Jacobs

Options Cost Estimate Report

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Medway Council

Medway Local Plan – M2 Jct 1 (Southbound) Merge 30 October 2025





Options Cost Estimate Report

Client name: Medway Council

Project name: Medway Local Plan – M2 Jct 1 (Southbound) Merge

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Appendix A. Register of Design Information

Appendix B. Cost Estimate

1. Project Summary

This Options Estimate Report Rev.O provides an estimate for the proposed infrastructure improvement and realignment of the merge between the Hasted Road (A289) southbound slip road and Junction 1 of the M2 Motorway. There are two design options currently under consideration as follows:-

- Option 1: Hasted Road (A289) to M2 Junction 1 Merge (Southbound) Scheme C Improving The Merge.
- Option 2: Hasted Road (A289) to M2 Junction 1 Merge (Southbound) Scheme D Improving The Merge and Realigning The M2.

A summary of the costs are as follows; however this report should be read in full to understand the basis of the costs, assumptions and exclusions, with no excerpts to be representative of the findings:

Table 1-1. Cost Summary

Sum	mary	Option 1	Option 2 £
High	way Works		
01	Preliminaries	551,000	1,907,000
02	Roadworks	835,000	3,317,000
03	Structures (Bridges, Viaducts, etc.)	N/A	N/A
04	Structures (Retaining walls, Culverts, Subways, etc.)	36,000	36,000
05	Miscellaneous Works	N/A	N/A
06	Accommodation Works	Excluded	Excluded
07	Facilitating Works	Excluded	Excluded
	Sub-Total (A)	1,422,000	5,260,000
Statu	tory Undertakers Works		
08	Statutory Undertakers Works	355,000	1,315,000
	Sub-Total (B)	1,777,000	6,575,000
Proje	ct / Design Team Fees		
09	Project / Design Team Fees	426,000	1,578,000
Othe	r Development / Project Costs		
10	Other Development / Project Costs	142,000	526,000
	Sub-Total (C)	2,345,000	8,679,000
Inflat	ion		
11	Inflation	Excluded	Excluded
	Sub-Total (D)	2,345,000	8,679,000
Risk			
12	Risk	938,000	3,471,000
	Total (Excl. VAT)	3,283,000	12,150,000

Note: Costs rounded to the nearest thousand pounds. Base date of this estimate is 4Q 2025, and has an expected accuracy level of -20% to +30%. Details of the estimate have been included in Appendix B of this report.

2. Methodology

The methodology detailed below has been used to prepare this cost estimate.

Figure 2-1. Methodology



Scope: The scope of works to be included in this estimate has been agreed with the Medway Council via Jacobs PM & designers and is defined by the design information included in Appendix A of this report. Section 3 of this report details those elements of the works that are included within each section of the estimate, as well as any assumptions and exclusions that have been made.

Quantification: Section 4 of this report details the methods used to quantify the various elements of the scope of works and identifies any industry Standard Methods of Measurement or Work Breakdown Structures that have been used.

Basis of Cost Estimate: The base date of the estimate, location factors, pricing methods and expected accuracy ranges are included in Section 5 of this report.

Check, Review & Approve: A line by line check of the estimate is carried out by an experienced surveyor prior to final high level review by an estimating manager and prior to approval by the Project Manager. This process is undertaken in accordance with Jacobs UK Ltd Business Management System – Work Instruction WI-3100.

3. Scope

This cost estimate has been based upon the design information listed in Appendix A of this report.

3.1 Highway Works

3.1.1 Preliminaries

The cost of Preliminaries includes Main Contractor's cost items such as:

- Project specific management and staff.
- Visiting management and staff.
- Support costs; staff travel, accommodation and subsistence.
- Site accommodation, offices, canteens, drying rooms, toilets and washrooms, laboratories, stores, compounds and the like.
- Temporary works, bases & foundations, connections to services, temporary site roads and paths, temporary drainage, haul roads, barriers and scaffolding.
- Traffic safety and management, temporary diversions for traffic, recovery vehicles, temporary CCTV and temporary speed camera systems.
- Furniture and equipment, IT systems, radio & telecommunications systems, sundries and consumables.
- Temporary water, gas, and electric supplies.
- Cleaning site accommodation and waste management.
- Security staff and equipment, hoardings, fences, gates and information boards.
- Safety and environmental protection, PPE, fire points, first aiders and traffic marshals.
- Contractor's surveys, inspection and monitoring, setting out, protection of the works, samples and testing.
- Mechanical plant, cranes, hoists, access plant, concrete plant, generators and compressors, and small tools.
 Site records, testing and commissioning, handover, post completion services.
- Insurances, bonds, quarantees and warranties.

3.1.2 Roadworks

The cost of the following Roadworks are included in this estimate:

- Roadworks General
 - Site Clearance, Road Restraint Systems and Earthworks.
- Main carriageway, Interchanges and Side Roads
 - Drainage & Service Ducts, Pavements, and Kerbs, Footways & Paved Areas.
- Signs, Motorway Communications and Lighting
 - Traffic Signs & Road Markings, Road Lighting Columns, Brackets & CCTV Masts, Electrical Work for Road Lighting & Traffic Signs.
- Landscape and Ecology

3.1.3 Structures

The cost of the following Structures are included in this estimate:

• Low retaining wall in between the merge of A289 Slip Road and M2 motorway.

3.1.4 Miscellaneous Works

Miscellaneous Works are excluded from this estimate.

3.1.5 Accommodation Works

Accommodation Works (e.g. alterations to boundary fencing, accesses and driveways) are excluded from this estimate.

3.1.6 Facilitating Works

Facilitating Works are excluded from this estimate as detailed in Section 3.9 below.

3.2 Statutory Undertakers Works

The cost of the following Statutory Undertakers Works are included in this estimate:

Temporary and permanent diversion works including diversion of statutory undertakers services (e.g. water, electricity, gas and communications).

3.3 Project / Design Team Fees

The cost of the following Project / Design Team Fees are included in this estimate:

- Client's project team and design consultant's fees.
- Client's construction supervision costs.

All other Project / Design Team Fees (e.g. Main Contractor's design costs) are excluded from this estimate as detailed in Section 3.9 below

3.4 Other Development / Project Costs

The cost of the following Other Development / Project Costs are included in this estimate:

Client contract administration costs.

All other Development / Project Costs (e.g. land costs, finance costs, etc.) are excluded from this estimate as detailed in Section 3.9 below.

3.5 Inflation

Tender Inflation and Construction Inflation are excluded from this cost estimate as detailed in Section 3.9 below.

3.6 Risk

3.6.1 Risk (Design, Construction & Client Risk)

A percentage allowance has been included in this estimate for design development risks, construction risks, Client change risks and Client other risks as detailed in Section 4.6 below.

3.6.2 Optimism Bias

Optimism Bias is excluded from this estimate as detailed in Section 3.9 below.

3.7 Value Added Tax (VAT)

Value Added Tax (VAT) is excluded from this cost estimate as detailed in Section 3.9 below.

3.8 Assumptions

The following assumptions have been made in the preparation of this cost estimate:

- Construction Works will generally be undertaken during normal working hours unless specifically identified
 as being undertaken out of normal working hours (evenings and weekends).
- Main Contractor's access to the site is unrestricted.
- The works will be completed as one continuous project.

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- Existing site conditions, extent of works and level of specification are as set out in the information included in Appendix A.
- An allowance for take up or down items has been included in this estimate.
- An allowance for site clearance has been included in the estimate is based on the extent of the proposed works area.
- Allowance has been included in the estimate for replacement of any affected items by the proposed works, such as road gullies, safety barriers and street lighting units etc.
- Allowance of 5.00 metre long 150mm diameter drain connecting each new gully to existing drainage system is included in this estimate.
- The earthwork quantities are calculated from the proposed pavement construction depths.
- No requirement to adjusted the existing height/level of the carriageway.
- All excavated material is assumed to be unacceptable Class U1a.
- All excavated material is to be disposed off-site.
- An allowance of 5% of the total excavated volume for excavation and filling of soft spots has been included
 in this estimate.
- No allowance for capping is included in the estimate for new carriageway construction.
- Full depth carriageway construction 40mm surface course, 60mm binder course, 225mm base course and 250mm sub-base.
- An allowance has been included in the estimate for low retaining wall between the merge of A289 slip road and M2 motorway.
- Resurfacing carriageway construction 40mm surface course and 60mm binder course.
- Allowance for 25mm thick regulating course to resurfacing carriageway area.
- An allowance has been included for night/ restricted working for works to be carried out on A289 slip road.
- An allowance has been included for traffic signs based on area of carriageway.
- An allowance has been included for road markings based on area of carriageway.
- An allowance has been included in the estimate for replacing of any road lighting columns affected by the proposed works with new.
- An allowance for electrical works for lighting columns based on the number of new lighting columns has been included in the estimate.
- No allowance is included in the estimate for works to existing bridges.

3.9 Exclusions

The following items are excluded from this cost estimate:

- Accommodation Works
 - Accommodation Works (e.g. alterations to boundary fencing, accesses and driveways).
- Facilitating Works
 - Toxic / hazardous material removal including removal of toxic or hazardous parts of building fabric and hazardous materials or components from existing services installations.
 - Removal and/or treatment of contaminated ground material.
 - Unexploded ordnance removal / clearance.
 - Eradication of invasive plant growth.
 - Ground gas venting measures including gas proof membranes, perforated collection pipes, proprietary gas dispersal fin layers, radon sumps and vent pipes.
 - Soil stabilisation measures including cement or chemical grouting, electrochemical stabilisation, sand stowing, soil nailing, ground anchors, compacting, and freezing of groundwater and subsoil.
 - Site dewatering and pumping to lower the ground water level of the site, including forming well points, filling, drain tubes and ring mains, sumps, pumps and pumping, off-site disposal of water, running costs and attendance.
 - Extraordinary site investigation works including archaeological investigation, reptile / wildlife mitigation measures and other site investigation works.
- Project / Design Team Fees
 - Main Contractor's design fees.
 - Main Contractor's pre-construction fees including associated management and staff, specialist support services fees, temporary accommodation, services and facilities, charges, overheads and profit.

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Other Development / Project Costs

- Compensation for permanent land take; statutory loss payments; possible disturbance claims; potential Part 1 claims and professional fees incurred by the claimants.
- Client finance costs, costs in connection with funding of project.
- Fees, planning fees, building control fees, oversailing fees, fees in connection with party wall awards, fees
 in connection with rights of light agreements, fees in connection with other agreements between the
 Client and neighbours to facilitate the project, other fees in connection with licences, permits and
 agreements.
- Charges, rates on temporary accommodation, licences in connection with hoardings, scaffolding, gantries and the like and licences in connection with crossovers, parking permits, parking bay suspension and the like.
- Planning contributions, direct financial contributions in connection with planning consent, and environmental improvement works.
- Insurances other than Main Contractor's works insurance.
- Decanting and relocation costs, temporary relocation costs, temporary accommodation, rents and other running costs.
- Fixtures, fittings and equipment other than that included in design.
- Marketing costs, public relations events, site based advertising and public relations literature.

Risk

- Department for Transport or His Majesty's Treasury provision for Optimism Bias.

Inflation

- Tender & Construction Inflation from estimate base date.

Taxation & Grants

- Capital allowances.
- Grants.
- Value Added Tax (VAT).

4. Quantification

4.1 Highway Works

The Highways Works element of this estimate have wherever possible been quantified in accordance with the Manual of Contract Documents for Highway Works, Volume 4, Bills of Quantities for Highway Works published by the Highways Agency (now National Highways). The work breakdown structure adopted is based on Table 1 included in Section 1, Chapter III of the Method of Measurement for Highways Works (MMHW). Where items of work cannot be quantified either a percentage or sum allowance has been included.

The detailed estimate is included in Appendix B which has been prepared using the RIB iTwo CostX Estimating Software. Quantities are either directly entered into take off sheets or measured electronically.

4.1.1 Preliminaries

An allowance of 35% on the cost of Roadworks and Structures has been included for Main Contractor's Preliminaries.

In addition, an allowance of cost/month has been include for Traffic Management for option 1 and option 2.

- In option 1, £246,000 for a assumed construction duration of 7 months. [e.g. 5 months on full TM @ £41,000 plus 2 months on half TM @ £20,500]
- In option 2, £733,100 for a assumed construction duration of 12 months. [e.g. 10 months on full TM @ £66,650 plus 2 months on half TM @ £33,300]

4.1.2 Roadworks

Roadworks have been quantified and itemised in accordance with the relevant series of the MMHW and the cost estimated on a unit cost basis.

4.1.3 Structures

Structures have been quantified and itemised using an approximate estimating technique based on the length of structure to be constructed and the cost estimated on a unit cost basis.

4.1.4 Miscellaneous Works

Excluded from this estimate.

4.1.5 Accommodation Works

Excluded from this estimate.

4.1.6 Facilitating Works

Excluded from this estimate.

4.2 Statutory Undertaker Works

An allowance of 25% on the cost of Highway Works and has been included for Statutory Undertaker Works.

4.3 Project / Design Team Fees

An allowance of 20% on the cost of Highway Works and has been included for Client's project / design team fees.

In addition, an allowance of 10% on the cost of Highway Works has been included for Client's construction management and supervision costs.

4.4 Other Development / Project Costs

An allowance of 10% on the cost of Highway Works has been included for Other Development / Project Costs.

4.5 Inflation

Excluded from this estimate.

4.6 Risk

4.6.1 Risk (Design, Construction & Client Risk)

Section 3.1.1 of "The Department for Transport Guidance, TAG Unit A1.2, Scheme Costs, dated May 2025" states that a Quantified Risk Assessment (QRA) is required for all transport projects with a cost greater than £7m and is encouraged for smaller schemes.

In the absence of a QRA an allowance of 40% on the cost of Highway Works, Statutory Undertakers Works, Project / Design Team Fees and Other Development / Project Costs has been included in this estimate for design development risks, construction risks, Client change risks and Client other risks in accordance with the ranges recommended by Jacobs below for projects at different stages of development.

Table 4-1. Typical Risk Range

National Highways PCF Stage (or equivalent)	Estimate Type	Risk
0 & 1: Strategy & Option Identification	Order of Magnitude	40 - 60%
1 & 2: Option Identification & Selection	Options Estimate	25 - 40%
3: Preliminary Design	Preliminary / Initial Estimate	20 - 25%
4: Statutory Procedures and Powers	Developing Estimate	15 - 20%
5: Construction Preparation	Final Estimate	10 – 15%
6: Construction	Cost to Complete Estimate	5 - 10%

4.6.2 Optimism Bias

Section 3.2.24 of "The Department for Transport Guidance, TAG Unit A1.2, Scheme Costs, dated May 2025" states that Optimism Bias uplifts are only required for the economic case of a proposal, hence Optimism Bias has not been included within the cost estimate.

4.7 Value Added Tax (VAT)

Excluded from this estimate.

5. Basis of Cost Estimate

5.1 Base Date

The base date of the estimate is 4th Quarter 2025 (4Q 2025).

5.2 Region

The works are located in the South East region of the United Kingdom of Great Britain and Northern Ireland.

Figure 5-1. Regional Map



5.3 Pricing

5.3.1 General

The rates and prices used are:

- in pounds sterling.
- reflect construction projects of a similar size and nature.
- inclusive of profit margins and contributions to head office overheads.
- inclusive of all Plant, Labour and Materials.

5.3.2 Percentage Allowances

Percentage allowances have been included for:

- Main Contractor's Preliminaries.
- Night time / restricted working allowances.
- Statutory Undertakers Works.
- Client Project & Design Team Fees.
- Client Construction Management & Supervision Costs.
- Client Contract Administration Costs.
- Risk.

5.3.3 Approximate Estimating Rates

The following elements have been priced using approximate estimating rates:

- Traffic Management.
- Site Clearance.
- Traffic Signs and Road Marking.
- Electrical Work associated with Road Lighting and Traffic Signs.
- Structure retaining walls based on length of structure.

5.3.4 Unit Rates

The following elements have been priced using unit rates:

- Road Restraint Systems.
- Drainage & Service Ducts.
- Earthworks.
- Pavements.
- Kerbs, Footways & Paved Areas.
- Road Lighting Columns, Brackets & CCTV Masts.
- Landscaping and Ecology.

5.3.5 Resource Costs

No items have been priced using resource costs.

5.4 Programme

No programme has been provided.

5.5 Range of Accuracy

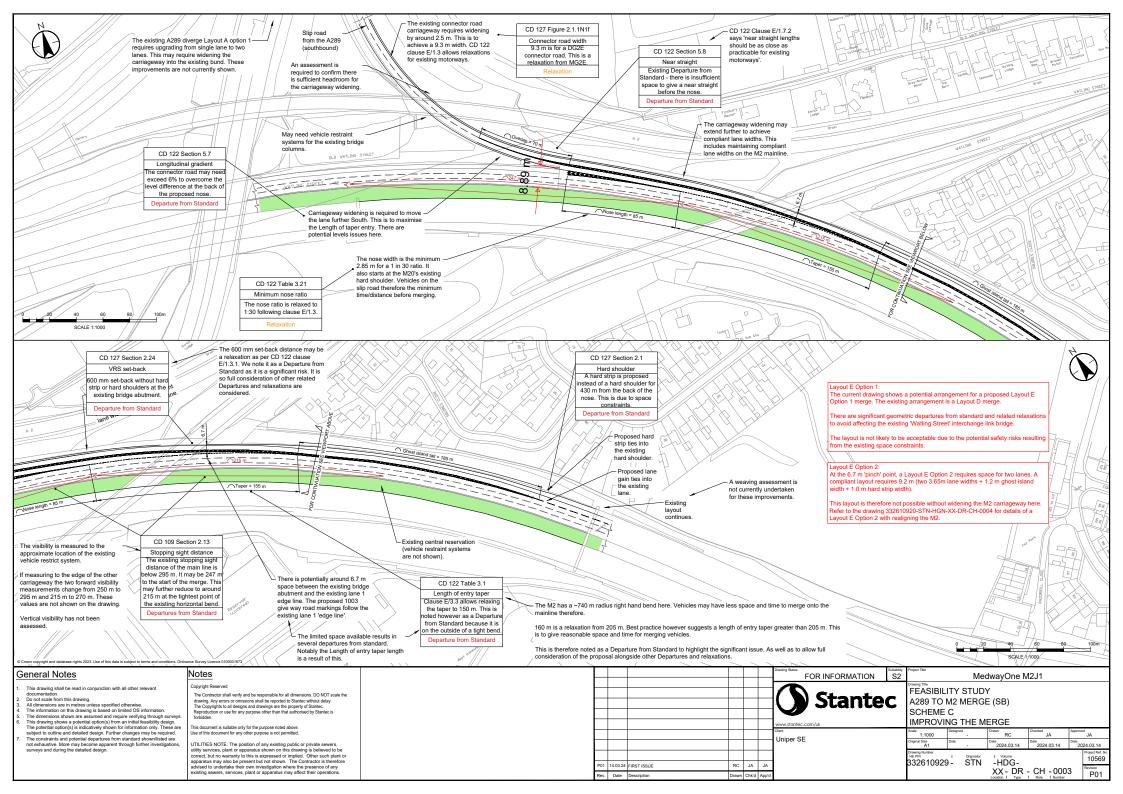
A cost estimate produced at this stage, based on the available information, will have an expected accuracy level of -20% to +30%.

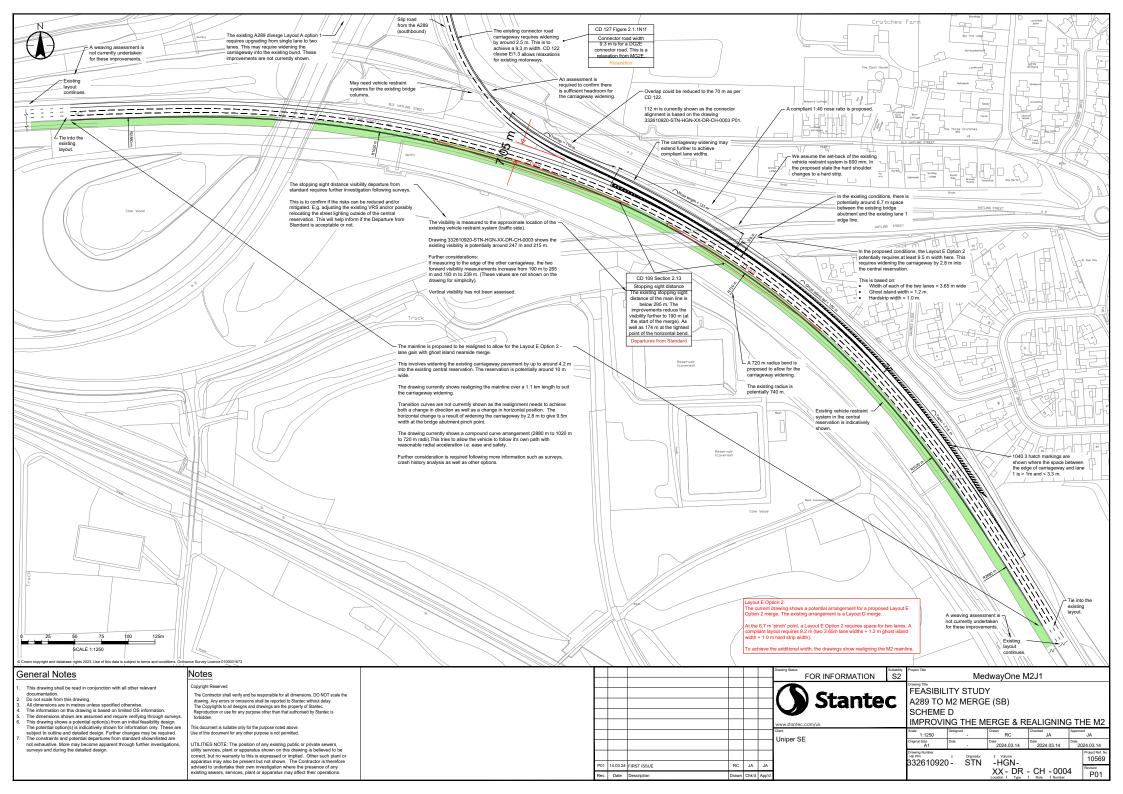
Table 5-1. Range of Accuracy

Estimate Class	Level of Project Definition	End Usage	Methodology	Expected Accuracy Range
Order of Magnitude	0% to 2%	Concept	Percentage Allowances / Approximate Estimating Rates	-30% to +50%
Options	1% to 15%	Study or Feasibility	Percentage Allowances / Approximate Estimating Rates	-20% to +30%
Preliminary / Initial	10% to 40%	Design Development, Budget Authorisation or Feasibility	Percentage Allowances / Approximate Estimating Rates / Unit Rates	-15% to +20%
Developing	30% to 75%	Control or Bid / Tender	Unit Rates / Resource Costs	-10% to +15%
Final	65% to 100%	Check Estimate or Bid / Tender	Unit Rates / Resource Costs	-5% to +10%

Appendix A. Register of Design Information

Document No.(s)	Rev	Document Title(s)	Status	Format
332610929-STN-HDG-XX- DR-CH-003	P01	FEASIBILITY STUDY A289 TO M2 MERGE (SB) SCHEME C IMPROVING THE MERGE	For Information	Pdf
332610920-STN-HGN-XX- DR-CH-004	P01	FEASIBILITY STUDY A289 TO M2 MERGE (SB) SCHEME D IMPROVING THE MERGE & REALIGNING THE M2	For Information	Pdf





Appendix B. Cost Estimate

There are two design options currently under consideration as follows:-

- Option 1: Hasted Road (A289) to M2 Junction 1 Merge (Southbound) Scheme C Improving The Merge.
- Option 2: Hasted Road (A289) to M2 Junction 1 Merge (Southbound) Scheme D Improving The Merge and Realigning The M2.

Sum	mary	Option 1	Option 2 £
Highw	vay Works		
01	Preliminaries	550,756	1,906,560
02	Roadworks	834,732	3,316,742
03	Structures (Bridges, Viaducts, etc.)	N/A	N/A
04	Structures (Retaining walls, Culverts, Subways, etc.)	36,000	36,000
05	Miscellaneous Works	N/A	N/A
06	Accommodation Works	Excluded	Excluded
07	Facilitating Works	Excluded	Excluded
	Sub-Total (A)	1,421,488	5,259,302
Statut	ory Undertakers Works		
08	Statutory Undertakers Works	355,372	1,314,826
	Sub-Total (B)	1,776,860	6,574,128
Projec	ct / Design Team Fees		
09	Project / Design Team Fees	426,446	1,577,791
Other	Development / Project Costs		
10	Other Development / Project Costs	142,149	525,930
	Sub-Total (C)	2,345,455	8,677,849
Inflati	on		
11	Inflation	Excluded	Excluded
	Sub-Total (D)	2,345,455	8,677,849
Risk			
12	Risk	938,182	3,471,139
	Total (Excl. VAT)	3,283,637	12,148,988

Note: Base date of this estimate is 4Q 2025, and has an expected accuracy level of -20% to +30%.



Ref	Description	Quantity	Unit	Rate (£)	Total (£)
01 Prelimina	ries	_			
01.01	Main Contractor Preliminaries				
01	Preliminaries	35	%	870,732.00	304,756
	Traffic Management				
02	Allowance for full Traffic Management	5	month	41,000.00	205,000
03	Allowance for half Traffic Management	2	month	20,500.00	41,000
	01 Preliminaries Subtotal				550,756
02 Roadwork	«S				
02.01	Roadworks General				
02.01.200	200 Site Clearance				
	Site Clearance				
01	General Site Clearance	0.568	ha	15,000.00	8,520
	Take Up or Down and Set Aside for Re-use or Remove to Store or Tip off Site				
02	Allowance for take up or down and remove to tip off site items	1	item	40,000.00	40,000
	Restricted / Night Working				
03	Allowance for restricted / night working	20	%	48,520.00	9,700
	Site Clearance Subtotal				58,220
02.01.300	300 Fencing				
	None				
	Fencing Subtotal				-
02.01.400	400 Road Restraint Systems (Vehicle and Pedestrian)				
	Safety Barrier				
01	Allowance for new safety barrier to align with the new kerb line	268	m	50.00	13,400
02	Allowance for new terminal	2	no	2,000.00	4,000
	Restricted / Night Working				
03	Allowance for restricted / night working	20	%	17,400.00	3,500
	Road Restraint Systems (Vehicle and Pedestrian) Subtotal				20,900
<u>02.01.600</u>	600 Earthworks				
	Excavation				
01	Excavation of unacceptable material U1A in cutting and other excavation	280	m3	34.00	9,520
	Excavation in Hard Material				
02	Extra over excavation for excavation in Hard Material	23	m3	65.00	1,495
	Disposal of Material				
03	Disposal of unacceptable material Class U1A	280	m3	45.00	12,600
	Imported Fill				



Ref	Description	Quantity	Unit	Rate (£)	Total (£)
02 Roadworks		_			(Continued)
04	Imported acceptable material Class 5B	7	m3	75.00	525
	Soft Spots and Other Voids				
05	Excavation of soft spots and other voids	14	m3	90.00	1,260
06	Filling of soft spots and other voids	14	m3	90.00	1,260
	Disused Sewers, Drains, Cables, Ducts, Pipelines and the Like Occurring at Formation or Sub-formation Level; Disused Basements, Cellars and the Like and Gullies				
07	Removal of disused gully 450mm internal diameter	3	no	650.00	1,950
	Topsoiling and Storage of Topsoil				
08	Topsoiling average 300mm thick	21	m2	6.50	137
	Completion of formation and sub-formation				
09	Completion of formation on material other than Class 1C, 6B or rock in cuttings	411	m2	2.00	822
	Restricted / Night Working				
10	Allowance for restricted / night working	20	%	29,568.50	5,900
	Earthworks Subtotal				35,469
02.02 to 02.04	Main Carriageway, Interchanges and Side Roads				
02.02to04.500	500 Drainage and Service Ducts				
	<u>Drains and Service Ducts</u>				
01	Gully pipes (size 150mm dia) (5m per gully)	15	m	150.00	2,250
	Connections				
02	Connection of 150mm internal diameter pipe to existing drain or existing piped culvert depth to invert not exceeding 2 metres (gully pipes)	3	no	460.00	1,380
	Chambers and Gullies				
03	Precast concrete trapped gully with existing D400 grating and frame	3	no	950.00	2,850
	Renewal, Raising or Lowering of Covers and Gratings on Existing Chambers and Gullies				
04	Allowance for raising or lowering the level of covers and frames on existing chambers	1	no	450.00	450
	Excavation in Hard Material				
05	Extra over excavation for excavation in hard material in drainage	4	m3	65.00	260
	Cleaning Existing Drainage Systems				
06	Allowance for cleaning existing piped drainage system	1	item	5,000.00	5,000
	Restricted / Night Working				
07	Allowance for restricted / night working	20	%	12,190.00	2,400
	Drainage and Service Ducts Subtotal				14,590
22 22 24 == :					
02.02to04.700	700 Pavements				
	Sub-base				



Ref	Description	Quantity	Unit	Rate (£)	Total (£)
02 Roadworks					(Continued)
01	Type 1 unbound mixture sub-base in carriageway, hardshoulder and hardstrip (250mm thick)	103	m3	85.00	8,755
	<u>Pavement - Full Depth</u>				
02	AC 32 HDM 40/60 design base 225mm thick in carriageway, hardshoulder and hardstrip	411	m2	60.00	24,660
03	AC 20 HDM 40/60 binder course 60mm thick in carriageway, hardshoulder and hardstrip	411	m2	27.50	11,303
04	TSCS 0/10 surface course 40mm thick in carriageway, hardshoulder and hardstrip	411	m2	26.00	10,686
	Pavement - Resurfacing				
05	AC 20 HDM 40/60 binder course 60mm thick in carriageway, hardshoulder and hardstrip	5,199	m2	27.50	142,973
06	TSCS 0/10 surface course 40mm thick in carriageway, hardshoulder and hardstrip	5,199	m2	26.00	135,174
	<u>Pavement – Tie In</u>				
07	AC 32 HDM 40/60 design base 225mm thick in carriageway, hardshoulder and hardstrip	31	m2	60.00	1,860
	Regulating Course				
08	AC 32 HDM 40/60 design base regulating course (average 25mm thick)	324.938	t	182.00	59,139
	Tack Coat				
09	Tack Coat	5,230	m2	1.50	7,845
	Cold Milling (Planing)				
10	Milling pavement 100mm thick (Tie In / Resurfacing)	5,199	m2	17.00	88,383
11	Milling pavement 325mm thick (Tie In)	31	m2	55.00	1,705
	Reinstatement of Paved Areas				
12	Reinstate paved areas with full depth pavement construction (excluding surface and binder courses)	11	m2	85.00	935
	Restricted / Night Working				
13	Allowance for restricted / night working	20	%	493,416.72	98,700
	Pavements Subtotal				592,117
02.02to04.110	1100 Kerbs, Footways and Paved Areas				
_	Kerbs, Channels, Edgings, Combined Drainage and Kerb Blocks and Linear Drainage Channel Systems				
	<u>Kerbs</u>				
01	Precast concrete kerb laid straight or curved	496	m	35.00	17,360
	Footways and Paved Areas				
02	Concrete verge comprising Type 1 unbound mixture sub-base 225mm thick and C16/20 low strength concrete (wet lean) 100mm thick surface course with brushed concrete finish	46	m2	72.00	3,312
	Restricted / Night Working				
03	Allowance for restricted / night working	20	%	20,671.85	4,100
	Kerbs, Footways and Paved Areas Subtotal				24,772



Ref	Description	Quantity	Unit	Rate (£)	Total (£)
02 Roadwork					(Continued)
02.05	Signs, Motorway Communications and Lighting				
02.05.1200	1200 Traffic Signs and Road Markings				
	Traffic Signs				
01	Allowance for traffic signs (based on area of pavement)	5,610	m2	2.50	14,025
	Road Markings				
02	Allowance for road markings	1	item	6,000.00	6,000
	Restricted / Night Working				
03	Allowance for restricted / night working	20	%	20,025.00	4,000
	Traffic Signs and Road Markings Subtotal				24,025
02.05.1300	1300 Road Lighting Columns				
	Road Lighting Columns and Brackets, Wall Mountings, CCTV Masts and Cantilever Masts				
01	Allowance for new road lighting column of 10 m nominal height with planted base and with single bracket arm with lantern	7	no	3,000.00	21,000
	Restricted / Night Working				
02	Allowance for restricted / night working	20	%	21,000.00	4,200
	Road Lighting Columns, Brackets and CCTV Masts Subtotal				25,200
02.05.1400	1400 Electrical Works for Road Lighting and Traffic Signs				
	Electrical works for Road Lighting				
01	Allowance electrical works for road lighting	7	no	2,500.00	17,500
	Electrical Works for Traffic Signs				
02	Allowance for Electrical Works for Traffic Signs				Included Elsewhere
	Sundry Electrical Works				
03	Allowance for Sundry Electrical Works (E.g electrical cabinets, feeder pillars etc.) (based on area of pavement)	1	Item	14,000.00	14,000
	Restricted / Night Working				
04	Allowance for restricted / night working	20	%	31,500.00	6,300
	Electrical Work for Road Lighting and Traffic Signs Subtotal				37,800
02.05.1500	1500 Motorway Communications				
	None				
	Motorway Communications Subtotal				-
02.06	Landscape and Ecology				
	Ground Preparation and Cultivation				
01	Vegetation clearance to surface sloping at 10o or less	496	m2	0.20	99
	to the horizontal				



Subpoil realizement to surface sloping at 100 or less to	Ref	Description	Quantity	Unit	Rate (£)	Total (£)
the horizontal final preparation of soils to surface sloping at 100 or less to the horizontal less to the horizontal final cultivation to surface sloping at 100 or less to the horizontal Seeding and Turfing	02 Roadwork	s				(Continued)
less to the horizontal final cultivation to surface sloping at 100 or less to the horizontal final cultivation to surface sloping at 100 or less to the horizontal seeding and Turfing for arise seeding by conventional sowing to surfaces sloping at 10 degrees or less to the horizontal Restricted / Night Working Restricted / Night Working Allowance for restricted / hight working Landscape and Ecology Subtotal O2 Roadworks Subtotal O3 Structures (Bridges, Viaducts, etc.) None O3 Structures (Bridges, Viaducts, etc.) None Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) Allowance for reinforced concrete retaining wall at merge of Wa and Slip road A289 Restricted / Night Working Allowance for reinforced concrete retaining wall at merge of Wa and Slip road A289 Restricted / Night Working Allowance for restricted / night working Subbrotal D5 Miscellaneous None O5 Miscellaneous Subtotal N/A D6 Accommodation Works None O7 Facilitating Works Subtotal D7 Facilitating Works Subtotal Statutory Undertakers Works Restrictory Undertakers works (% of 125 % 1,421,488.00 355,372	02		496	m2	0.60	298
horizontal Seeding and Turfing Grass seeding by conventional sowing to surfaces sloping at 10 degrees or less to the horizontal Restricted / Night Working Allowance for restricted / night working Daddworks Subtotal 303 Structures (Bridges, Viaducts, etc.) None O3 Structures (Bridges, Viaducts, etc.) None O3 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) 404 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) 405 Allowance for reinforced concrete retaining wall at merge of M2 and Slip road A289 Allowance for alteration on existing concrete slab at merge of M2 and Slip road A289 Restricted / Night Working 31 Allowance for restricted / night working 32 Allowance for restricted / night working 33 Allowance for restricted / night working 34 Allowance for restricted / night working 35 Allowance for restricted / night working 36,000 A Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) Subtotal D5 Miscellaneous None O6 Accommodation Works None O7 Facilitating Works None O7 Facilitating Works Subtotal D7 Facilitating Works Subtotal D8 Statutory Undertakers Works B8.01 Statutory Undertakers Works B1 Allowance for statutory undertakers works 06 of 4 1,421,488.00 Allowance for statutory undertakers works 06 of 4 1,421,488.00 Allowance for statutory undertakers works 06 of 4 1,421,488.00 Allowance for statutory undertakers works 06 of 4 1,421,488.00 Allowance for statutory undertakers works 06 of 4 1,421,488.00 Allowance for statutory undertakers works 06 of 4 1,421,488.00 Allowance for statutory undertakers works 06 of 4 1,421,488.00 Allowance for statutory undertakers works 06 of 4 1,421,488.00 Allowance for statutory undertakers works 06 of 4 1,421,488.00 Allowance for statutory undertakers works 06 of 4 1,421,488.00 Allowance for statutory undertakers works 06 of 4 1,421,488.00 Allowance for statutory undertakers works 06 of 4 1,421,488.00 Allowance for statutory undertakers works 06 of 4 1,421	03		496	m2	0.50	248
Crass seeding by conventional sowing to surfaces sloping at 10 degrees or less to the horizontal Restricted / Injight Working Allowance for restricted / night working 20 % 1,340.00 300 1,640 20 % 1,340.00 300 1,640 20 % 1,340.00 300 1,640 20 % 1,340.00 300 1,640 20 % 1,340.00 300 1,640 20 % 1,340.00 300 1,640 20 % 1,340.00 300 1,640 20 % 1,340.00 300 1,640 20 % 1,340.00 300 1,640 20 % 1,340.00 300 1,640 20 % 1,340.00 300 1,640 20 % 1,340.00 300 1,640 20 % 1,340.00 300 1,640 20 % 1,340.00 300 1,640 20 % 1,340.00 300 1,640 20 % 1,340.00 20 % 1,	04	Final cultivation to surface sloping at 10o or less to the horizontal	496	m2	0.60	298
sloping at 10 degrees or less to the horizontal Restricted / Night Working 06 Allowance for restricted / night working 1,640 02 Roadworks Subtotal 03 Structures (Bridges, Viaducts, etc.) None 03 Structures (Bridges, Viaducts, etc.) Subtotal 04 Structures (Bridges, Viaducts, etc.) Subtotal 05 Structures (Bridges, Viaducts, etc.) Subtotal 06 Action Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) 07 Allowance for reinforced concrete retaining wall at merge of M2 and Slip road A289 08 Restricted / Night Working 09 Restricted / Night Working 09 Restricted / Night Working 09 Allowance for restricted / night working 09 Astructures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) 09 Simiscellaneous 09 Miscellaneous 09 Miscellaneous Subtotal 00 Accommodation Works None 09 Accommodation Works None 09 Accommodation Works Subtotal 00 Facilitating Works None 00 Facilitating Works None 00 Facilitating Works Subtotal 01 Allowance for statutory undertakers Works 08 Allowance for statutory undertakers works (% of 25 % 1,421,488.00 355,372		Seeding and Turfing				
Allowance for restricted / night working 20 % 1,340.00 300 1,640	05	Grass seeding by conventional sowing to surfaces sloping at 10 degrees or less to the horizontal	496	m2	0.80	397
Landscape and Ecology Subtotal 1,640 02 Roadworks Subtotal 834,732 03 Structures (Bridges, Viaducts, etc.) None 03 Structures (Bridges, Viaducts, etc.) Subtotal N/A 04 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) 04.01 Retaining Walls 01 Allowance for reinforced concrete retaining wall at merge of M2 and Slip road A289 02 Allowance for alteration on existing concrete slab at merge of M2 and Slip road A289 Restricted / Night Working 03 Allowance for restricted / night working 20 % 30,000.00 6,000 Retaining Walls Total 36,000 04 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) Subtotal 36,000 05 Miscellaneous None 05 Miscellaneous Subtotal N/A 06 Accommodation Works None 06 Accommodation Works Subtotal Excluded 07 Facilitating Works None 07 Facilitating Works Subtotal Excluded 08 Statutory Undertakers Works 08.01 Statutory Undertakers works Highway Works Total) 01 Allowance for statutory undertakers works (% of 25 % 1,421,488.00 355,372		Restricted / Night Working				
02 Roadworks Subtotal 834,732	06	Allowance for restricted / night working	20	%	1,340.00	300
O3 Structures (Bridges, Viaducts, etc.) None O3 Structures (Bridges, Viaducts, etc.) Subtotal O4 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) 04.01 Retaining Walls O1 Allowance for reinforced concrete retaining wall at merge of M2 and Slip road A289 O2 Allowance for alteration on existing concrete slab at merge of M2 and Slip road A289 Restricted / Night Working O3 Allowance for restricted / night working O4 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) O5 Miscellaneous None O5 Miscellaneous Subtotal O6 Accommodation Works None O6 Accommodation Works Subtotal O7 Facilitating Works Subtotal O8 Statutory Undertakers Works O8.01 Statutory Undertakers Works O1 Allowance for restricted works (% of 25 % 1,421,488.00 355,372 Highway Works Total) Allowance for statutory undertakers works (% of 25 % 1,421,488.00 355,372 Highway Works Total)		Landscape and Ecology Subtotal				1,640
None 03 Structures (Bridges, Viaducts, etc.) Subtotal 04 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) 04.01 Retaining Walls 01 Allowance for reinforced concrete retaining wall at merge of M2 and Slip road A289 02 Allowance for alteration on existing concrete slab at merge of M2 and Slip road A289 03 Restricted / Night Working 03 Allowance for restricted / night working 04 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) 05 Miscellaneous None 05 Miscellaneous Subtotal 06 Accommodation Works None 07 Facilitating Works Subtotal 07 Facilitating Works Subtotal 08 Statutory Undertakers Works 08.01 Allowance for statutory undertakers works (% of 25 % 1.421.488.00 355.372 Highway Works Total)		02 Roadworks Subtotal				834,732
03 Structures (Bridges, Viaducts, etc.) Subtotal 04 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) 04.01 Retaining Walls 01 Allowance for reinforced concrete retaining wall at merge of M2 and Slip road A289 02 Allowance for alteration on existing concrete slab at merge of M2 and Slip road A289 Restricted / Night Working 03 Allowance for restricted / night working 04 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) Subways, Gantries, Large Headwalls, etc.) 05 Miscellaneous None 05 Miscellaneous Subtotal 06 Accommodation Works None 07 Facilitating Works Subtotal 08 Statutory Undertakers Works 08.01 Statutory Undertakers Works 01 Allowance for statutory undertakers works (% of 25 % 1,421,488.00 355,372	03 Structures	(Bridges, Viaducts, etc.)				
O4 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) O4.01 Retaining Walls O1 Allowance for reinforced concrete retaining wall at merge of M2 and Slip road A289 O2 Allowance for alteration on existing concrete slab at merge of M2 and Slip road A289 O3 Allowance for restricted / night working O3 Allowance for restricted / night working O4 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) O5 Miscellaneous None O5 Miscellaneous Subtotal O6 Accommodation Works None O6 Accommodation Works Subtotal O7 Facilitating Works None O7 Facilitating Works Subtotal O8 Statutory Undertakers Works O8 Statutory Undertakers Works O8 O1 Allowance for statutory undertakers works (% of 25 % 1,421,488.00 355,372 Highway Works Total)		None				
Other Retaining Walls Other Allowance for reinforced concrete retaining wall at merge of M2 and Slip road A289 Other		03 Structures (Bridges, Viaducts, etc.) Subtotal				N/A
Allowance for reinforced concrete retaining wall at merge of M2 and Slip road A289 Allowance for alteration on existing concrete slab at merge of M2 and Slip road A289 Restricted / Night Working Allowance for statutory undertakers works (% of Highway Works Total) Allowance for statutory undertakers works (% of Highway Works Total)	04 Structures	Retaining Walls, Culverts, Subways, Gantries, Larg	ge Headwall	s, etc.)		
merge of M2 and Slip road A289 Allowance for alteration on existing concrete slab at merge of M2 and Slip road A289 Restricted / Night Working Allowance for restricted / night working Allowance for restricted / night working O4 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) Subtotal O5 Miscellaneous None O5 Miscellaneous Subtotal N/A O6 Accommodation Works None O6 Accommodation Works Subtotal C7 Facilitating Works None O7 Facilitating Works Subtotal Statutory Undertakers Works O8 Statutory Undertakers Works Allowance for statutory undertakers works (% of Highway Works Total) Allowance for statutory undertakers works (% of Highway Works Total)	04.01	Retaining Walls				
merge of M2 and Slip road A289 Restricted / Night Working Allowance for restricted / night working O4 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) O5 Miscellaneous None O5 Miscellaneous Subtotal O6 Accommodation Works None O6 Accommodation Works Subtotal O7 Facilitating Works None O7 Facilitating Works Subtotal Excluded O8 Statutory Undertakers Works Allowance for statutory undertakers works (% of Highway Works Total) Allowance for statutory undertakers works (% of Highway Works Total)	01		1	item	20,000.00	20,000
Allowance for restricted / night working Retaining Walls Total O4 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) Subtotal O5 Miscellaneous None O5 Miscellaneous Subtotal None O6 Accommodation Works None O6 Accommodation Works Subtotal Excluded O7 Facilitating Works None O7 Facilitating Works Subtotal Statutory Undertakers Works O8 Statutory Undertakers Works Allowance for statutory undertakers works (% of Highway Works Total) Allowance for statutory undertakers works (% of Highway Works Total)	02	Allowance for alteration on existing concrete slab at merge of M2 and Slip road A289	1	item	10,000.00	10,000
Retaining Walls Total 36,000 O4 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) Subtotal 05 Miscellaneous None O5 Miscellaneous Subtotal N/A O6 Accommodation Works None O6 Accommodation Works Subtotal Excluded O7 Facilitating Works None O7 Facilitating Works Subtotal Excluded O8 Statutory Undertakers Works O8 Statutory Undertakers Works O1 Allowance for statutory undertakers works (% of Highway Works Total) Allowance for statutory undertakers works (% of Highway Works Total)		Restricted / Night Working				
04 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) Subtotal 05 Miscellaneous None 05 Miscellaneous Subtotal N/A 06 Accommodation Works None 06 Accommodation Works Subtotal Excluded 07 Facilitating Works None 07 Facilitating Works Subtotal Excluded 08 Statutory Undertakers Works 08.01 Statutory Undertakers Works 01 Allowance for statutory undertakers works (% of Highway Works Total) Statutory Undertakers Works (% of Highway Works Total)	03	Allowance for restricted / night working	20	%	30,000.00	6,000
Subways, Gantries, Large Headwalls, etc.) Subtotal O5 Miscellaneous None O5 Miscellaneous Subtotal N/A O6 Accommodation Works None O6 Accommodation Works Subtotal Fxcluded O7 Facilitating Works None O7 Facilitating Works Subtotal Excluded O8 Statutory Undertakers Works O8.01 Statutory Undertakers Works O1 Allowance for statutory undertakers works (% of Highway Works Total) Subtotal N/A Excluded 1 Allowance for statutory undertakers works (% of Highway Works Total)		Retaining Walls Total				36,000
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05 Miscellaneous Subtotal N/A 06 Accommodation Works None 06 Accommodation Works Subtotal Excluded 07 Facilitating Works None 07 Facilitating Works Subtotal Excluded 08 Statutory Undertakers Works 08.01 Allowance for statutory undertakers works (% of Highway Works Total) Allowance for statutory undertakers works (% of Highway Works Total)	05 Miscellane	eous				
06 Accommodation Works None		None				
None O6 Accommodation Works Subtotal O7 Facilitating Works None O7 Facilitating Works Subtotal Excluded O8 Statutory Undertakers Works O8 Statutory Undertakers Works Allowance for statutory undertakers works (% of Highway Works Total) Allowance More Subtotal Excluded Excluded Excluded 1 421,488.00 355,372		05 Miscellaneous Subtotal				N/A
O6 Accommodation Works Subtotal Excluded	06 Accommo	dation Works	l			
07 Facilitating Works None 07 Facilitating Works Subtotal Excluded 08 Statutory Undertakers Works 08.01 Statutory Undertakers Works 01 Allowance for statutory undertakers works (% of Highway Works Total) 25 % 1,421,488.00 355,372		None				
07 Facilitating Works None 07 Facilitating Works Subtotal Excluded 08 Statutory Undertakers Works 08.01 Statutory Undertakers Works Allowance for statutory undertakers works (% of Highway Works Total) Statutory Undertakers works (% of Latency Undertakers Works Undertakers works (% of Latency Undertakers Works Undertakers Un		06 Accommodation Works Subtotal				Excluded
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08 Statutory Undertakers Works 08.01 Statutory Undertakers Works 01 Allowance for statutory undertakers works (% of Highway Works Total) 25 % 1,421,488.00 355,372		Ī				
08 Statutory Undertakers Works 08.01 Statutory Undertakers Works 01 Allowance for statutory undertakers works (% of Highway Works Total) 25 % 1,421,488.00 355,372		07 Facilitating Works Subtotal				Excluded
O8.01 Statutory Undertakers Works Allowance for statutory undertakers works (% of Highway Works Total) Statutory Undertakers Works 1,421,488.00 355,372	08 Statutory	-	I	I		
Allowance for statutory undertakers works (% of Highway Works Total) Allowance for statutory undertakers works (% of 25 % 1,421,488.00 355,372	08.01					
	01	Allowance for statutory undertakers works (% of	25	%	1,421,488.00	355,372
TOO STATEMENT FOR THE STATEMENT OF THE S		08 Statutory Undertakers Works Subtotal				355,372



Ref	Description	Quantity	Unit	Rate (£)	Total (£)
09 Project /	Design Team Fees				
09.01	Client Project & Design Team Fees				
01	Allowance for Client project & design team fees (% of Highway Works Total)	20	%	1,421,488.00	284,298
09.02	Client Construction Management & Supervision Costs				
01	Allowance for Client construction management & site supervision costs (% of Highway Works Total)	10	%	1,421,488.00	142,149
	09 Project / Design Team Fees Subtotal				426,446
10 Other De	evelopment / Project Costs				
10.01	Other Development / Project Costs				
01	Client contract administration costs (% of Highway Works Total)	10	%	1,421,488.00	142,149
02	Land acquisition costs		item		Excluded
	10 Other Development / Project Costs Subtotal				142,149
11 Inflation					
11.01	VAT				
01	Allowance for Inflation		%		Excluded
	11 Inflation Subtotal				Excluded
12 Risk				·	
12.01	Risk (Design, Construction & Employer Risk)				
01	Allowance for Risk	40	%	2,345,455.00	938,182
12.02	Optimism Bias				
01	Optimism Bias for Roadworks plus % add-on items		%		Excluded
02	Optimism Bias for Structures plus % add-on items		%		Excluded
	12 Risk Subtotal				938,182
13 VAT					
13.01	VAT				
01	Allowance for VAT		%		Excluded
	13 VAT Subtotal				Excluded

Medway One M2J1 - Option 1 Total

3,283,637



Ref	Description	Quantity	Unit	Rate (£)	Total (£)
01 Prelimina	ries				
01.01	Main Contractor Preliminaries				
01	Preliminaries	35	%	3,352,742.00	1,173,460
	Traffic Management				
02	Allowance for full Traffic Management	10	month	66,650.00	666,500
03	Allowance for half Traffic Management	2	month	33,300.00	66,600
	01 Preliminaries Subtotal				1,906,560
02 Roadwork	s				
02.01	Roadworks General				
02.01.200	200 Site Clearance				
	Site Clearance				
01	General Site Clearance	3.194	ha	15,000.00	47,910
	Take Up or Down and Set Aside for Re-use or Remove to Store or Tip off Site				
02	Allowance for take up or down and remove to tip off site items	1	item	140,000.00	140,000
	Restricted / Night Working				
03	Allowance for restricted / night working for Slip Road A289	1	item	11,000.00	11,000
	Site Clearance Subtotal				198,910
02.01.300	300 Fencing				
	None				
	Fencing Subtotal				-
02.01.400	400 Road Restraint Systems (Vehicle and Pedestrian)				
	Safety Barrier				
01	Allowance for new safety barrier to align with the new kerb line	1,282	m	50.00	64,100
02	Allowance for new terminal	1	no	2,000.00	2,000
03	Allowance for concrete barrier (on bridge deck)	36	m	450.00	16,200
	Restricted / Night Working				
04	Allowance for restricted / night working for Slip Road A289	1	item	4,000.00	4,000
	Road Restraint Systems (Vehicle and Pedestrian) Subtotal				86,300
02.01.600	600 Earthworks				
	Excavation				
01	Excavation of unacceptable material U1A in cutting and other excavation	1,838	m3	34.00	62,492
	Excavation in Hard Material				
02	Extra over excavation for excavation in Hard Material	72	m3	65.00	4,680
	Disposal of Material				



Ref	Description	Quantity	Unit	Rate (£)	Total (£)
02 Roadworks	;				(Continued)
03	Disposal of unacceptable material Class U1A	1,838	m3	45.00	82,710
	Imported Fill				
04	Imported acceptable material Class 5B	40	m3	75.00	3,000
	Soft Spots and Other Voids				
05	Excavation of soft spots and other voids	92	m3	90.00	8,280
06	Filling of soft spots and other voids	92	m3	90.00	8,280
	Disused Sewers, Drains, Cables, Ducts, Pipelines and the Like Occurring at Formation or Sub-formation Level; Disused Basements, Cellars and the Like and Gullies				
07	Removal of disused gully 450mm internal diameter	25	no	650.00	16,250
	Topsoiling and Storage of Topsoil				
08	Topsoiling average 300mm thick	123	m2	6.50	800
	Completion of formation and sub-formation				
09	Completion of formation on material other than Class 1C, 6B or rock in cuttings	2,900	m2	2.00	5,800
	Restricted / Night Working				
10	Allowance for restricted / night working for Slip Road A289	1	item	7,000.00	7,000
	Earthworks Subtotal				199,292
02.02 to 02.04	Main Carriageway, Interchanges and Side Roads				
02.02to04.500	500 Drainage and Service Ducts				
	Drains and Service Ducts				
01	Gully pipes (size 150mm dia) (5m per gully)	125	m	150.00	18,750
	Connections				
02	Connection of 150mm internal diameter pipe to existing drain or existing piped culvert depth to invert not exceeding 2 metres (gully pipes)	25	no	460.00	11,500
	Chambers and Gullies				
03	Precast concrete trapped gully with existing D400 grating and frame	25	no	950.00	23,750
	Renewal, Raising or Lowering of Covers and Gratings on Existing Chambers and Gullies				
04	Allowance for raising or lowering the level of covers and frames on existing chambers	1	no	450.00	450
	Excavation in Hard Material				
05	Extra over excavation for excavation in hard material in drainage	27	m3	65.00	1,755
	Cleaning Existing Drainage Systems				
06	Allowance for cleaning existing piped drainage system	1	item	5,000.00	5,000
	Restricted / Night Working				
07	Allowance for restricted / night working for Slip Road A289	1	item	3,000.00	3,000
	Drainage and Service Ducts Subtotal				64,205



Ref	Description	Quantity	Unit	Rate (£)	Total (£)
02 Roadworks					(Continued)
02.02to04.700	700 Pavements				
	<u>Sub-base</u>				
01	Type 1 unbound mixture sub-base in carriageway, hardshoulder and hardstrip (250mm thick)	699	m3	85.00	59,415
	Pavement - Full Depth				
02	AC 32 HDM 40/60 design base 225mm thick in carriageway, hardshoulder and hardstrip	2,796	m2	60.00	167,760
03	AC 20 HDM 40/60 binder course 60mm thick in carriageway, hardshoulder and hardstrip	2,900	m2	27.50	79,750
04	TSCS 0/10 surface course 40mm thick in carriageway, hardshoulder and hardstrip	2,900	m2	26.00	75,400
	Pavement - Resurfacing				
05	AC 20 HDM 40/60 binder course 60mm thick in carriageway, hardshoulder and hardstrip	20,904	m2	27.50	574,860
06	TSCS 0/10 surface course 40mm thick in carriageway, hardshoulder and hardstrip	20,904	m2	26.00	543,504
	Pavement - Tie In				
07	AC 32 HDM 40/60 design base 225mm thick in carriageway, hardshoulder and hardstrip	1,006	m2	60.00	60,360
	Regulating Course				
08	AC 32 HDM 40/60 design base regulating course (average 25mm thick)	1,306.500	t	182.00	237,783
	<u>Tack Coat</u>				
09	Tack Coat	20,904	m2	1.50	31,356
	Cold Milling (Planing)				
10	Milling pavement 100mm thick (Tie In / Resurfacing)	20,904	m2	17.00	355,368
11	Milling pavement 325mm thick (Tie In)	1,006	m2	55.00	55,330
	Reinstatement of Paved Areas				
12	Reinstate paved areas with full depth pavement construction (excluding surface and binder courses)	94	m2	630.00	59,220
	Restricted / Night Working				
13	Allowance for restricted / night working for Slip Road A289	1	item	110,000.00	110,000
	Pavements Subtotal				2,410,106
02.02to04.110 0	1100 Kerbs, Footways and Paved Areas				
	Kerbs, Channels, Edgings, Combined Drainage and Kerb Blocks and Linear Drainage Channel Systems				
	<u>Kerbs</u>				
01	Precast concrete kerb laid straight or curved	1,467	m	35.00	51,345
	Footways and Paved Areas				
02	Concrete verge comprising Type 1 unbound mixture sub-base 225mm thick and C16/20 low strength concrete (wet lean) 100mm thick surface course with brushed concrete finish	46	m2	72.00	3,312
	Restricted / Night Working				



Ref	Description	Quantity	Unit	Rate (£)	Total (£)
02 Roadwork	······································				(Continued)
03	Allowance for restricted / night working for Slip Road A289	1	item	5,000.00	5,000
	Kerbs, Footways and Paved Areas Subtotal				59,657
02.05	Signs, Motorway Communications and Lighting				
02.05.1200	1200 Traffic Signs and Road Markings				
	Traffic Signs				
01	Allowance for traffic signs (based on area of pavement)	23,804	m2	2.50	59,510
	Road Markings				
02	Allowance for road markings (based on area of pavement)	1	item	25,000.00	25,000
	Road Studs				
03	Allowance for road studs	74	no	25.00	1,850
	Restricted / Night Working				
04	Allowance for restricted / night working for Slip Road A289	1	item	5,000.00	5,000
	Traffic Signs and Road Markings Subtotal				91,360
02.05.1300	1300 Road Lighting Columns				
	Road Lighting Columns and Brackets, Wall Mountings, CCTV Masts and Cantilever Masts				
01	Allowance for new road lighting column of 10 m nominal height with planted base and with single bracket arm with lantern	5	no	3,000.00	15,000
02	Allowance for new road lighting column of 10 m nominal height with planted base and with double bracket arm with lantern	13	no	4,000.00	52,000
	Restricted / Night Working				
03	Allowance for restricted / night working for Slip Road A289	1	item	5,000.00	5,000
	Road Lighting Columns, Brackets and CCTV Masts Subtotal				72,000
02.05.1400	1400 Electrical Works for Road Lighting and Traffic Signs				
	Electrical works for Road Lighting				
01	Allowance electrical works for road lighting	18	no	2,500.00	45,000
	Electrical Works for Traffic Signs				
02	Allowance for Electrical Works for Traffic Signs				Included Elsewhere
	Sundry Electrical Works				
03	Allowance for Sundry Electrical Works (E.g electrical cabinets, feeder pillars etc.) (based on area of pavement)	1	ltem	60,000.00	60,000
	Restricted / Night Working				
04	Allowance for restricted / night working for Slip Road A289	1	item	7,000.00	7,000



Ref	Description	Quantity	Unit	Rate (£)	Total (£)
02 Roadworks	5				(Continued)
	Electrical Work for Road Lighting and Traffic Signs Subtotal				112,000
	Jubicial				
02.05.1500	1500 Motorway Communications				
	None				
	Motorway Communications Subtotal				-
02.06	Landscape and Ecology				
	Ground Preparation and Cultivation				
01	Vegetation clearance to surface sloping at 10o or less to the horizontal	8,338	m2	0.20	1,668
02	Subsoil treatment to surface sloping at 10o or less to the horizontal	8,338	m2	0.60	5,003
03	Final preparation of soils to surface sloping at 10o or less to the horizontal	8,338	m2	0.50	4,169
04	Final cultivation to surface sloping at 10o or less to the horizontal	8,338	m2	0.60	5,003
	Seeding and Turfing				
05	Grass seeding by conventional sowing to surfaces sloping at 10 degrees or less to the horizontal	8,338	m2	0.80	6,670
	Restricted / Night Working				
06	Allowance for restricted / night working for Slip Road A289	1	item	400.00	400
	Landscape and Ecology Subtotal				22,913
	02 Roadworks Subtotal				3,316,742
03 Structures	(Bridges, Viaducts, etc.)	•			
	None				
	03 Structures (Bridges, Viaducts, etc.) Subtotal				N/A
04 Structures	(Retaining Walls, Culverts, Subways, Gantries, Larg	ge Headwall	s, etc.)		
04.01	Retaining Walls				
01	Allowance for reinforced concrete retaining wall at merge of M2 and Slip road A289	1	item	20,000.00	20,000
02	Allowance for alteration on existing concrete slab at merge of M2 and Slip road A289	1	item	10,000.00	10,000
	Restricted / Night Working				
03	Allowance for restricted / night working for Slip Road A289	1	item	6,000.00	6,000
	Retaining Walls Total				36,000
	04 Structures (Retaining Walls, Culverts, Subways, Gantries, Large Headwalls, etc.) Subtotal				36,000
05 Miscellane	eous				
	None				
	05 Miscellaneous Subtotal				N/A



Ref	Description	Quantity	Unit	Rate (£)	Total (£)
06 Accomm	nodation Works				
	None				
	06 Accommodation Works Subtotal				Excluded
07 Facilitati	ing Works	•			
	None				
	07 Facilitating Works Subtotal				Excluded
08 Statutor	y Undertakers Works	1			
08.01	Statutory Undertakers Works				
01	Allowance for statutory undertakers works (% of Highway Works Total)	25	%	5,259,302.00	1,314,826
	08 Statutory Undertakers Works Subtotal				1,314,826
09 Project /	Design Team Fees				
09.01	Client Project & Design Team Fees				
01	Allowance for Client project & design team fees (% of Highway Works Total)	20	%	5,259,302.00	1,051,860
09.02	Client Construction Management & Supervision Costs				
01	Allowance for Client construction management & site supervision costs (% of Highway Works Total)	10	%	5,259,302.00	525,930
	09 Project / Design Team Fees Subtotal				1,577,791
10 Other De	evelopment / Project Costs	ı			
10.01	Other Development / Project Costs				
01	Client contract administration costs (% of Highway Works Total)	10	%	5,259,302.00	525,930
02	Land acquisition costs		item		Excluded
	10 Other Development / Project Costs Subtotal				525,930
11 Inflation	1	ı			
11.01	VAT				
01	Allowance for Inflation		%		Excluded
	11 Inflation Subtotal				Excluded
12 Risk		ı		1	
12.01	Risk (Design, Construction & Employer Risk)				
01	Allowance for Risk	40	%	8,677,848.50	3,471,139
12.02	Optimism Bias				
01	Optimism Bias for Roadworks plus % add-on items		%		Excluded
02	Optimism Bias for Structures plus % add-on items		%		Excluded
	12 Risk Subtotal				3,471,139
13 VAT	1	ı	1	ı	
13.01	VAT				
01	Allowance for VAT		%		Excluded
	13 VAT Subtotal				Excluded

Medway One M2J1 - Option 2 Total

12,148,988