\$ 32,480,874 \$ 37,323,392
Escalation (Nominal - applied to base case + contingency)	17% 35%
	\$ 3,342,330 \$ 3,775,526
Total Out turn	\$ 35,800,000 \$ 41,100,000
	P50 P90
Total Out turn Cost	\$ 35,800,000 \$ 41,100,000

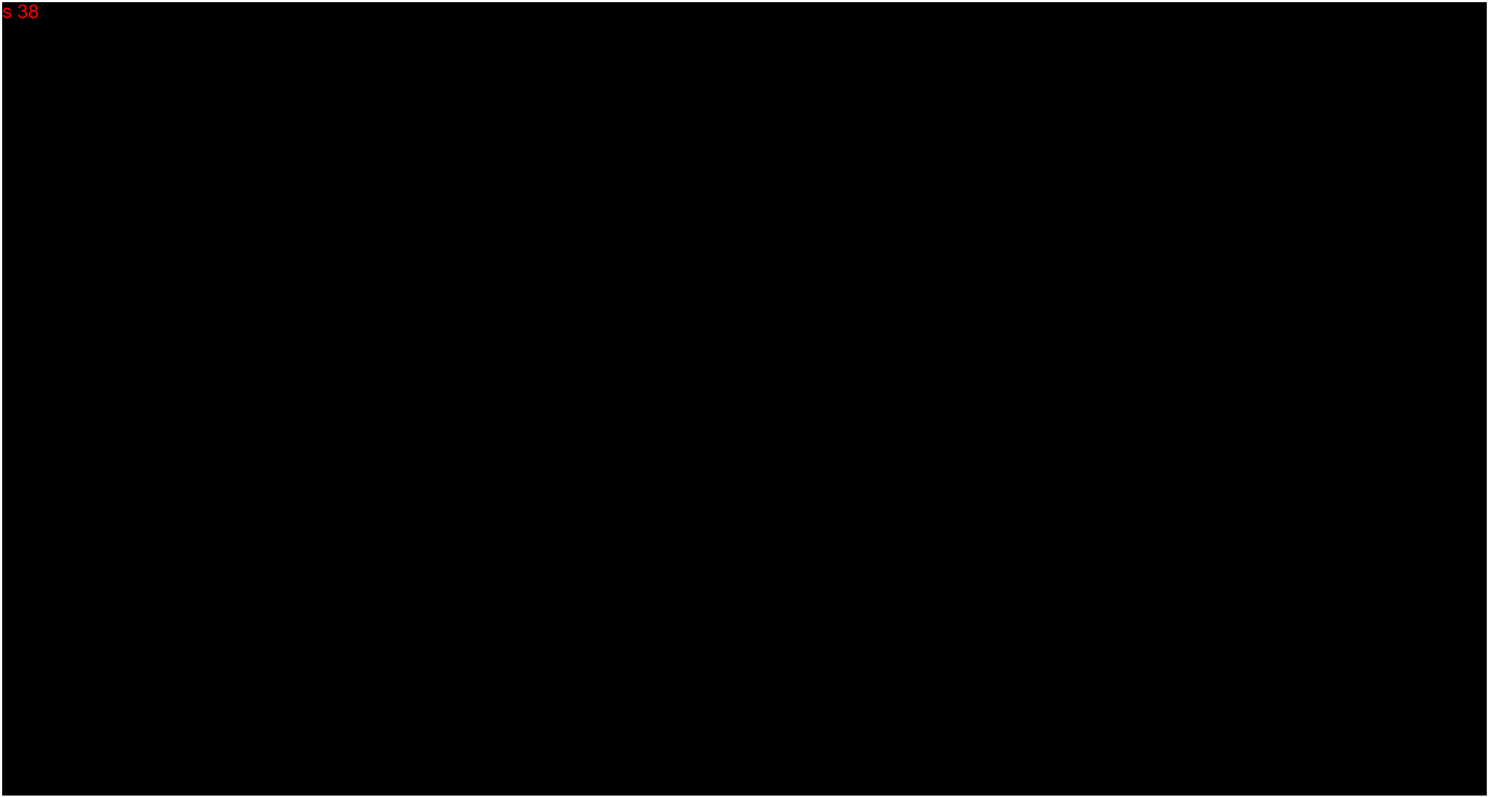
Overall Cash Flow

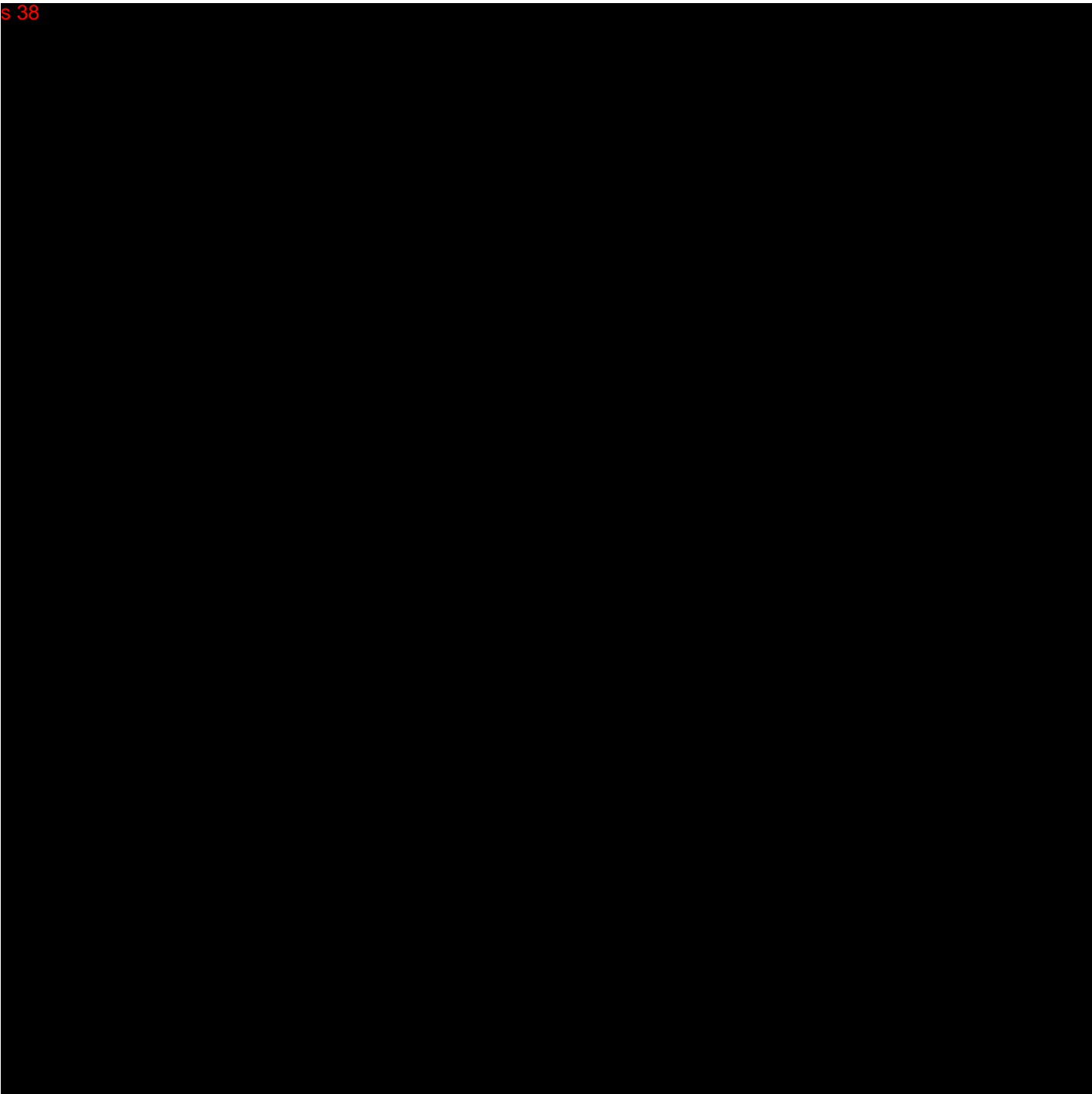
	Financial Year			
P50 Cash Flow	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 400,000	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 1,850,000	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 25,440,000
Inherent Risk	\$ -	\$ 251,117	\$ 1,004,467	\$ 1,255,583
Contingent Risk	\$ -	\$ 227,971	\$ 455,942	\$ 1,595,796
Escalation costs (nominal)	\$ -	\$ 30,768	\$ 235,784	\$ 3,075,779
Sub-Total (annual)	\$ -	\$ 910,000	\$ 3,550,000	\$ 31,370,000
Accumulative Total	\$ -	\$ 910,000	\$ 4,460,000	\$ 35,830,000

	Financial Year			
P90 Cash Flow	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 400,000.00	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 1,850,000.00	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 25,440,000.00
Inherent Risk	\$ -	\$ 534,669.77	\$ 2,138,679.07	\$ 2,673,348.84
Contingent Risk	\$ -	\$ 428,669.44	\$ 857,338.88	\$ 3,000,686.08
Escalation costs (nominal)	\$ -	\$ 47,716.87	\$ 345,157.63	\$ 3,382,651.76
Sub-Total (annual)	\$ -	\$ 1,410,000	\$ 5,190,000	\$ 34,500,000
Accumulative Total	\$ -	\$ 1,410,000	\$ 6,600,000	\$ 41,100,000









Contract Value Estimations for:

Project Name

Brief reference number

State Growth Project Number

Consultant Project number

Date

Assumptions

CPI

Real escalation

Nominal escalation

Southern Outlet Bus Lanes -Project 1 - Option 1 -
Stage 1 - Alternate 'B' Grade Separated

2220-1-39

054758/1

IS174300

7/11/16

Project completion:

2020 (assumed)

2.0%

1.5%

3.5%

Southern Outlet Bus Lanes -Project 1 - Option 1 - Stage 1 - Alternate 'B' Grade Separ

Project Cash Flow

Totals

P50 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping		\$ 400,000			
Project Development			\$ 1,850,000		
Project Delivery (incl. CA)				\$ 25,440,000	
Inherent Risk		\$ 251,117	\$ 1,004,467	\$ 1,255,583.14	
Contingent Risk		\$ 227,971	\$ 455,942	\$ 1,595,795.72	
Escalation costs (nominal)		\$ 30,768	\$ 235,784	\$ 3,075,779	
Sub-Total (annual)	\$ -	\$ 910,000	\$ 3,550,000	\$ 31,370,000	\$ -
Accumulative Total	\$ -	\$ 910,000	\$ 4,460,000	\$ 35,830,000	\$ -

P90 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping	\$ -	\$ 400,000	\$ -	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 1,850,000	\$ -	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 25,440,000	\$ -
Inherent Risk	\$ -	\$ 534,670	\$ 2,138,679	\$ 2,673,348.84	\$ -
Contingent Risk	\$ -	\$ 428,669	\$ 857,339	\$ 3,000,686.08	\$ -
Escalation costs (nominal)	\$ -	\$ 47,717	\$ 345,158	\$ 3,382,652	\$ -
Sub-Total (annual)	\$ -	\$ 1,410,000	\$ 5,190,000	\$ 34,500,000	\$ -
Accumulative Total	\$ -	\$ 1,410,000	\$ 6,600,000	\$ 41,100,000	\$ -

Released under

Department of State Growth - Southern Outlet Bus Lanes

Project Name:

Southern Outlet Bus Lanes - Project 1 -
Option 1 - Stage 2

Project Phase:

Early Planning / Concept Options

Brief reference number
State Growth Project Number
Consultant Project number
Date

2220-1-39
054758/1
IS174300
7/11/2016

Project completion:
2020 (assumed)

Description of Scope

Early planning phase concept designs and high level cost estimates of proposed north bound bus lanes for the Southern Outlet from Kingston to Olinda Grove - Northbound bus lane on the left hand side from Kingston to start of Stage 1

Rates:

Rates are based on State Growth supplied rates for previous projects and past experience. The rates are subject to change depending on market conditions, and market rates may differ considerably to those adopted in the Cost Estimate.

Quantities:

Quantities have been taken from the high level Concept Designs.

Escalation:

A 3.5% escalation rate has been applied to activities outside of the 2016/2017 construction season.

Summary of results:

Base Estimate (Owners Cost + Construction Cost)
Inherent risk allowance
Contingent risk allowance
Base Estimate + Contingency (Inherent + Contingent)
Total contingency % above base estimate
Escalation (Nominal - applied to base case + contingency)
Total Out turn

\$	13,020,000.00
P50	P90
\$ 961,217	\$ 2,446,919
\$ 1,661,819	\$ 3,562,877
\$ 15,643,036	\$ 19,029,796
20%	46%
\$ 1,613,539	\$ 1,920,238
\$ 17,300,000	\$ 21,000,000

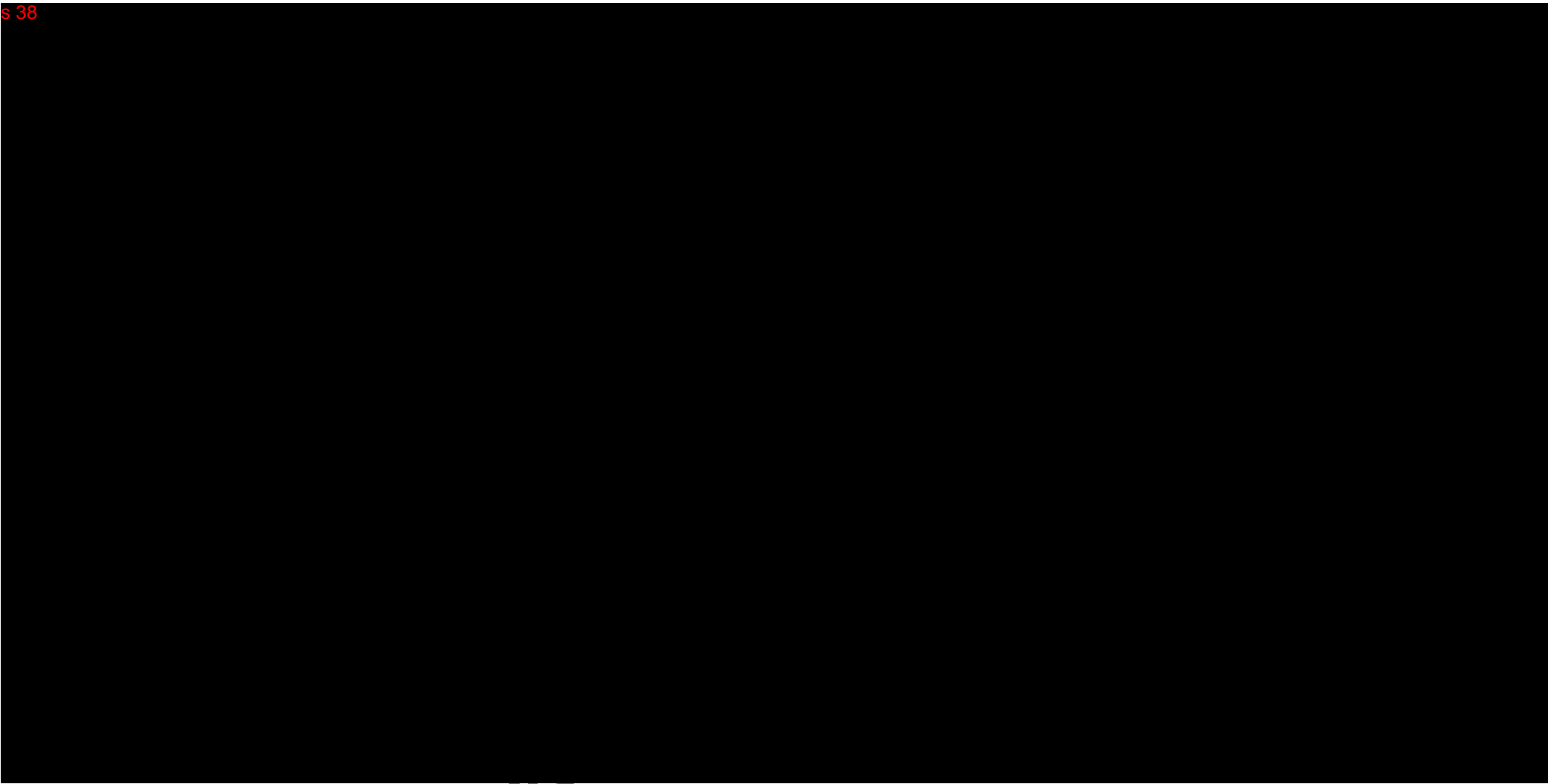
Total Out turn Cost

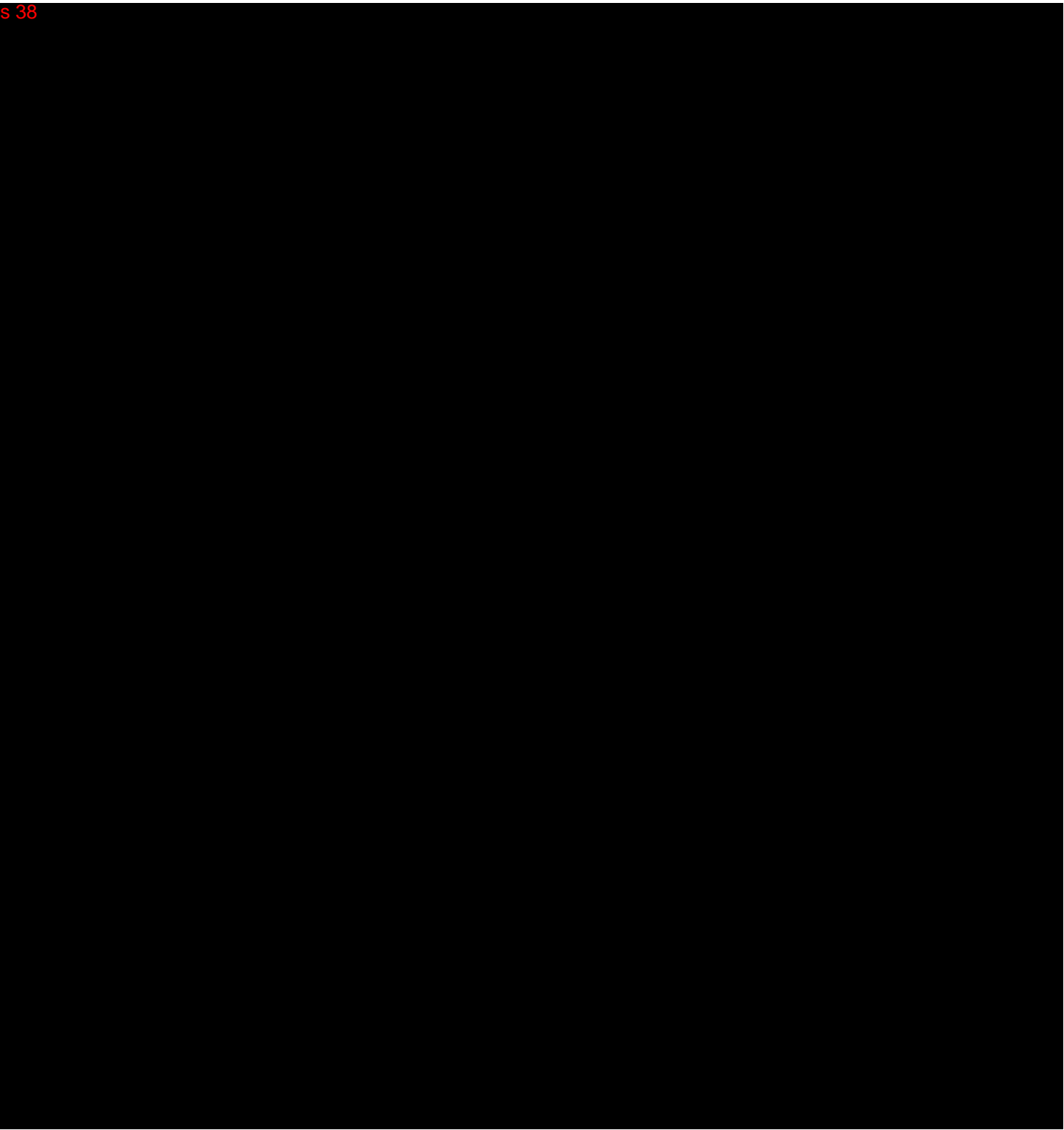
P50	P90
\$ 17,300,000	\$ 21,000,000

Overall Cash Flow

P50 Cash Flow	Financial Year			
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 250,000	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 600,000	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 12,170,000
Inherent Risk	\$ -	\$ 96,122	\$ 384,487	\$ 480,608
Contingent Risk	\$ -	\$ 166,182	\$ 332,364	\$ 1,163,273
Escalation costs (nominal)	\$ -	\$ 17,931	\$ 93,793	\$ 1,501,816
Sub-Total (annual)	\$ -	\$ 530,000	\$ 1,410,000	\$ 15,320,000
Accumulative Total	\$ -	\$ 530,000	\$ 1,940,000	\$ 17,260,000

P90 Cash Flow	Financial Year			
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 250,000.00	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 600,000.00	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 12,170,000.00
Inherent Risk	\$ -	\$ 244,691.86	\$ 978,767.45	\$ 1,223,459.32
Contingent Risk	\$ -	\$ 356,287.71	\$ 712,575.42	\$ 2,494,013.96
Escalation costs (nominal)	\$ -	\$ 29,784.29	\$ 163,200.90	\$ 1,727,252.33
Sub-Total (annual)	\$ -	\$ 880,000	\$ 2,450,000	\$ 17,610,000
Accumulative Total	\$ -	\$ 880,000	\$ 3,330,000	\$ 20,940,000





Contract Value Estimations for:

Project Name	Southern Outlet Bus Lanes - Project 1 - Option 1 - Stage 2	
Brief reference number	2220-1-39	Project completion:
State Growth Project Number	054758/1	2020 (assumed)
Consultant Project number	IS174300	
Date	7/11/16	
Assumptions		
CPI	2.0%	
Real escalation	1.5%	
Nominal escalation	3.5%	

Southern Outlet Bus Lanes - Project 1 - Option 1 - Stage 2

Project Cash Flow

Totals

P50 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping		\$ 250,000			
Project Development			\$ 600,000		
Project Delivery (incl. CA)				\$ 12,170,000	
Inherent Risk		\$ 96,122	\$ 384,487	\$ 480,608.50	
Contingent Risk		\$ 166,182	\$ 332,364	\$ 1,163,273.15	
Escalation costs (nominal)		\$ 17,931	\$ 93,793	\$ 1,501,816	
Sub-Total (annual)	\$ -	\$ 530,000	\$ 1,410,000	\$ 15,320,000	\$ -
Accumulative Total	\$ -	\$ 530,000	\$ 1,940,000	\$ 17,260,000	\$ -

P90 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping	\$ -	\$ 250,000	\$ -	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 600,000	\$ -	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 12,170,000	\$ -
Inherent Risk	\$ -	\$ 244,692	\$ 978,767	\$ 1,223,459.32	
Contingent Risk	\$ -	\$ 356,288	\$ 712,575	\$ 2,494,013.96	
Escalation costs (nominal)	\$ -	\$ 29,784	\$ 163,201	\$ 1,727,252	
Sub-Total (annual)	\$ -	\$ 880,000	\$ 2,450,000	\$ 17,610,000	\$ -
Accumulative Total	\$ -	\$ 880,000	\$ 3,330,000	\$ 20,940,000	\$ -

Released under

Department of State Growth - Southern Outlet Bus Lanes

Project Name: Southern Outlet Bus Lanes - Project 1 -
Option 2 - Stage 1 - Alternative 'A' At Grade
Option

Project Phase: Early Planning / Concept Options

Brief reference number 2220-1-39
State Growth Project Number 054758/1
Consultant Project number IS174300
Date 7/11/2016

Project completion:
2020 (assumed)

Description of Scope

Early planning phase concept design and high level cost estimate of tidal flow bus lane for the south of Olinda Grove to Hobart CBD - Tidal Flow (centralised) bus lane with At Grade Macquarie/Davey Street Intersection.

Rates:

Rates are based on State Growth supplied rates for previous projects and past experience. The rates are subject to change depending on market conditions, and market rates may differ considerably to those adopted in the Cost Estimate.

Quantities:

Quantities have been taken from the high level Concept Designs.

Escalation:

A 3.5% escalation rate has been applied to activities outside of the 2016/2017 construction

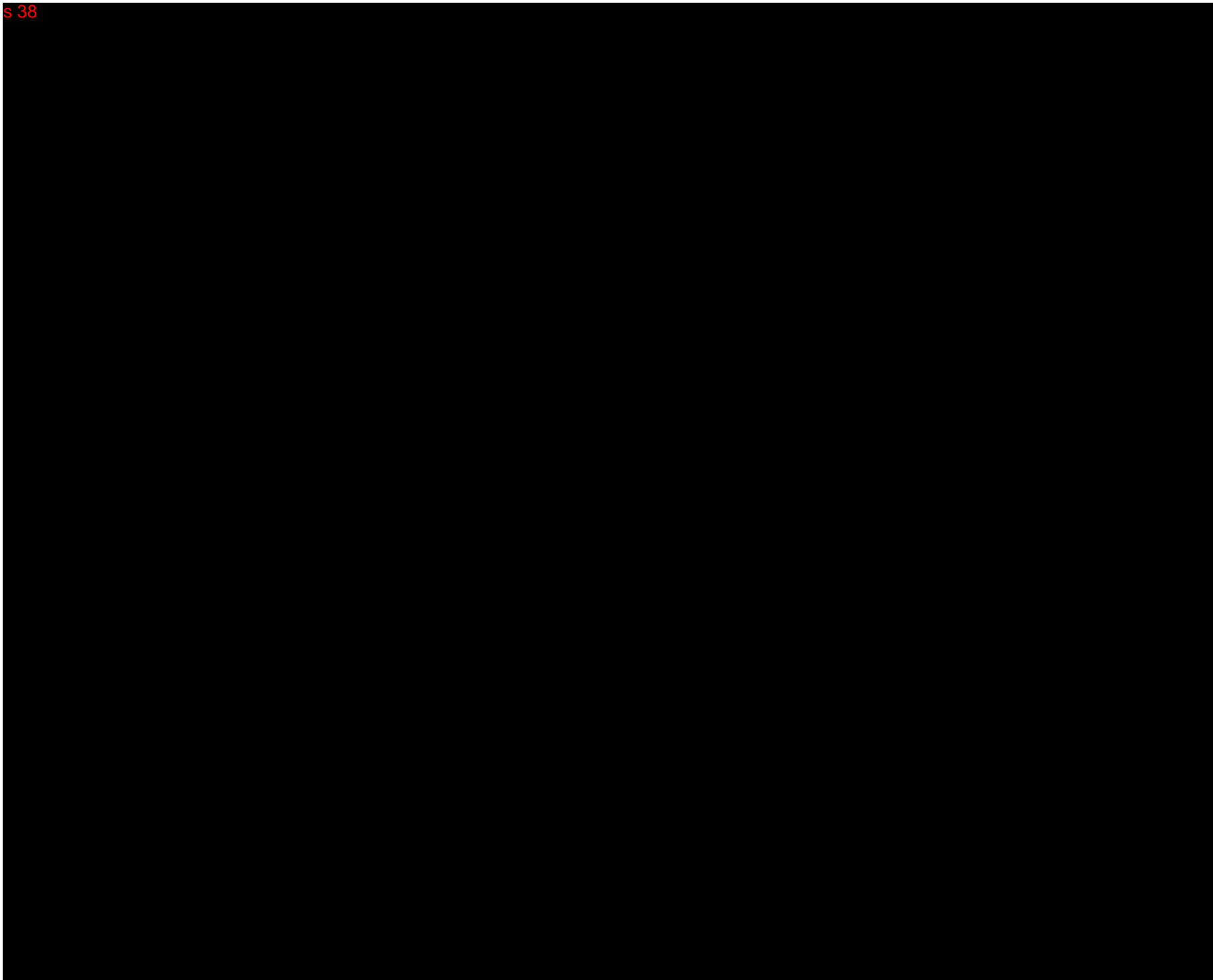
Summary of results:

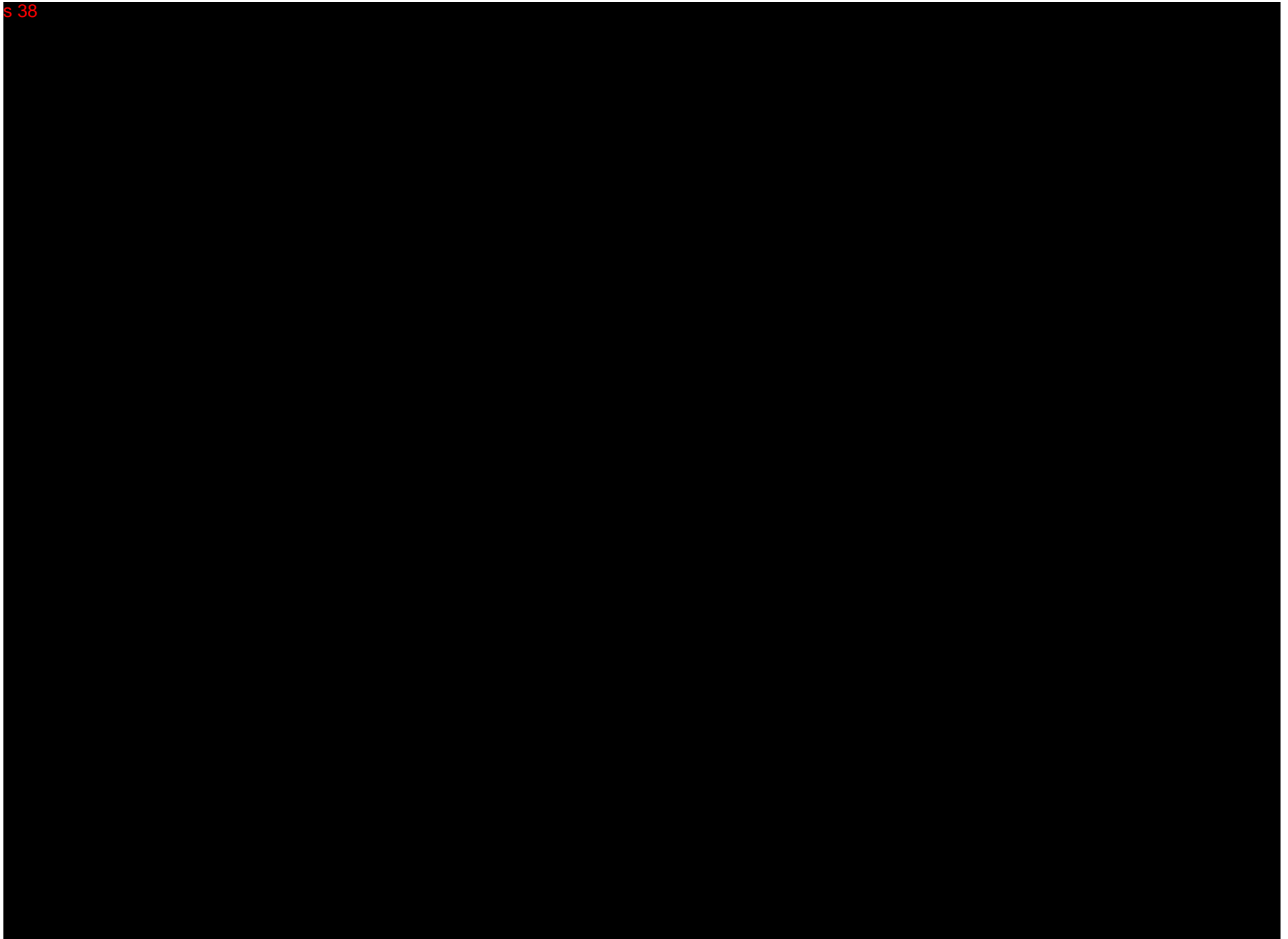
Base Estimate (Owners Cost + Construction Cost)	\$ 21,450,000.00	
	P50	P90
Inherent risk allowance	\$ 3,082,196	\$ 4,033,501
Contingent risk allowance	\$ 2,255,145	\$ 4,415,082
Base Estimate + Contingency (Inherent + Contingent)	\$ 25,787,340	\$ 29,898,582
Total contingency % above base estimate	20%	39%
Escalation (Nominal - applied to base case + contingency)	\$ 2,624,585	\$ 2,995,782
Total Out turn	\$ 28,400,000	\$ 32,900,000
	P50	P90
Total Out turn Cost	\$ 28,400,000	\$ 32,900,000

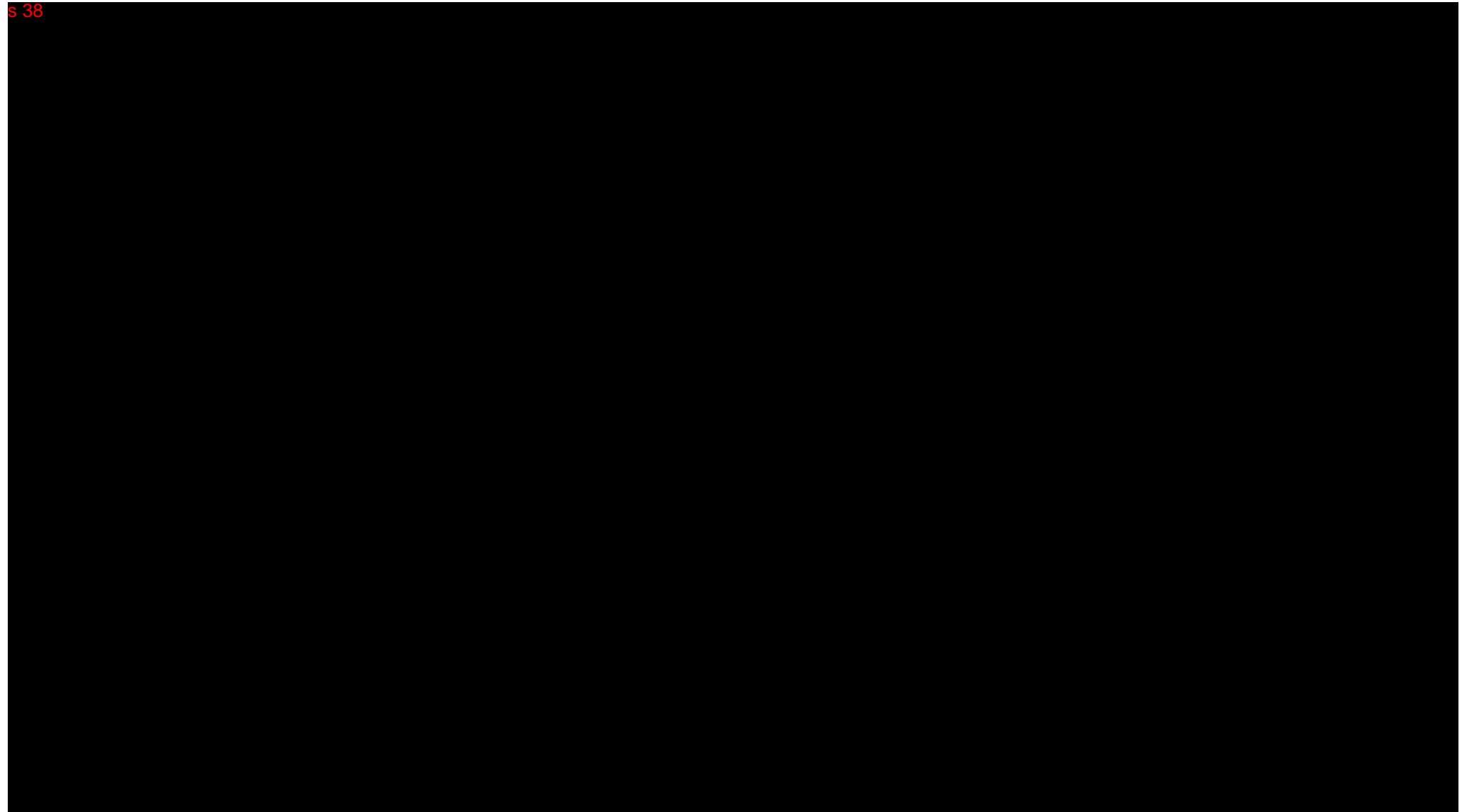
Overall Cash Flow

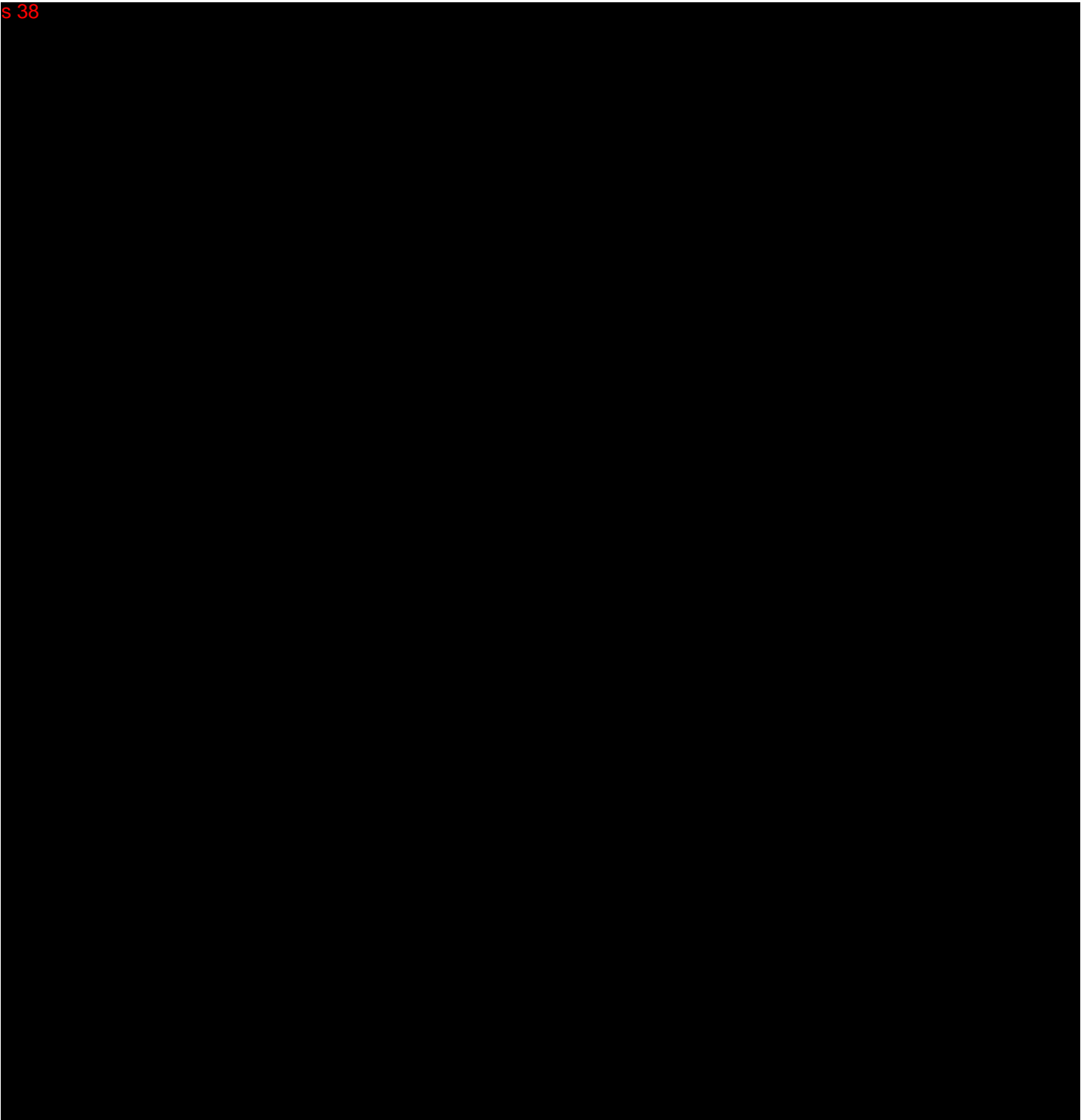
P50 Cash Flow	Financial Year			
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 400,000	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 1,850,000	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 19,200,000
Inherent Risk	\$ -	\$ 208,220	\$ 832,878	\$ 1,041,098
Contingent Risk	\$ -	\$ 225,514	\$ 451,029	\$ 1,578,601
Escalation costs (nominal)	\$ -	\$ 29,181	\$ 223,213	\$ 2,372,191
Sub-Total (annual)	\$ -	\$ 860,000	\$ 3,360,000	\$ 24,190,000
Accumulative Total	\$ -	\$ 860,000	\$ 4,220,000	\$ 28,410,000

P90 Cash Flow	Financial Year			
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 400,000.00	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 1,850,000.00	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 19,200,000.00
Inherent Risk	\$ -	\$ 403,350.08	\$ 1,613,400.32	\$ 2,016,750.40
Contingent Risk	\$ -	\$ 441,508.17	\$ 883,016.34	\$ 3,090,557.19
Escalation costs (nominal)	\$ -	\$ 43,570.04	\$ 309,573.53	\$ 2,642,638.83
Sub-Total (annual)	\$ -	\$ 1,290,000	\$ 4,660,000	\$ 26,950,000
Accumulative Total	\$ -	\$ 1,290,000	\$ 5,950,000	\$ 32,900,000









Contract Value Estimations for:

Project Name	Southern Outlet Bus Lanes - Project 1 - Option 2 - Stage 1 - Alternative 'A' At Grade Option	
Brief reference number	2220-1-39	Project completion:
State Growth Project Number	054758/1	2020 (assumed)
Consultant Project number	IS174300	
Date	7/11/16	
Assumptions		
CPI	2.0%	
Real escalation	1.5%	
Nominal escalation	3.5%	

Southern Outlet Bus Lanes - Project 1 - Option 2 - Stage 1 - Alternative 'A' At Grade (

Project Cash Flow

Totals

P50 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping		\$ 400,000			
Project Development			\$ 1,850,000		
Project Delivery (incl. CA)				\$ 19,200,000	
Inherent Risk		\$ 208,220	\$ 832,878	\$ 1,041,097.84	
Contingent Risk		\$ 225,514	\$ 451,029	\$ 1,578,601.16	
Escalation costs (nominal)		\$ 29,181	\$ 223,213	\$ 2,372,191	
Sub-Total (annual)	\$ -	\$ 860,000	\$ 3,360,000	\$ 24,190,000	\$ -
Accumulative Total	\$ -	\$ 860,000	\$ 4,220,000	\$ 28,410,000	\$ -

P90 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping	\$ -	\$ 400,000	\$ -	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 1,850,000	\$ -	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 19,200,000	\$ -
Inherent Risk	\$ -	\$ 403,350	\$ 1,613,400	\$ 2,016,750.40	
Contingent Risk	\$ -	\$ 441,508	\$ 883,016	\$ 3,090,557.19	
Escalation costs (nominal)	\$ -	\$ 43,570	\$ 309,574	\$ 2,642,639	
Sub-Total (annual)	\$ -	\$ 1,290,000	\$ 4,660,000	\$ 26,950,000	\$ -
Accumulative Total	\$ -	\$ 1,290,000	\$ 5,950,000	\$ 32,900,000	\$ -

Released under

Department of State Growth - Southern Outlet Bus Lanes

Project Name:

Southern Outlet Bus Lanes - Project 1 -
Option 2 - Stage 1 - Alternative 'B' Grade
Separated

Project Phase:

Early Planning / Concept Options

Brief reference number

2220-1-39

Project completion:

State Growth Project Number

054758/1

2020 (assumed)

Consultant Project number

IS174300

Date

7/11/2016

Description of Scope

Early planning phase concept design and high level cost estimate of proposed tidal flow bus lanes for the Southern Outlet from south of Olinda Grove to Hobart CBD - Tidal Flow (centralised) bus lane with Grade Separated Macquarie/Davey Street Interchange.

Rates:

Rates are based on State Growth supplied rates for previous projects and past experience. The rates are subject to change depending on market conditions, and market rates may differ considerably to those adopted in the Cost Estimate.

Quantities:

Quantities have been taken from the high level Concept Designs.

Escalation:

A 3.5% escalation rate has been applied to activities outside of the 2016/2017 construction season.

Summary of results:

Base Estimate (Owners Cost + Construction Cost)
Inherent risk allowance
Contingent risk allowance
Base Estimate + Contingency (Inherent + Contingent)
Total contingency % above base estimate
Escalation (Nominal - applied to base case + contingency)
Total Out turn

\$	29,170,000.00
P50	P90
\$ 2,633,570	\$ 5,595,724
2,252,285	4,277,819
\$ 34,055,855	\$ 39,043,543
17%	34%
\$ 3,511,229	\$ 3,957,099
\$ 37,600,000	\$ 43,100,000

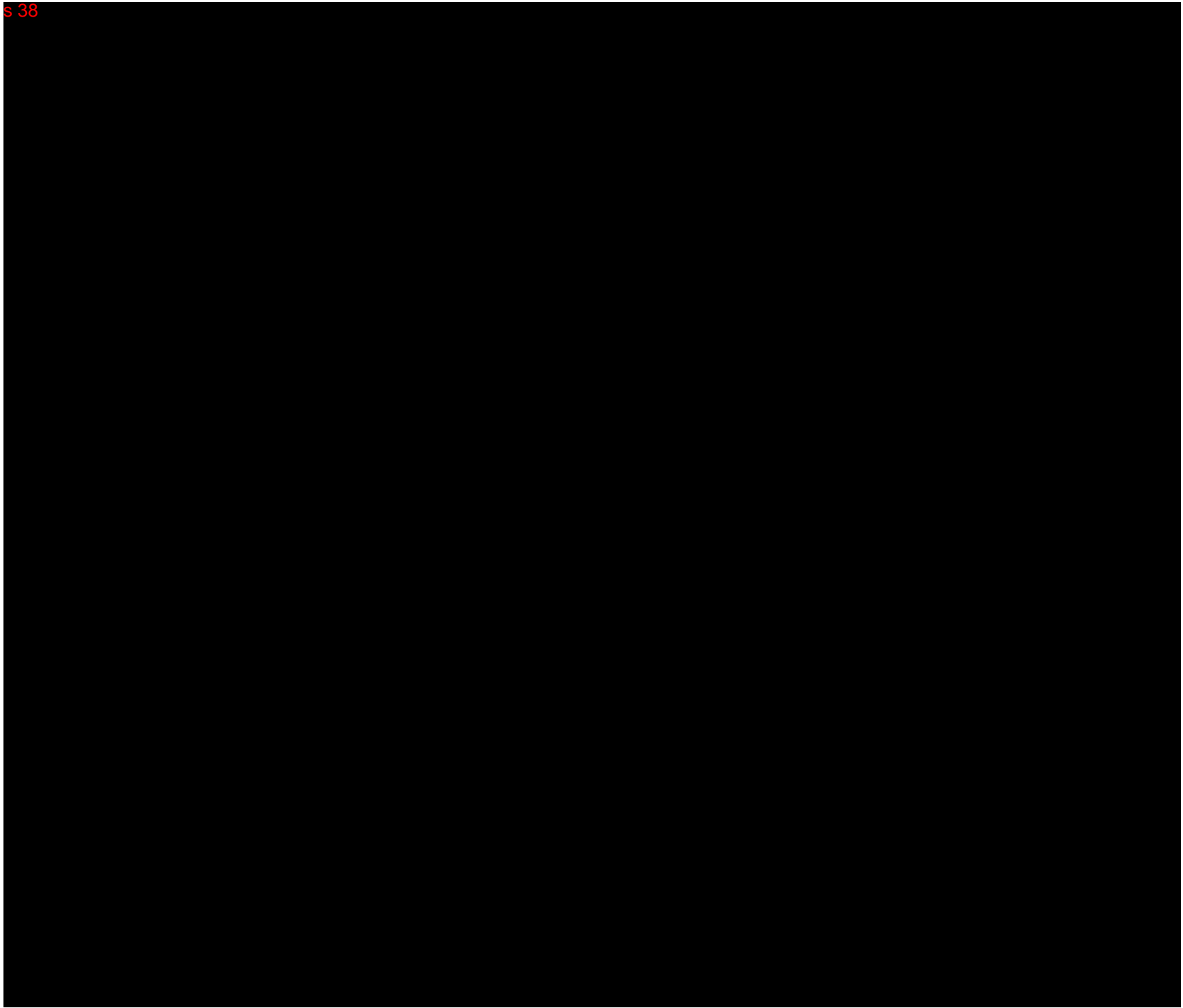
Total Out turn Cost

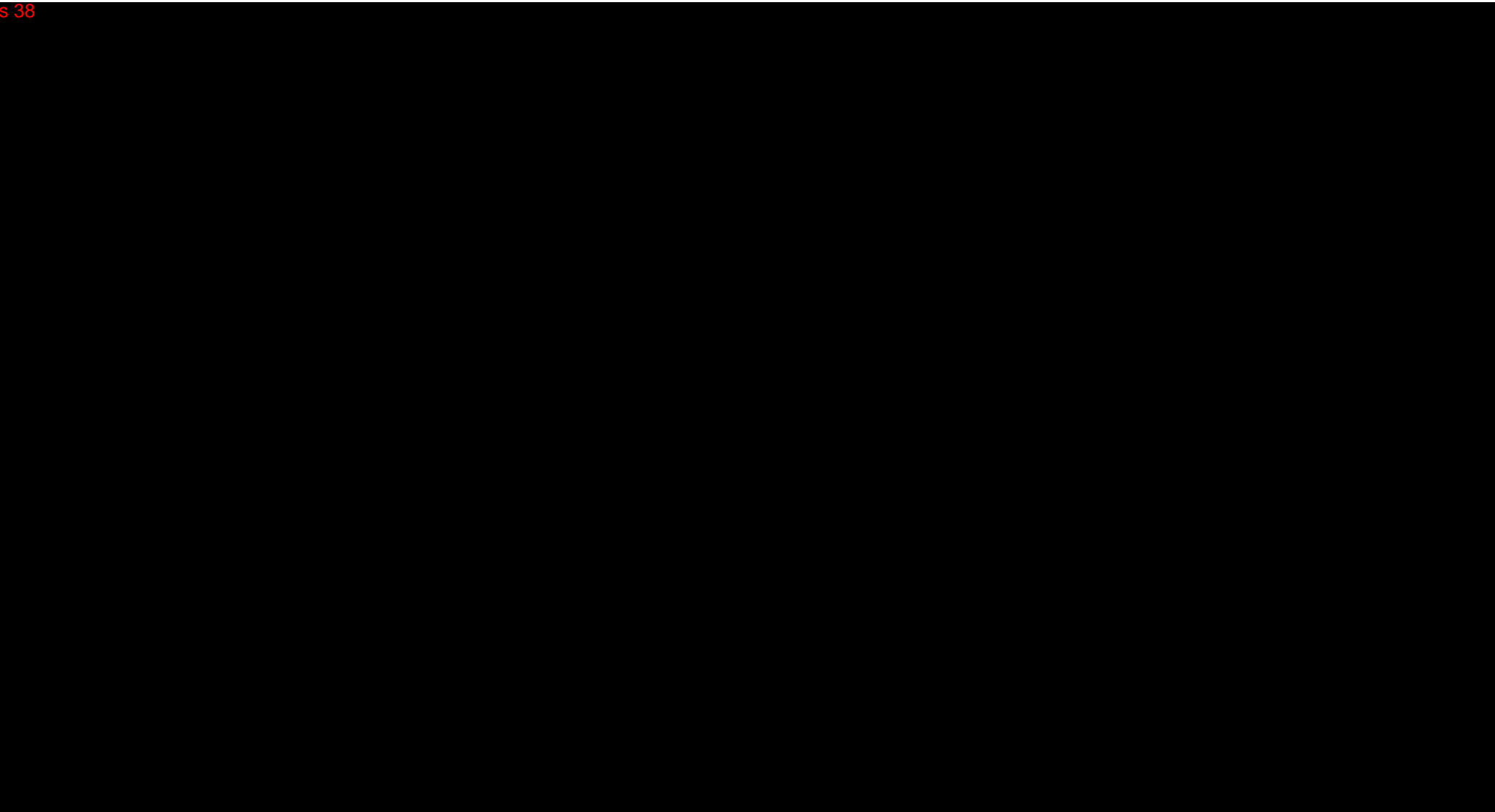
P50	P90
\$ 37,600,000	\$ 43,100,000

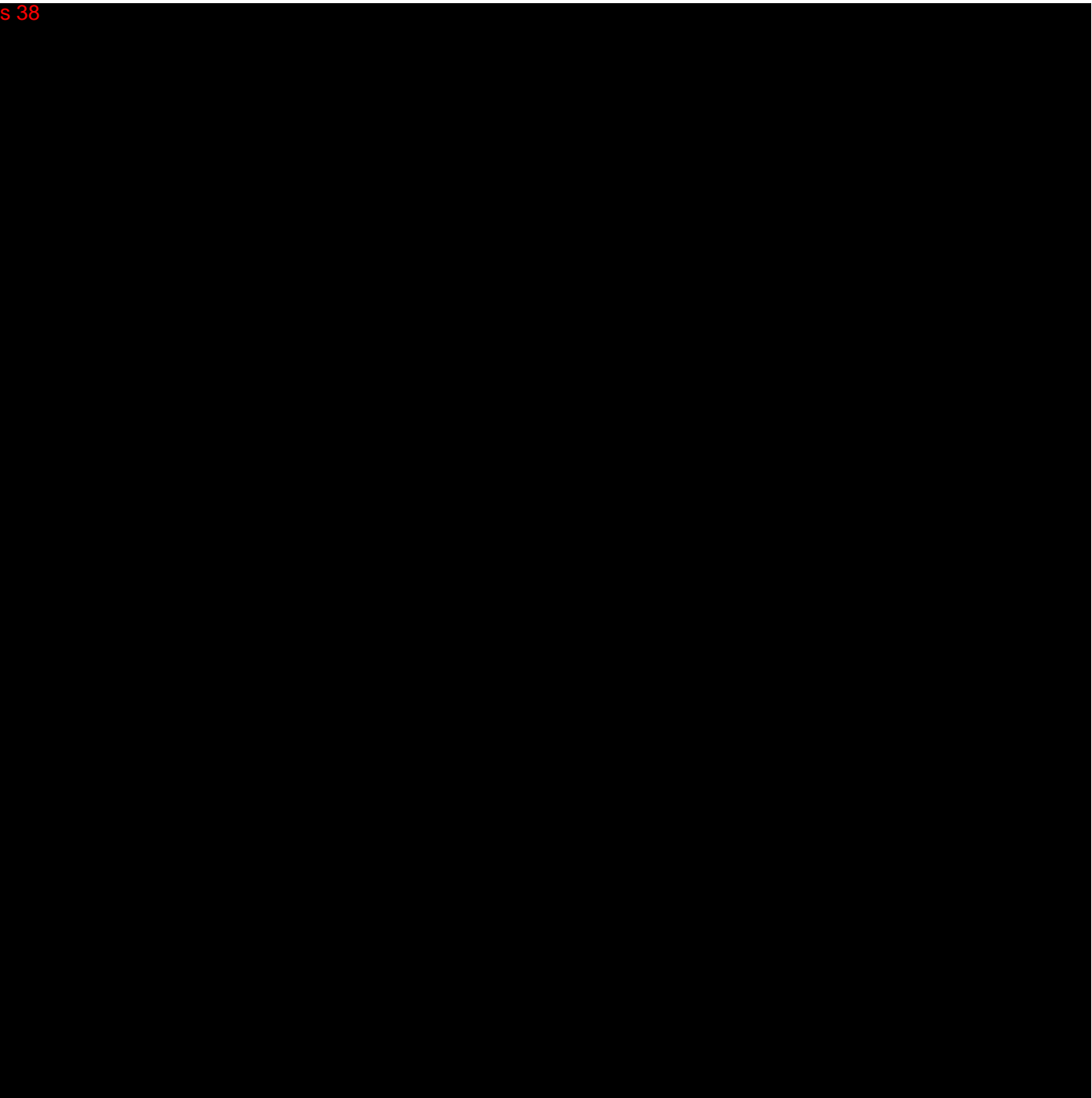
Overall Cash Flow

P50 Cash Flow	Financial Year			
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 400,000	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 1,850,000	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 26,920,000
Inherent Risk	\$ -	\$ 263,357	\$ 1,053,428	\$ 1,316,785
Contingent Risk	\$ -	\$ 225,229	\$ 450,457	\$ 1,576,600
Escalation costs (nominal)	\$ -	\$ 31,100	\$ 238,880	\$ 3,241,248
Sub-Total (annual)	\$ -	\$ 920,000	\$ 3,590,000	\$ 33,050,000
Accumulative Total	\$ -	\$ 920,000	\$ 4,510,000	\$ 37,560,000

P90 Cash Flow	Financial Year			
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 400,000.00	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 1,850,000.00	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 26,920,000.00
Inherent Risk	\$ -	\$ 559,572.37	\$ 2,238,289.49	\$ 2,797,861.86
Contingent Risk	\$ -	\$ 427,781.94	\$ 855,563.88	\$ 2,994,473.59
Escalation costs (nominal)	\$ -	\$ 48,557.40	\$ 352,125.96	\$ 3,556,415.60
Sub-Total (annual)	\$ -	\$ 1,440,000	\$ 5,300,000	\$ 36,270,000
Accumulative Total	\$ -	\$ 1,440,000	\$ 6,740,000	\$ 43,010,000







Contract Value Estimations for:

Project Name

Brief reference number

State Growth Project Number

Consultant Project number

Date

Assumptions

CPI

Real escalation

Nominal escalation

Southern Outlet Bus Lanes - Project 1 - Option 2 -

Stage 1 - Alternative 'B' Grade Separated

2220-1-39

054758/1

IS174300

7/11/16

Project completion:

2020 (assumed)

2.0%

1.5%

3.5%

Southern Outlet Bus Lanes - Project 1 - Option 2 - Stage 1 - Alternative 'B' Grade Sep

Project Cash Flow

Totals

P50 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping		\$ 400,000			
Project Development			\$ 1,850,000		
Project Delivery (incl. CA)				\$ 26,920,000	
Inherent Risk		\$ 263,357	\$ 1,053,428	\$ 1,316,785.08	
Contingent Risk		\$ 225,229	\$ 450,457	\$ 1,576,599.66	
Escalation costs (nominal)		\$ 31,100	\$ 238,880	\$ 3,241,248	
Sub-Total (annual)	\$ -	\$ 920,000	\$ 3,590,000	\$ 33,050,000	\$ -
Accumulative Total	\$ -	\$ 920,000	\$ 4,510,000	\$ 37,560,000	\$ -

P90 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping	\$ -	\$ 400,000	\$ -	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 1,850,000	\$ -	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 26,920,000	\$ -
Inherent Risk	\$ -	\$ 559,572	\$ 2,238,289	\$ 2,797,861.86	\$ -
Contingent Risk	\$ -	\$ 427,782	\$ 855,564	\$ 2,994,473.59	\$ -
Escalation costs (nominal)	\$ -	\$ 48,557	\$ 352,126	\$ 3,556,416	\$ -
Sub-Total (annual)	\$ -	\$ 1,440,000	\$ 5,300,000	\$ 36,270,000	\$ -
Accumulative Total	\$ -	\$ 1,440,000	\$ 6,740,000	\$ 43,010,000	\$ -

Released under

Department of State Growth - Southern Outlet Bus Lanes

Project Name:

Southern Outlet Bus Lanes - Project 1 -
Option 2 - Stage 2

Project Phase:

Early Planning / Concept Options

Brief reference number

2220-1-39

Project completion:

State Growth Project Number

054758/1

2020 (assumed)

Consultant Project number

IS174300

Date

7/11/2016

Description of Scope

Early planning phase concept design and high level cost estimate of proposed tidal flowbus lane for the Southern Outlet from Kingston to Olinde Grove - Centralised (Tidal Flow) bus lane from Kingston to start of Stage 1

Rates:

Rates are based on State Growth supplied rates for previous projects and past experience. The rates are subject to change depending on market conditions, and market rates may differ considerably to those adopted in the Cost Estimate.

Quantities:

Quantities have been taken from the high level Concept Designs.

Escalation:

A 3.5% escalation rate has been applied to activities outside of the 2016/2017 construction season.

Summary of results:

Base Estimate (Owners Cost + Construction Cost)
Inherent risk allowance
Contingent risk allowance
Base Estimate + Contingency (Inherent + Contingent)
Total contingency % above base estimate
Escalation (Nominal - applied to base case + contingency)
Total Out turn

\$	15,590,000.00
P50	P90
\$ 1,186,899	\$ 2,799,994
\$ 1,669,199	\$ 3,590,564
\$ 18,446,098	\$ 21,980,557
18%	41%
\$ 1,913,124	\$ 2,232,728
\$ 20,400,000	\$ 24,300,000

Total Out turn Cost

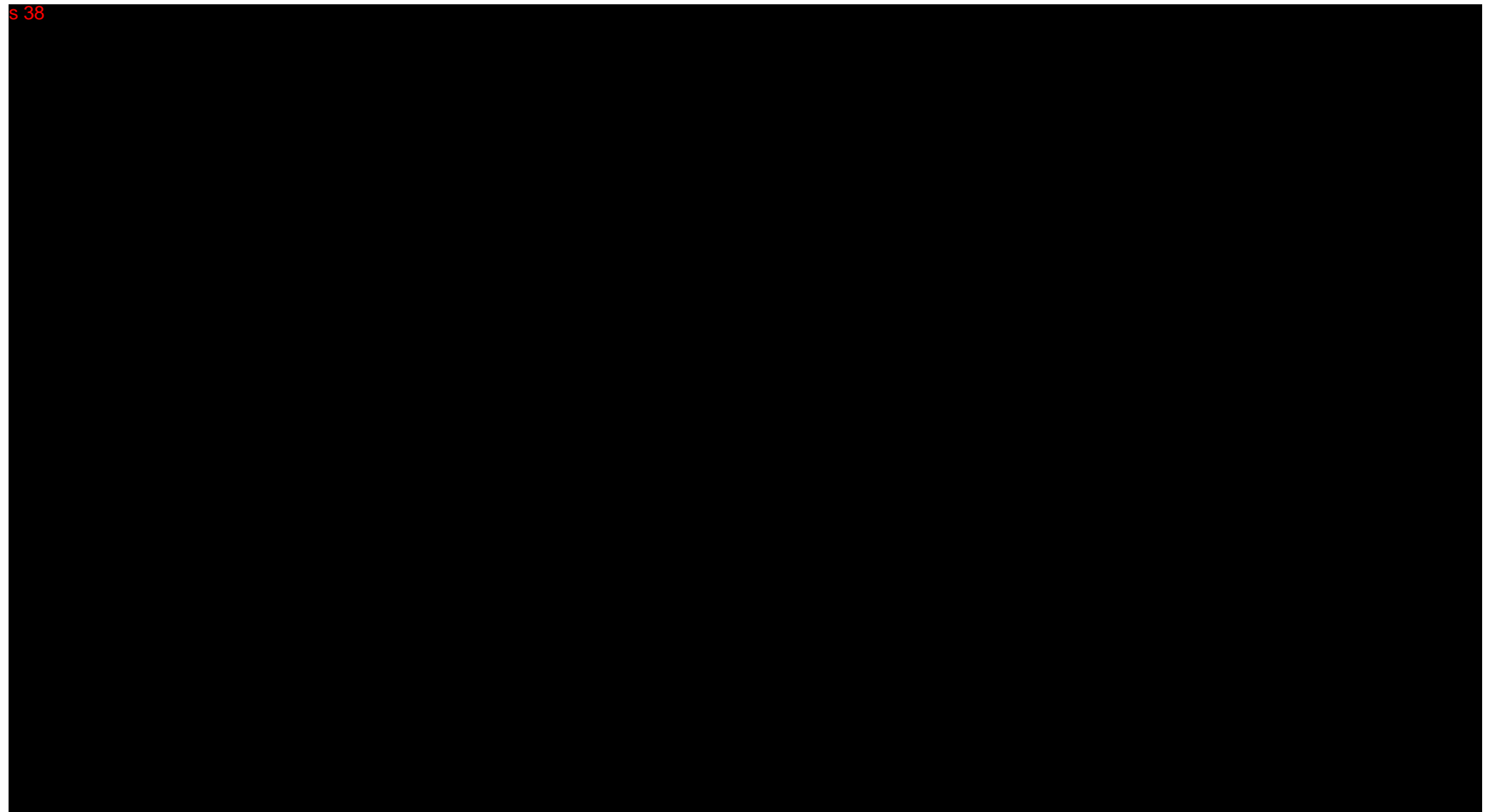
P50	P90
\$ 20,400,000	\$ 24,300,000

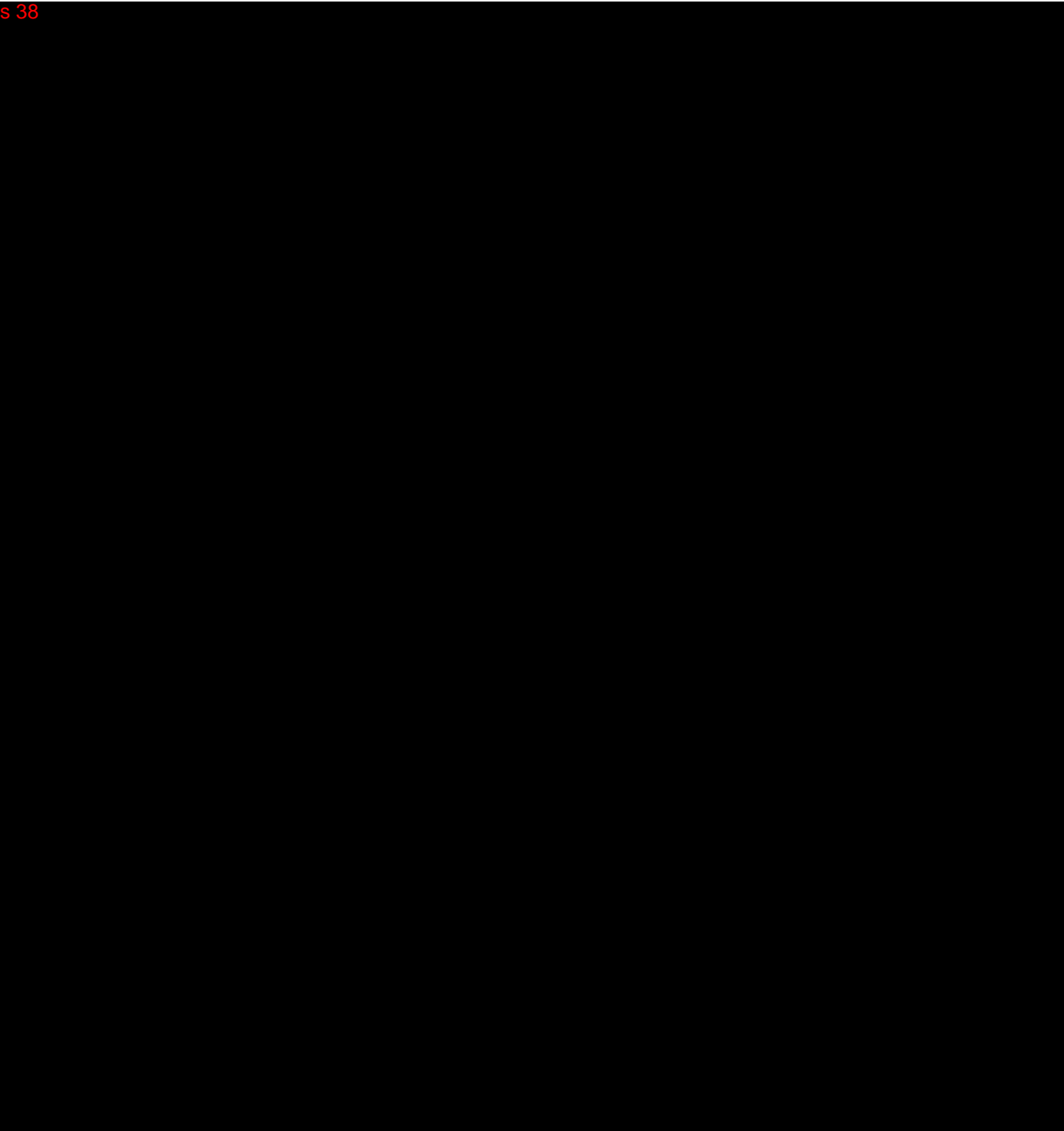
Overall Cash Flow

	Financial Year			
P50 Cash Flow	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 250,000	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 600,000	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 14,740,000
Inherent Risk	\$ -	\$ 118,690	\$ 474,760	\$ 593,450
Contingent Risk	\$ -	\$ 166,920	\$ 333,840	\$ 1,168,439
Escalation costs (nominal)	\$ -	\$ 18,746	\$ 100,327	\$ 1,794,050
Sub-Total (annual)	\$ -	\$ 550,000	\$ 1,510,000	\$ 18,300,000
Accumulative Total	\$ -	\$ 550,000	\$ 2,060,000	\$ 20,360,000

	Financial Year			
P90 Cash Flow	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 250,000.00	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 600,000.00	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 14,740,000.00
Inherent Risk	\$ -	\$ 279,999.36	\$ 1,119,997.44	\$ 1,399,996.80
Contingent Risk	\$ -	\$ 359,056.37	\$ 718,112.74	\$ 2,513,394.60
Escalation costs (nominal)	\$ -	\$ 31,116.95	\$ 173,654.40	\$ 2,027,957.07
Sub-Total (annual)	\$ -	\$ 920,000	\$ 2,610,000	\$ 20,680,000
Accumulative Total	\$ -	\$ 920,000	\$ 3,530,000	\$ 24,210,000







Contract Value Estimations for:

Project Name	Southern Outlet Bus Lanes - Project 1 - Option 2 - Stage 2	
Brief reference number	2220-1-39	Project completion:
State Growth Project Number	054758/1	2020 (assumed)
Consultant Project number	IS174300	
Date	7/11/16	
Assumptions		
CPI	2.0%	
Real escalation	1.5%	
Nominal escalation	3.5%	

Southern Outlet Bus Lanes - Project 1 - Option 2 - Stage 2

Project Cash Flow

Totals

P50 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping		\$ 250,000			
Project Development			\$ 600,000		
Project Delivery (incl. CA)				\$ 14,740,000	
Inherent Risk		\$ 118,690	\$ 474,760	\$ 593,449.67	
Contingent Risk		\$ 166,920	\$ 333,840	\$ 1,168,438.97	
Escalation costs (nominal)		\$ 18,746	\$ 100,327	\$ 1,794,050	
Sub-Total (annual)	\$ -	\$ 550,000	\$ 1,510,000	\$ 18,300,000	\$ -
Accumulative Total	\$ -	\$ 550,000	\$ 2,060,000	\$ 20,360,000	\$ -

P90 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping	\$ -	\$ 250,000	\$ -	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 600,000	\$ -	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 14,740,000	\$ -
Inherent Risk	\$ -	\$ 279,999	\$ 1,119,997	\$ 1,399,996.80	
Contingent Risk	\$ -	\$ 359,056	\$ 718,113	\$ 2,513,394.60	
Escalation costs (nominal)	\$ -	\$ 31,117	\$ 173,654	\$ 2,027,957	
Sub-Total (annual)	\$ -	\$ 920,000	\$ 2,610,000	\$ 20,680,000	\$ -
Accumulative Total	\$ -	\$ 920,000	\$ 3,530,000	\$ 24,210,000	\$ -

Released under

Department of State Growth - Southern Outlet Bus Lanes

Project Name:

Southern Outlet Bus Lanes - Project 1 -
Option 3

Project Phase:

Early Planning / Concept Options

Brief reference number
State Growth Project Number
Consultant Project number
Date

2220-1-39
054758/1
IS174300
7/11/2016

Project completion:
2020 (assumed)

Description of Scope

Early planning phase concept design and high level cost estimate of proposed south bound bus lane for the Southern Outlet from Olinder Grove to Kingston. Southbound right hand side bus lane (Note: removes barriers for Option 2 - Stage 2 Tidal Flow from Kingston to Olinda Grove Overpass)

Rates:

Rates are based on State Growth supplied rates for previous projects and past experience. The rates are subject to change depending on market conditions, and market rates may differ considerably to those adopted in the Cost Estimate.

Quantities:

Quantities have been taken from the high level Concept Designs.

Escalation:

A 3.5% escalation rate has been applied to activities outside of the 2016/2017 construction season.

Summary of results:

Base Estimate (Owners Cost + Construction Cost)
Inherent risk allowance
Contingent risk allowance
Base Estimate + Contingency (Inherent + Contingent)
Total contingency % above base estimate
Escalation (Nominal - applied to base case + contingency)
Total Out turn

\$	14,790,000.00
P50	P90
\$ 1,139,354	\$ 2,699,073
\$ 1,669,164	\$ 3,620,426
\$ 17,598,518	\$ 21,109,499
19%	43%
\$ 1,822,041	\$ 2,139,842
\$ 19,400,000	\$ 23,300,000

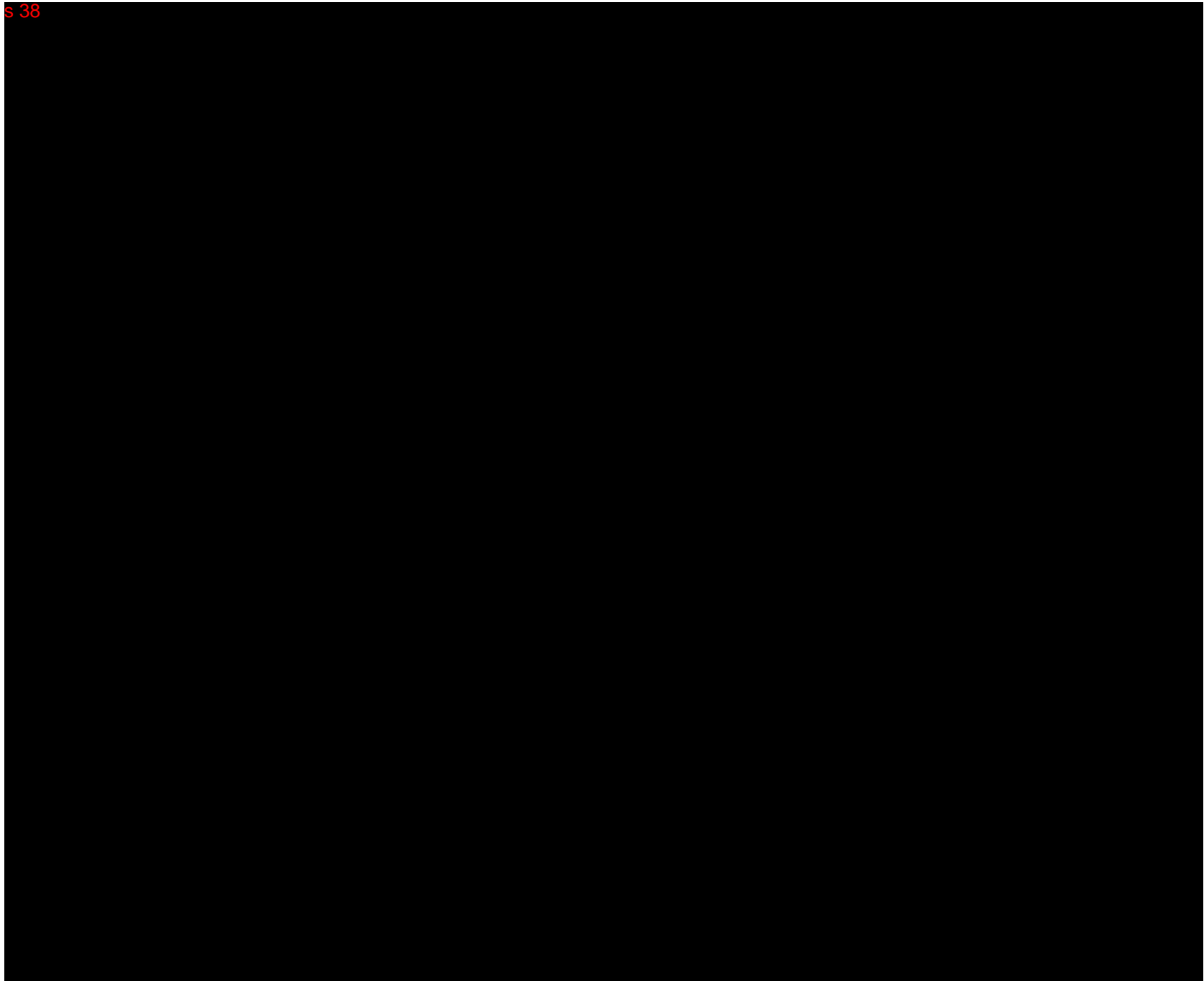
Total Out turn Cost

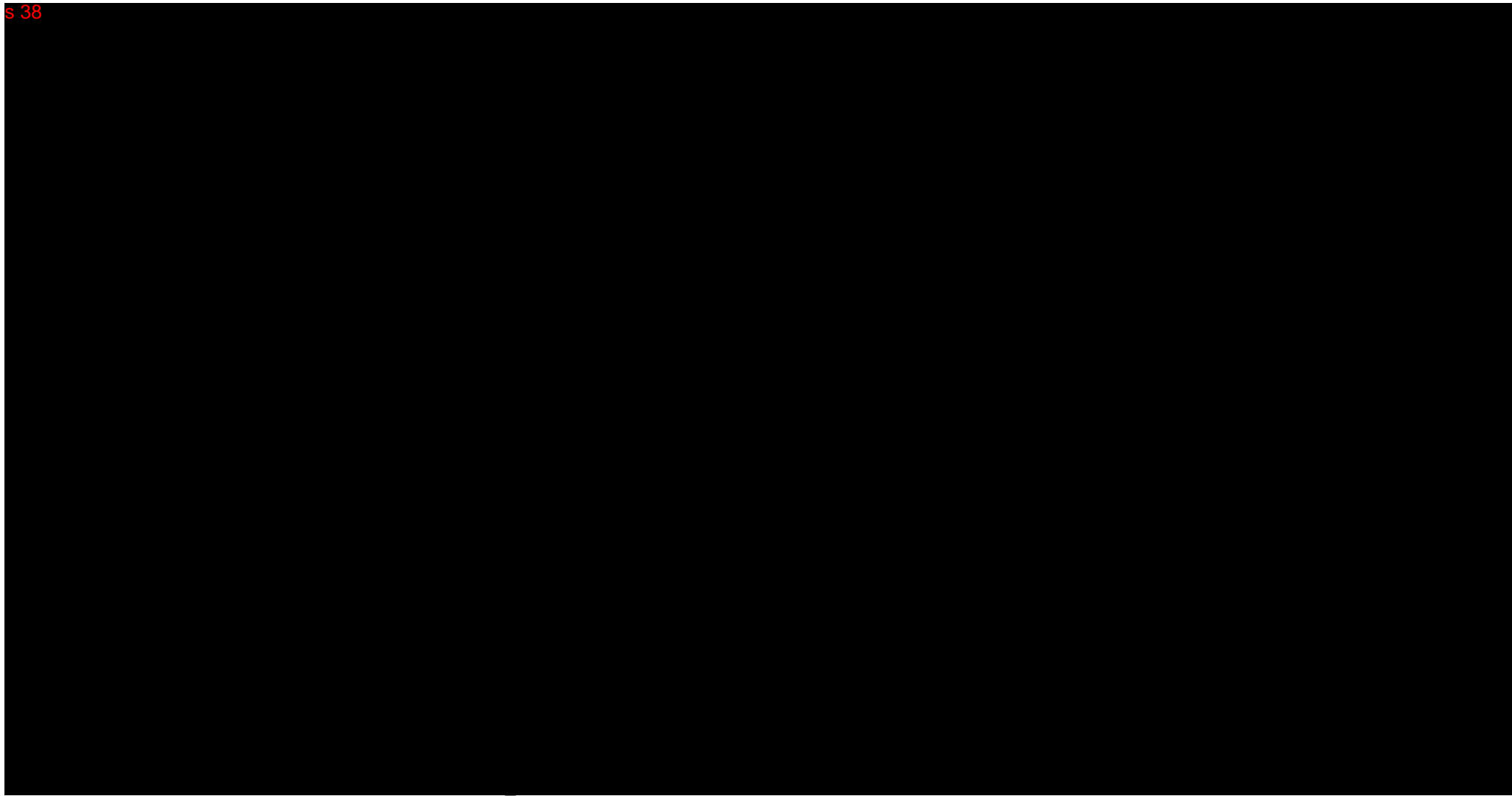
P50	P90
\$ 19,400,000	\$ 23,300,000

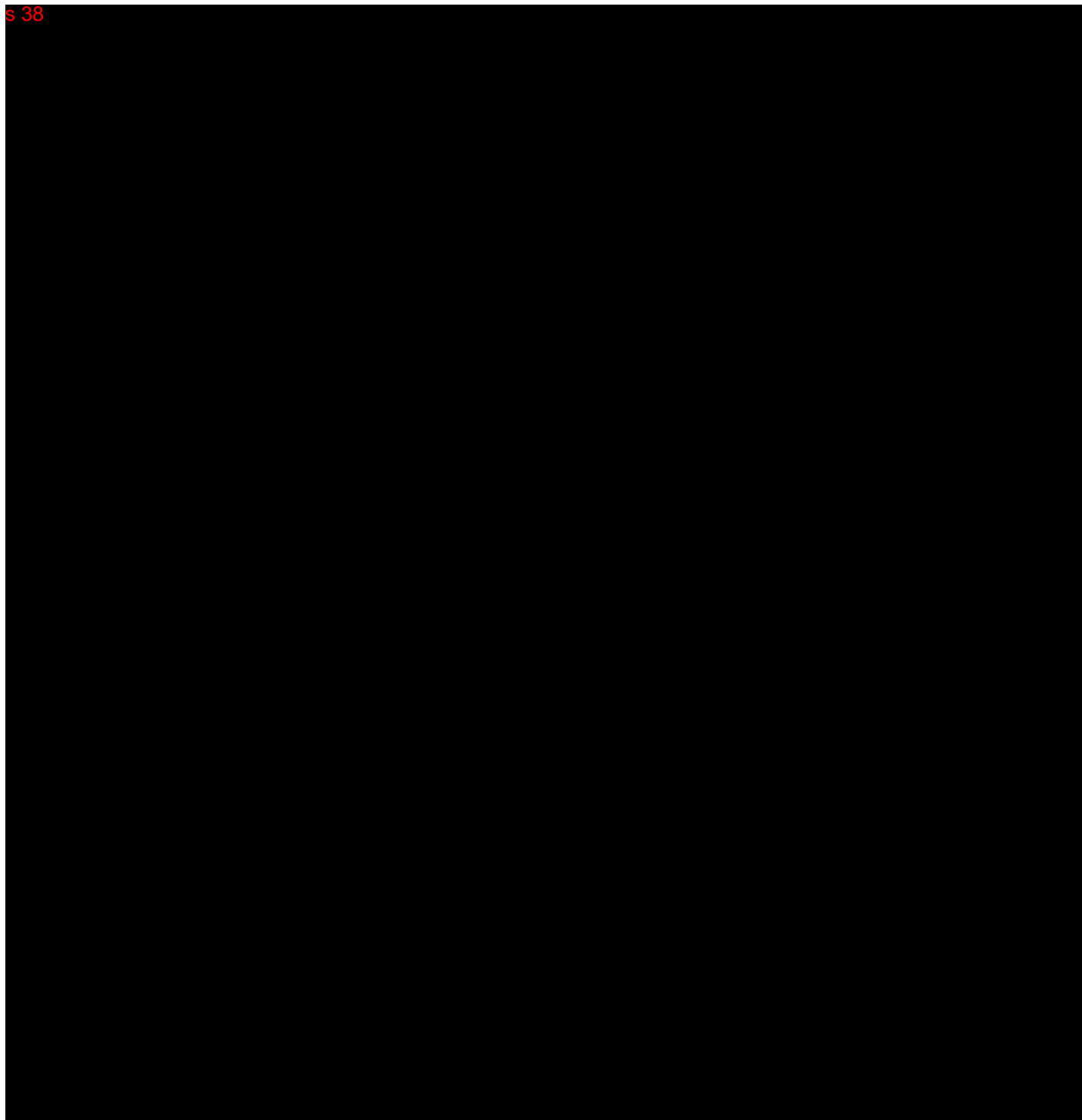
Overall Cash Flow

P50 Cash Flow	Financial Year			
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 250,000	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 600,000	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 13,940,000
Inherent Risk	\$ -	\$ 113,935	\$ 455,742	\$ 569,677
Contingent Risk	\$ -	\$ 166,916	\$ 333,833	\$ 1,168,415
Escalation costs (nominal)	\$ -	\$ 18,580	\$ 98,972	\$ 1,704,489
Sub-Total (annual)	\$ -	\$ 550,000	\$ 1,490,000	\$ 17,380,000
Accumulative Total	\$ -	\$ 550,000	\$ 2,040,000	\$ 19,420,000

P90 Cash Flow	Financial Year			
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 250,000.00	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 600,000.00	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 13,940,000.00
Inherent Risk	\$ -	\$ 269,907.27	\$ 1,079,629.07	\$ 1,349,536.33
Contingent Risk	\$ -	\$ 362,042.63	\$ 724,085.25	\$ 2,534,298.38
Escalation costs (nominal)	\$ -	\$ 30,868.25	\$ 171,204.55	\$ 1,937,769.43
Sub-Total (annual)	\$ -	\$ 910,000	\$ 2,570,000	\$ 19,760,000
Accumulative Total	\$ -	\$ 910,000	\$ 3,480,000	\$ 23,240,000







Contract Value Estimations for:

Project Name Southern Outlet Bus Lanes - Project 1 - Option 3
 Brief reference number 2220-1-39 Project completion:
 State Growth Project Number 054758/1 2020 (assumed)
 Consultant Project number IS174300
 Date 7/11/16

Assumptions
 CPI 2.0%
 Real escalation 1.5%
 Nominal escalation 3.5%

Southern Outlet Bus Lanes - Project 1 - Option 3

Project Cash Flow

Totals

P50 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping		\$ 250,000			
Project Development			\$ 600,000		
Project Delivery (incl. CA)				\$ 13,940,000	
Inherent Risk		\$ 113,935	\$ 455,742	\$ 569,677.02	
Contingent Risk		\$ 166,916	\$ 333,833	\$ 1,168,414.66	
Escalation costs (nominal)		\$ 18,580	\$ 98,972	\$ 1,704,489	
Sub-Total (annual)	\$ -	\$ 550,000	\$ 1,490,000	\$ 17,380,000	\$ -
Accumulative Total	\$ -	\$ 550,000	\$ 2,040,000	\$ 19,420,000	\$ -

P90 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping	\$ -	\$ 250,000	\$ -	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 600,000	\$ -	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 13,940,000	\$ -
Inherent Risk	\$ -	\$ 269,907	\$ 1,079,629	\$ 1,349,536.33	
Contingent Risk	\$ -	\$ 362,043	\$ 724,085	\$ 2,534,298.38	
Escalation costs (nominal)	\$ -	\$ 30,868	\$ 171,205	\$ 1,937,769	
Sub-Total (annual)	\$ -	\$ 910,000	\$ 2,570,000	\$ 19,760,000	\$ -
Accumulative Total	\$ -	\$ 910,000	\$ 3,480,000	\$ 23,240,000	\$ -

Released under the
Access to Information Act

Department of State Growth - Macquarie Street Bus Lane

Project Name:

Macquarie Street Bus Lane - Alternative 'A'

Project Phase:

Early Planning / Concept Options

Brief reference number
State Growth Project Number
Consultant Project number
Date

2220-1-39
054758/1
IS174300
20/12/2016

Project completion:
2020 (assumed)

Description of Scope

Early planning phase concept design and high level cost estimate of proposed bus lane for Macquarie Street from Southern Outlet to Elizabeth Street. Parking retained where possible. Significant kerb realignment required and traffic lanes generally 3.2m (min) wide.

Rates:

Rates are based on State Growth supplied rates for previous projects and past experience. The rates are subject to change depending on market conditions, and market rates may differ considerably to those adopted in the Cost Estimate.

Quantities:

Quantities have been taken from the high level Concept Designs.

Escalation:

A 3.5% escalation rate has been applied to activities outside of the 2016/2017 construction

Summary of results:

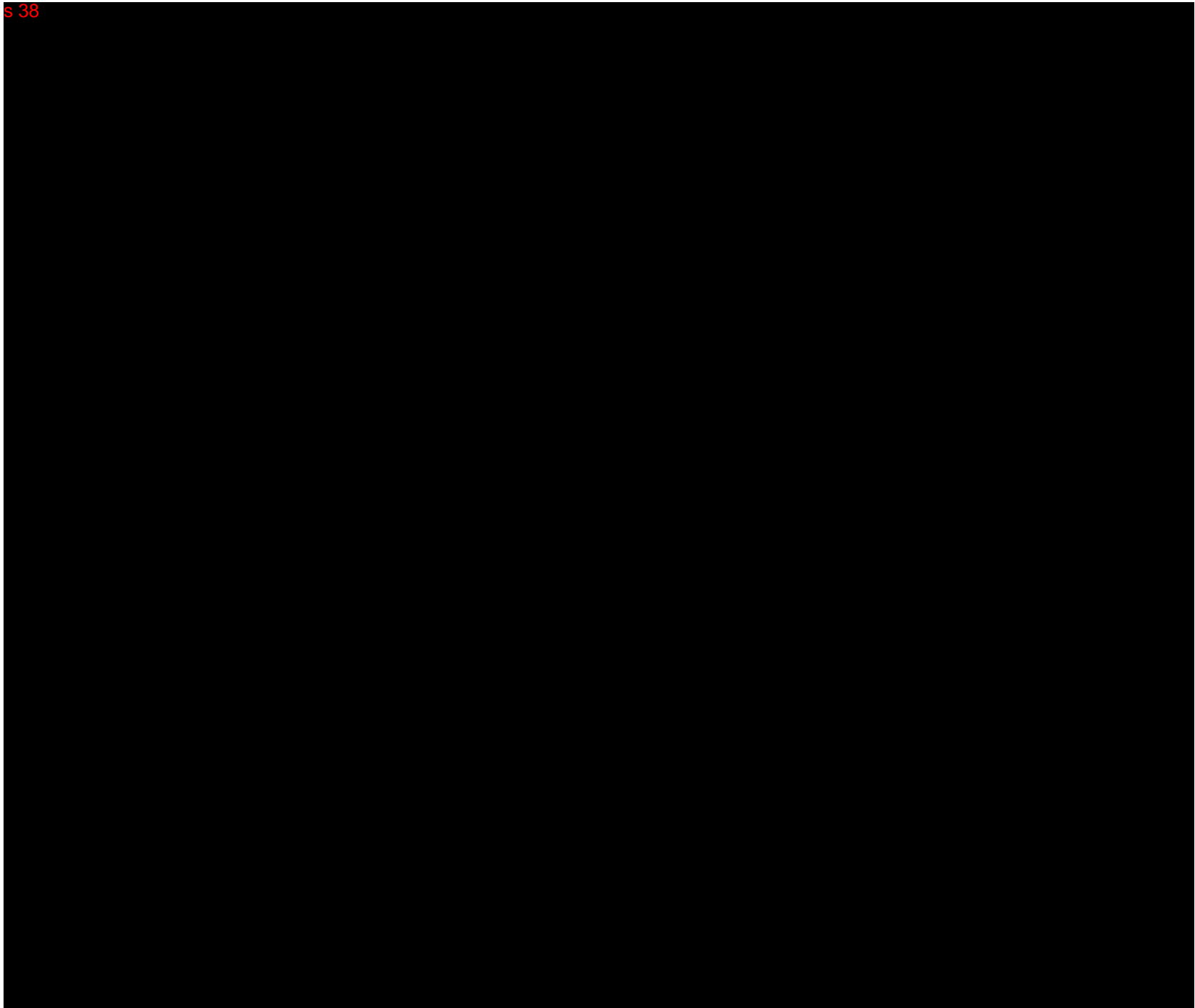
Base Estimate (Owners Cost + Construction Cost)	\$	1,460,000.00
Inherent risk allowance	P50	P90
Contingent risk allowance	122,086	229,128
Base Estimate + Contingency (Inherent + Contingent)	105,387	194,820
Total contingency % above base estimate	\$ 1,687,473	\$ 1,883,948
Escalation (Nominal - applied to base case + contingency)	16%	29%
	\$ 168,027	\$ 185,663
Total Out turn	\$ 1,900,000	\$ 2,100,000

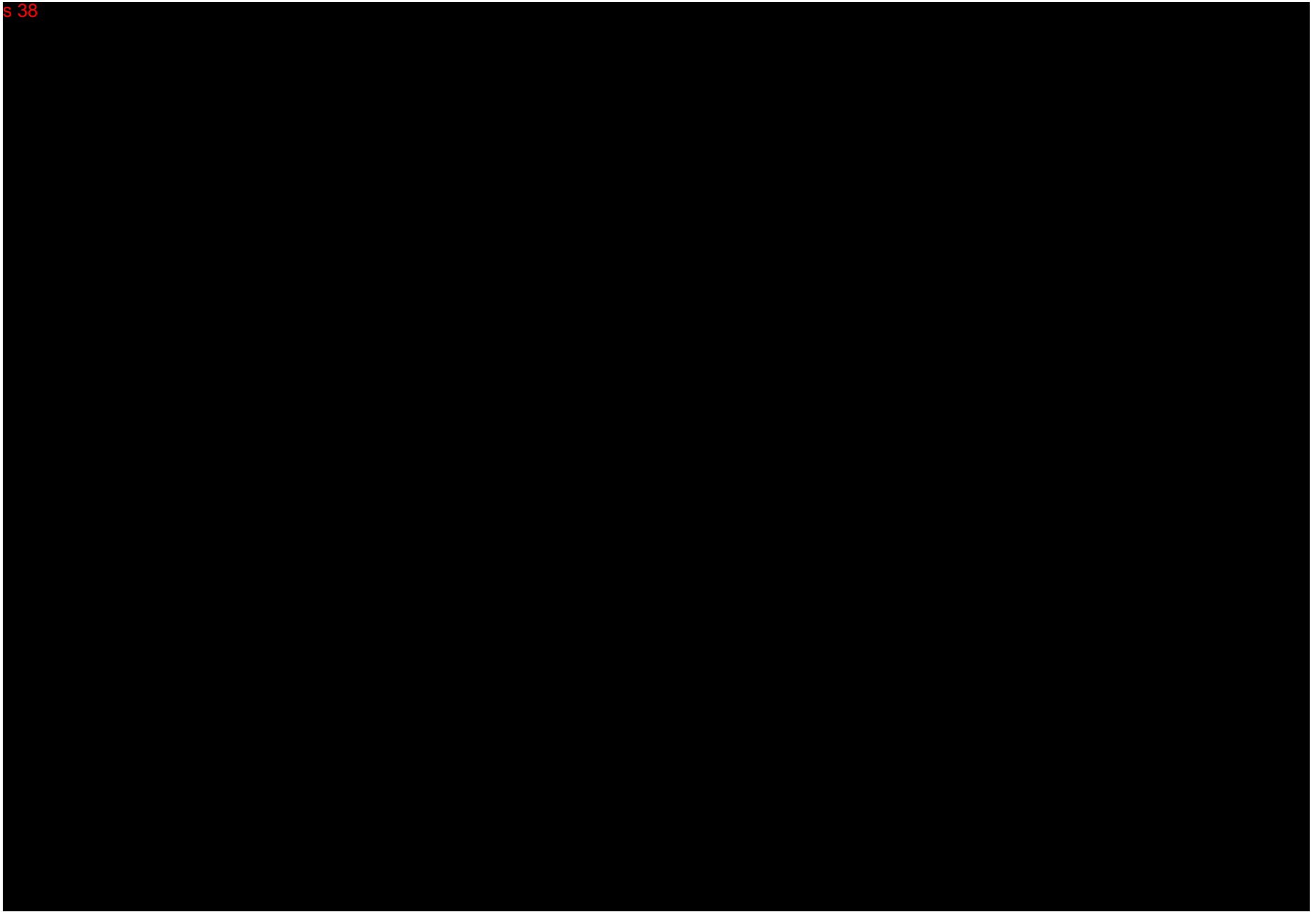
	P50	P90
Total Out turn Cost	\$ 1,900,000	\$ 2,100,000

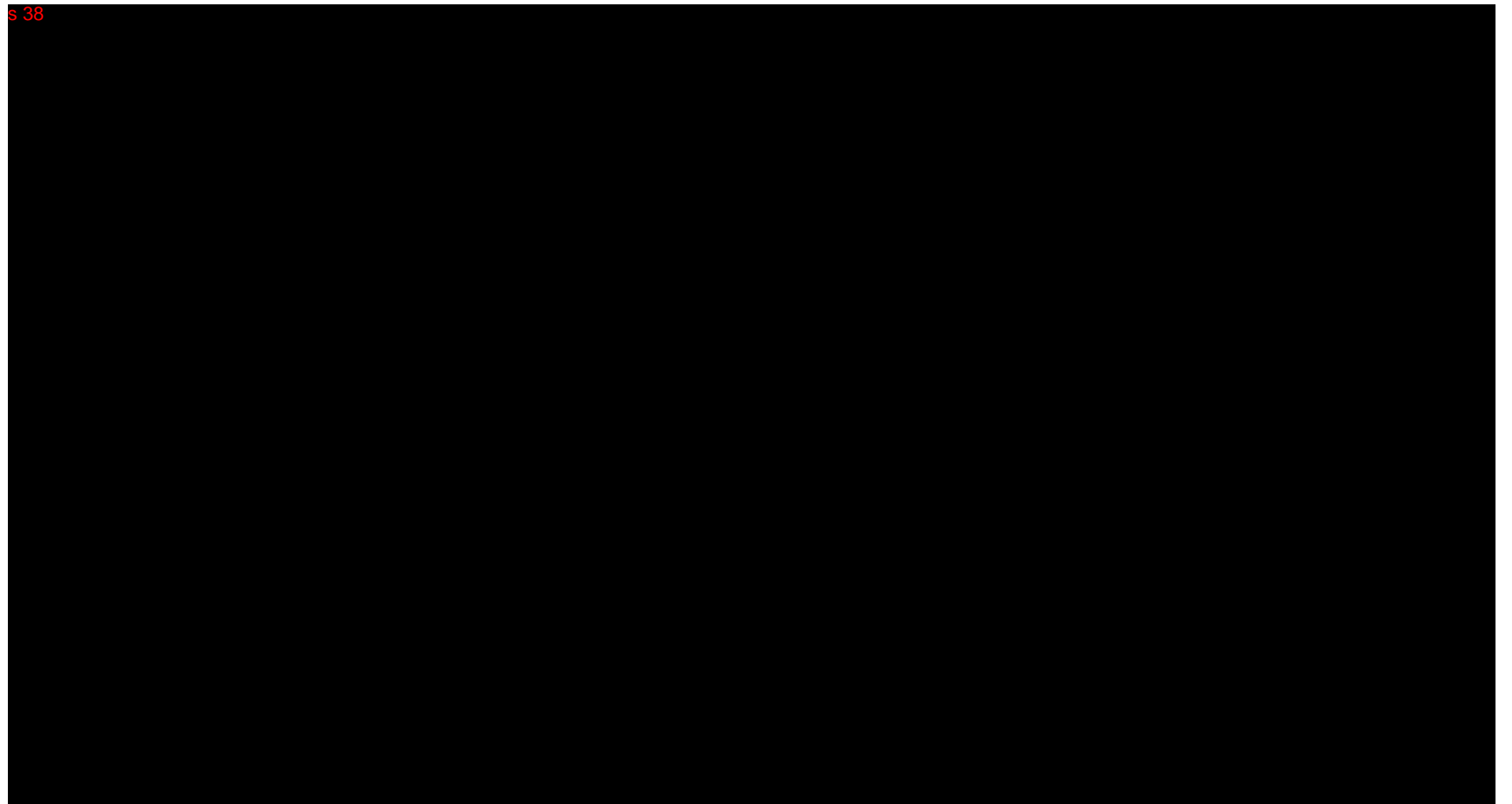
Overall Cash Flow

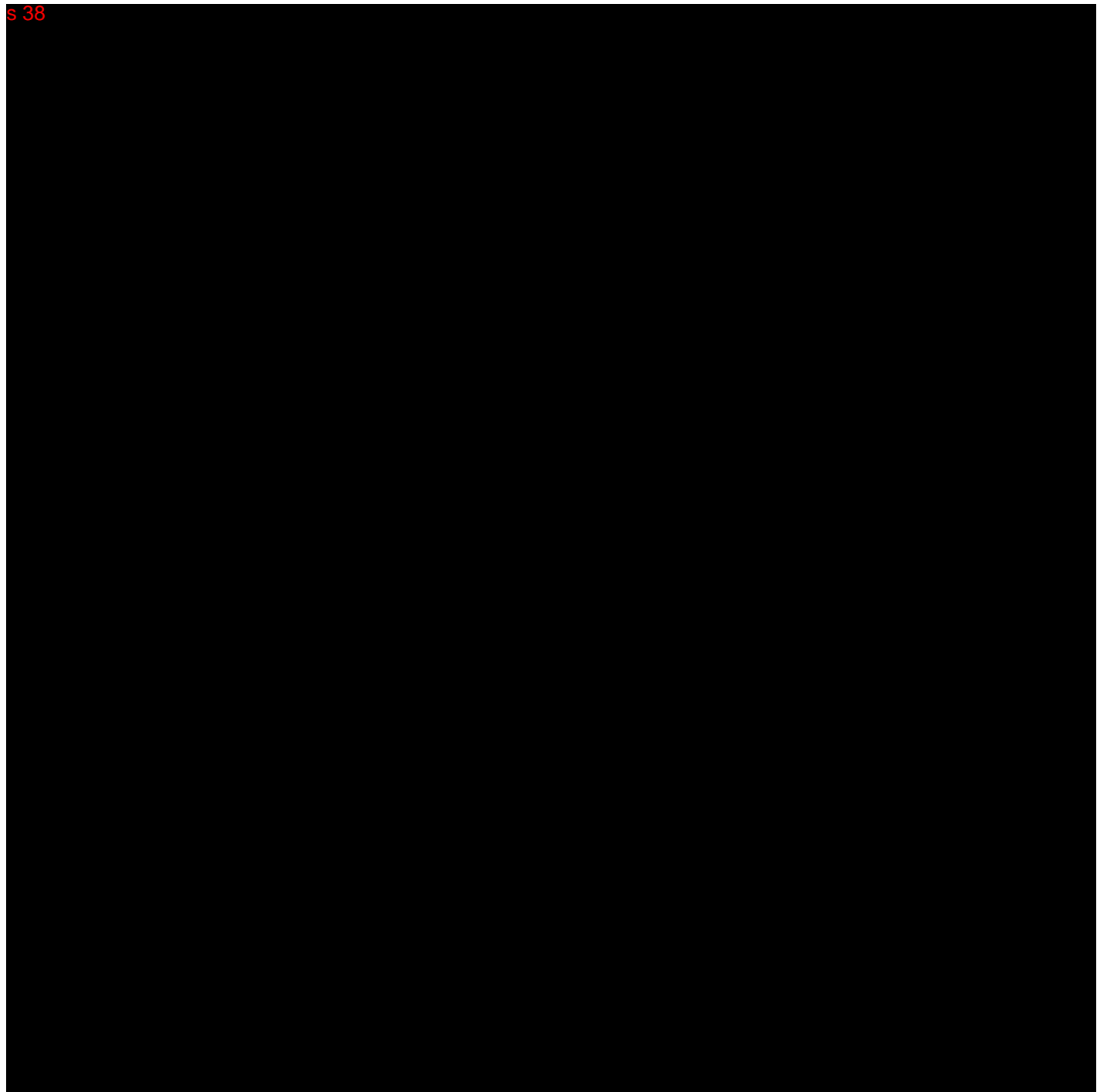
	Financial Year			
P50 Cash Flow	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 90,000	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 120,000	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 1,250,000
Inherent Risk	\$ -	\$ 12,209	\$ 48,834	\$ 61,043
Contingent Risk	\$ -	\$ 10,539	\$ 21,077	\$ 73,771
Escalation costs (nominal)	\$ -	\$ 3,946	\$ 13,526	\$ 150,554
Sub-Total (annual)	\$ -	\$ 120,000	\$ 200,000	\$ 1,540,000
Accumulative Total	\$ -	\$ 120,000	\$ 320,000	\$ 1,860,000

	Financial Year			
P90 Cash Flow	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 90,000.00	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 120,000.00	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 1,250,000.00
Inherent Risk	\$ -	\$ 22,912.80	\$ 91,651.19	\$ 114,563.99
Contingent Risk	\$ -	\$ 19,482.04	\$ 38,964.07	\$ 136,374.25
Escalation costs (nominal)	\$ -	\$ 4,633.82	\$ 17,850.07	\$ 163,178.82
Sub-Total (annual)	\$ -	\$ 140,000	\$ 270,000	\$ 1,660,000
Accumulative Total	\$ -	\$ 140,000	\$ 410,000	\$ 2,070,000









Contract Value Estimations for:

Project Name Macquarie Street Bus Lane - Alternative 'A'
 Brief reference number 2220-1-39 Project completion:
 State Growth Project Number 054758/1 2020 (assumed)
 Consultant Project number IS174300
 Date 20/12/16

Assumptions
 CPI 2.0%
 Real escalation 1.5%
 Nominal escalation 3.5%

Macquarie Street Bus Lane - Alternative 'A'

Project Cash Flow

Totals

P50 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping		\$ 90,000			
Project Development			\$ 120,000		
Project Delivery (incl. CA)				\$ 1,250,000	
Inherent Risk		\$ 12,209	\$ 48,834	\$ 61,042.81	
Contingent Risk		\$ 10,539	\$ 21,077	\$ 73,771.10	
Escalation costs (nominal)		\$ 3,946	\$ 13,526	\$ 150,554	
Sub-Total (annual)	\$ -	\$ 120,000	\$ 200,000	\$ 1,540,000	\$ -
Accumulative Total	\$ -	\$ 120,000	\$ 320,000	\$ 1,860,000	\$ -

P90 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping	\$ -	\$ 90,000	\$ -	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 120,000	\$ -	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 1,250,000	\$ -
Inherent Risk		\$ 22,913	\$ 91,651	\$ 114,563.99	
Contingent Risk		\$ 19,482	\$ 38,964	\$ 136,374.25	
Escalation costs (nominal)		\$ 4,634	\$ 17,850	\$ 163,179	
Sub-Total (annual)	\$ -	\$ 140,000	\$ 270,000	\$ 1,660,000	\$ -
Accumulative Total	\$ -	\$ 140,000	\$ 410,000	\$ 2,070,000	\$ -

Released under

Department of State Growth - Macquarie Street Bus Lane

Project Name:

Macquarie Street Bus Lane - Project 2 -
Alternative 'B'

Project Phase:

Early Planning / Concept Options

Brief reference number
State Growth Project Number
Consultant Project number
Date

2220-1-39
054758/1
IS174300
20/12/2016

Project completion:
2020 (assumed)

Description of Scope

Early planning phase concept design and high level cost estimate of proposed bus lane for the Macquarie Street from Southern Outlet to Elizabeth Street. Existing kerbs retained where practical. No parking retained.

Rates:

Rates are based on State Growth supplied rates for previous projects and past experience. The rates are subject to change depending on market conditions, and market rates may differ considerably to those adopted in the Cost Estimate.

Quantities:

Quantities have been taken from the high level Concept Designs.

Escalation:

A 3.5% escalation rate has been applied to activities outside of the 2016/2017 construction season.

Summary of results:

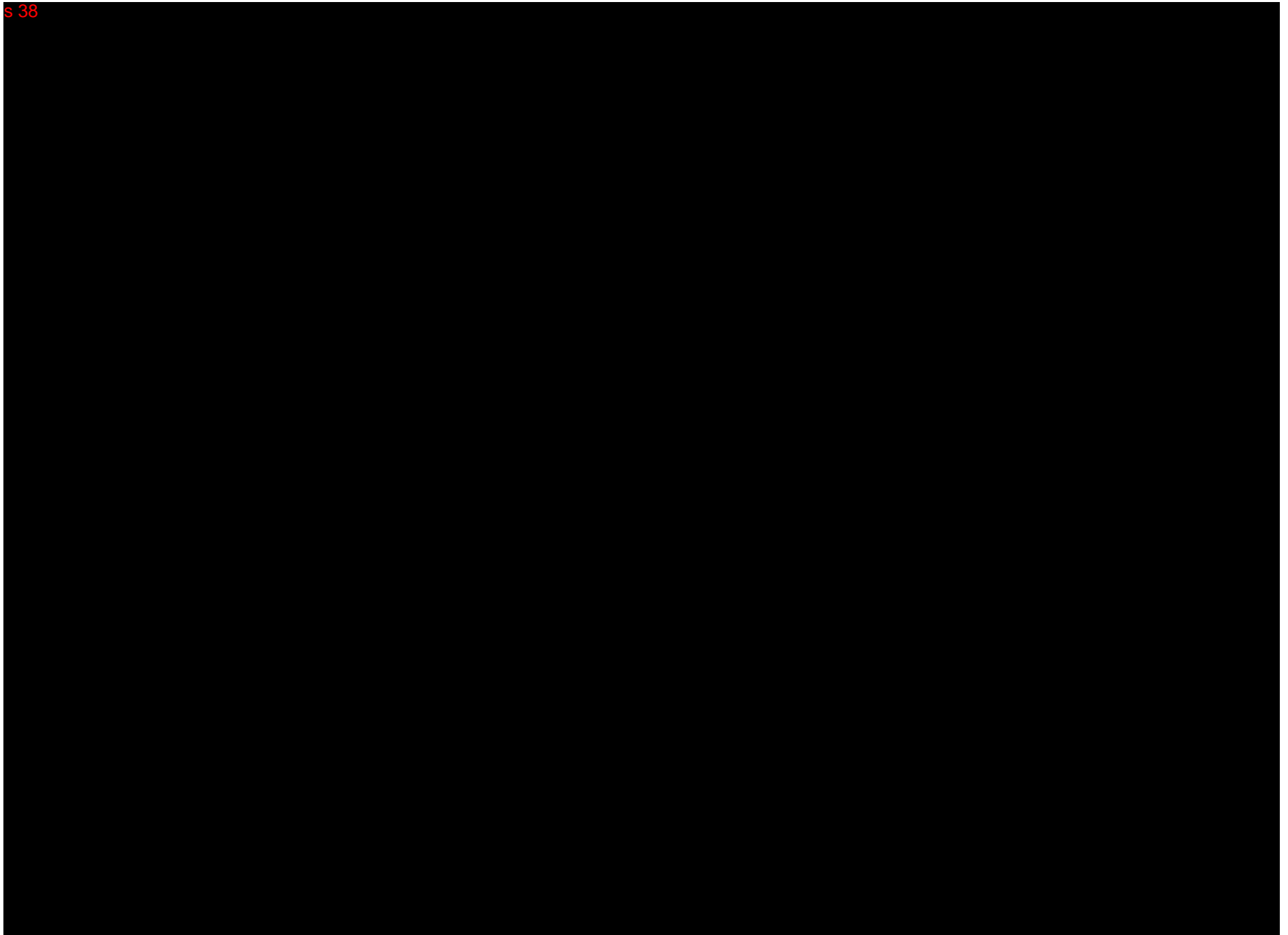
Base Estimate (Owners Cost + Construction Cost)	\$ 1,240,000.00
Inherent risk allowance	\$ 100,267
Contingent risk allowance	\$ 112,528
Base Estimate + Contingency (Inherent + Contingent)	\$ 1,452,795
Total contingency % above base estimate	17%
Escalation (Nominal - applied to base case + contingency)	\$ 142,895
Total Out turn	\$ 1,600,000

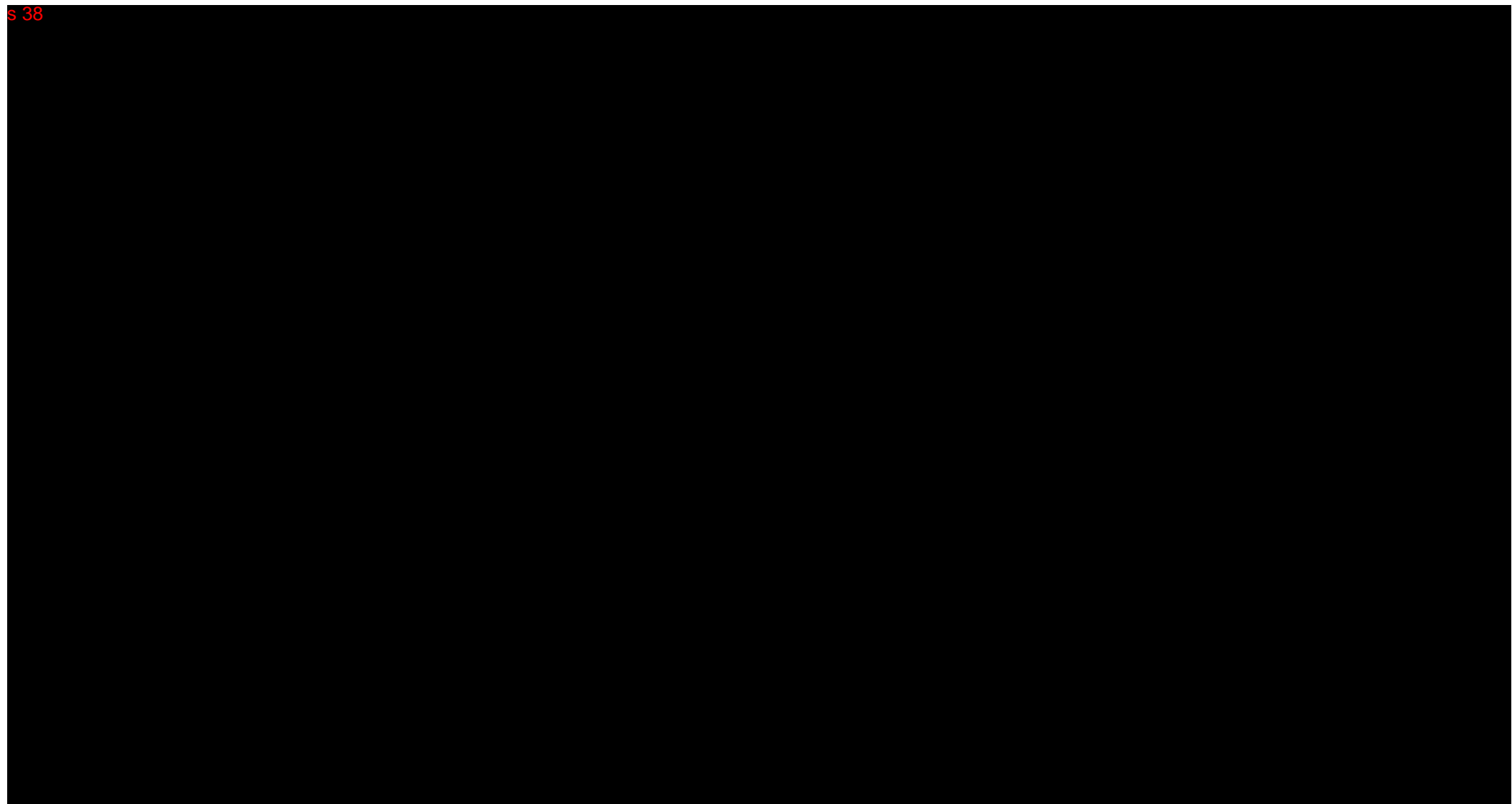
Total Out turn Cost	\$ 1,600,000
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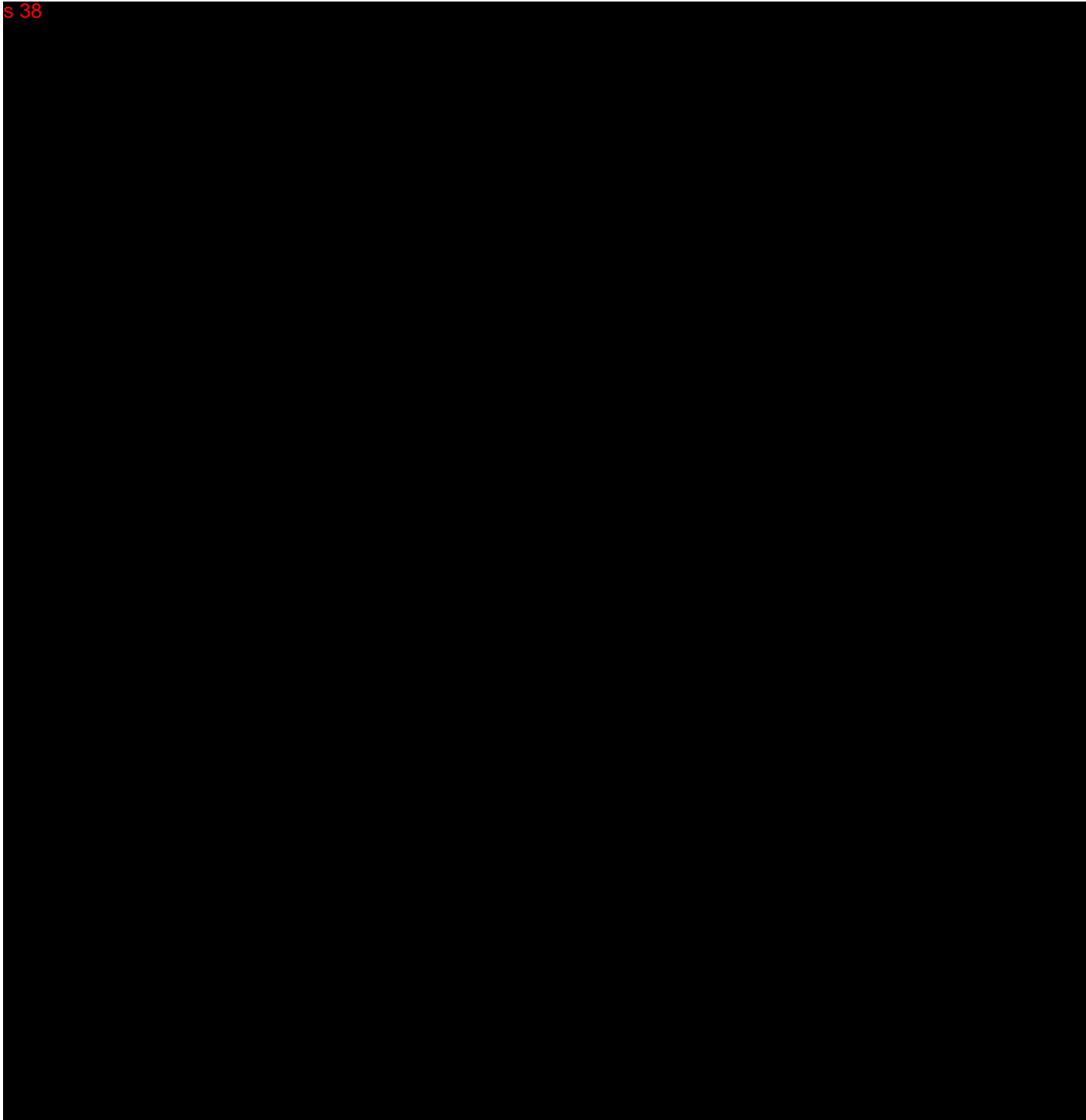
Overall Cash Flow

	Financial Year			
P50 Cash Flow	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 90,000	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 120,000	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 1,030,000
Inherent Risk	\$ -	\$ 10,027	\$ 40,107	\$ 50,134
Contingent Risk	\$ -	\$ 11,253	\$ 22,506	\$ 78,769
Escalation costs (nominal)	\$ -	\$ 3,895	\$ 13,007	\$ 125,993
Sub-Total (annual)	\$ -	\$ 120,000	\$ 200,000	\$ 1,280,000
Accumulative Total	\$ -	\$ 120,000	\$ 320,000	\$ 1,600,000

	Financial Year			
P90 Cash Flow	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020
Project Identification and Scoping	\$ -	\$ 90,000.00	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 120,000.00	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 1,030,000.00
Inherent Risk	\$ -	\$ 21,251.63	\$ 85,006.53	\$ 106,258.17
Contingent Risk	\$ -	\$ 20,303.99	\$ 40,607.99	\$ 142,127.96
Escalation costs (nominal)	\$ -	\$ 4,604.45	\$ 17,493.89	\$ 138,983.42
Sub-Total (annual)	\$ -	\$ 140,000	\$ 260,000	\$ 1,420,000
Accumulative Total	\$ -	\$ 140,000	\$ 400,000	\$ 1,820,000







Contract Value Estimations for:

Project Name	Macquarie Street Bus Lane - Project 2 - Alternative 'B'	
Brief reference number	2220-1-39	Project completion:
State Growth Project Number	054758/1	2020 (assumed)
Consultant Project number	IS174300	
Date	20/12/16	
Assumptions		
CPI	2.0%	
Real escalation	1.5%	
Nominal escalation	3.5%	

Macquarie Street Bus Lane - Project 2 - Alternative 'B'

Project Cash Flow

Totals

P50 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping		\$ 90,000			
Project Development			\$ 120,000		
Project Delivery (incl. CA)				\$ 1,030,000	
Inherent Risk		\$ 10,027	\$ 40,107	\$ 50,133.51	
Contingent Risk		\$ 11,253	\$ 22,506	\$ 78,769.40	
Escalation costs (nominal)		\$ 3,895	\$ 13,007	\$ 125,993	
Sub-Total (annual)	\$ -	\$ 120,000	\$ 200,000	\$ 1,280,000	\$ -
Accumulative Total	\$ -	\$ 120,000	\$ 320,000	\$ 1,600,000	\$ -

P90 Cash Flow	Financial Year				
	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Project Identification and Scoping	\$ -	\$ 90,000	\$ -	\$ -	\$ -
Project Development	\$ -	\$ -	\$ 120,000	\$ -	\$ -
Project Delivery (incl. CA)	\$ -	\$ -	\$ -	\$ 1,030,000	\$ -
Inherent Risk		\$ 21,252	\$ 85,007	\$ 106,258.17	
Contingent Risk		\$ 20,304	\$ 40,608	\$ 142,127.96	
Escalation costs (nominal)		\$ 4,604	\$ 17,494	\$ 138,983	
Sub-Total (annual)	\$ -	\$ 140,000	\$ 260,000	\$ 1,420,000	\$ -
Accumulative Total	\$ -	\$ 140,000	\$ 400,000	\$ 1,820,000	\$ -

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Risk Likelihood Evaluation Criteria

The likelihood that a risk event will occur is based on the following contributing factors:

- Complexity – evaluated in the context of the complexity of a process or activity
- Susceptibility – evaluated in the context of people, processes, stakeholders involved or the rate of change within industry.
- History – evaluated in the context of the history of previous incidents directly within the organisation, industry or more broadly.

Some events happen once in a lifetime. Other can happen almost every day. Analysing risk requires an assessment of their frequency of occurrence. This following table provides broad descriptions used to support likelihood ratings. The occurrence will be evaluated without reference to known management practices since these are at a later stage of the risk assessment process.

RISK ASSESSMENT MATRIX		LIKELIHOOD (Refer to Definitions right)				
		A. Rare	B. Unlikely	C. Possible	D. Likely	E. Almost Certain
CONSEQUENCES (Refer to Definitions Overleaf)	5 - Catastrophic	M	H	H	VH	VH
	4 - Major	M	M	H	H	VH
	3 - Moderate	L	M	M	H	H
	2 - Minor	L	L	M	M	H
	1 - Notable	L	L	L	M	M

Risk Action Levels	
VH - Very High	<ul style="list-style-type: none"> Minister/Secretary decision/direction may be required Provide memorandum to Manager Project Services Include in Project Monthly Report
H - High	<ul style="list-style-type: none"> Take immediate action to further control the risk Include in Project Monthly Report Consider providing supplementary advice to Manager Project Services
M - Medium	<ul style="list-style-type: none"> Proactively manage risks Report to Project Steering Committee through risk register Review for improvement opportunities
L - Low	<ul style="list-style-type: none"> Monitor risk, reduce if practicable

Likelihood Definitions	
What is the likelihood of the selected consequences occurring?	
Likelihood Rating	Description
5 - Almost Certain	<ul style="list-style-type: none"> Over 90% probability; or "Happens Often"; or "Unlikely that it won't happen"
4 - Likely	<ul style="list-style-type: none"> Greater than 50% probability; or "Could easily happen"
3 - Possible	<ul style="list-style-type: none"> Greater than 10% probability; or "Could happen, has occurred before".
2 - Unlikely	<ul style="list-style-type: none"> Greater than 1% probability; or "Hasn't happened yet but could".
1 - Rare	<ul style="list-style-type: none"> Less than 1% probability; or Conceivable, but only as a result of combination of unusual events.

Risk Consequence Evaluation Criteria

In the context of the risk assessment, risks are assessed in terms of their impact on the achievement of business strategies and operational outcomes. Risk evaluation criteria may be based on operational, technical, financial, legal, social, environmental or other criteria. Each consequence can be rated, in terms of its severity, from notable to catastrophic as follows:

Consequence Definitions – What are the likely consequences in the event of a failure?							
Rating	Community	Environment & Heritage	Legal & Compliance	Reputation	Management Impact	Financial Impact	Program Impact
5 - Catastrophic	<ul style="list-style-type: none"> Complete loss of trust by affected community leading to social unrest & outrage 	<ul style="list-style-type: none"> Unacceptable impact on environmental values with high significance Unacceptable impact on heritage values with high significance 	<ul style="list-style-type: none"> Major litigation with significant damages costs Potential prosecution by authorities Court or NGO¹ imposed fine 	<ul style="list-style-type: none"> Reputation and standing of DIER affected locally, national and internationally Catastrophic loss of confidence by key stakeholders 	<ul style="list-style-type: none"> Requires management at Ministerial level Requires new or amended Legislation 	<ul style="list-style-type: none"> Project unable to proceed Loss of Federal funding Election commitment projects cancelled or deferred to balance budget 	<ul style="list-style-type: none"> Project is never able to proceed
4 - Major	<ul style="list-style-type: none"> Prolonged community outrage 	<ul style="list-style-type: none"> Serious long term environmental impact Partial loss of significant heritage values 	<ul style="list-style-type: none"> Major litigation Class action Possibility of custodial sentence for Senior Management 	<ul style="list-style-type: none"> Major embarrassment for DIER locally and nationally Significant loss of confidence of key stakeholders 	<ul style="list-style-type: none"> Critical event that requires considerable Secretarial and General Manager time to manage over many months 	<ul style="list-style-type: none"> Additional funding required from Federal Government at project level Additional funding required from State to balance program budget Other projects cancelled or deferred (Internal budget reallocation) 	<ul style="list-style-type: none"> Project is delayed indefinitely
3 - Moderate	<ul style="list-style-type: none"> Sustained community disruption leading to actions requiring continual management attention 	<ul style="list-style-type: none"> Moderate impact but not affecting ecosystem function Moderate impact on heritage values 	<ul style="list-style-type: none"> Major breach of regulation with punitive fine Significant litigation involving many weeks of senior management time 	<ul style="list-style-type: none"> Community and stakeholder concern on a number of issues suggesting an inability to deliver results 	<ul style="list-style-type: none"> Significant event that can be managed with careful management attention Will take some Branch-level Management time over several weeks 	<ul style="list-style-type: none"> Scope reduced on this project Internal budget reallocation Scope reduced on other projects in the program 	<ul style="list-style-type: none"> Critical timeframe for delivery cannot be met
2 - Minor	<ul style="list-style-type: none"> Short term community outrage or sustained but localised community disruption 	<ul style="list-style-type: none"> Minor impacts on environmental values Minor impacts on heritage values 	<ul style="list-style-type: none"> Serious breach of regulation with investigation or report to authority with prosecution and/or moderate fine possible 	<ul style="list-style-type: none"> Issues raised by community and stakeholders Negative perception of DIER in parts of the community or with key stakeholders 	<ul style="list-style-type: none"> Will require Group Manager attention over several days 	<ul style="list-style-type: none"> Scope reduced on this project Internal budget reallocation 	<ul style="list-style-type: none"> Moderate delay against non-critical timeframe for delivery
1 - Notable	<ul style="list-style-type: none"> Insignificant localised community disruption 	<ul style="list-style-type: none"> No impact values 	<ul style="list-style-type: none"> Minor breach of regulation 	<ul style="list-style-type: none"> Some isolated impact on DIER reputation at any level 	<ul style="list-style-type: none"> Impact of event absorbed in normal management activity 	<ul style="list-style-type: none"> Use of contingency funds is required 	<ul style="list-style-type: none"> Minor delay to program

¹ Non Government Organisation