



# Analysts Day

21 October 2004

**Balfour Beatty**



# Brian Osborne

Group Managing Director, Balfour Beatty plc

**Balfour Beatty**

Working in partnership with  
the Highways Agency to widen  
Europe's busiest motorway

# Balfour Beatty in roads

	2004E sales £m	Order book £m
UK road building / widening	275	498
UK road maintenance / management	190	435
US highways	135	445
Hong Kong roads	127	229
<b>Total</b>	<b>727</b>	<b>1607</b>



**Balfour Beatty – The creation and care of essential assets**

# New Civil Engineer – Contractors File 2004

## ROADS/ROAD BRIDGES

Company			2003 £M	2002
1	(1)	Balfour Beatty	468.00	(325)
2	(2)	Ringway Group	259.00	(231)
3	(3)	Carillion	180.00	(182)
4	(6)	Alfred McAlpine	152.00	(118)
5	(7)	Mowlem	117.00	(114)
6	(4)	Edmund Nuttall	113.00	(151)
6	(5)	Amec Group	113.00	(127)
8	(8)	May Gurney Integrated Services	90.00	(93)
9	(11)	Birse Civils	80.00	(89)
10	(13)	Costain Group	70.00	(70)

**Balfour Beatty – The creation and care of essential assets**

# UK early contractor involvement

Project	Estimated value (£m)	Start	Completion
A303 Stonehenge	190	2005	2008
A3 Hindhead	130	2005	2009
A46 Newark	110	2007	2009
A1 Wetherby	40	2006	2008
Total	470		



**Balfour Beatty – The creation and care of essential assets**



# Major widening project experience

Project	Value £m
M25 JT 12-15	148
M25 JT 8-10	93
M20 JT 5-8	70
M6 JT 30-32	37
M25 JT 10-13	30
M25 / A8282	26

# UK Highways Agency widening prospects

Project	Estimated Value	Start	Completion
M1 10-13	£380m	2008	2011
M1 6a-10	£230m	2005	2008
M1 21-30	£1.7bn	2008/9	?
M25	£1.5bn	2006/7	?
M6	£1.9bn	2012	?

# RCS

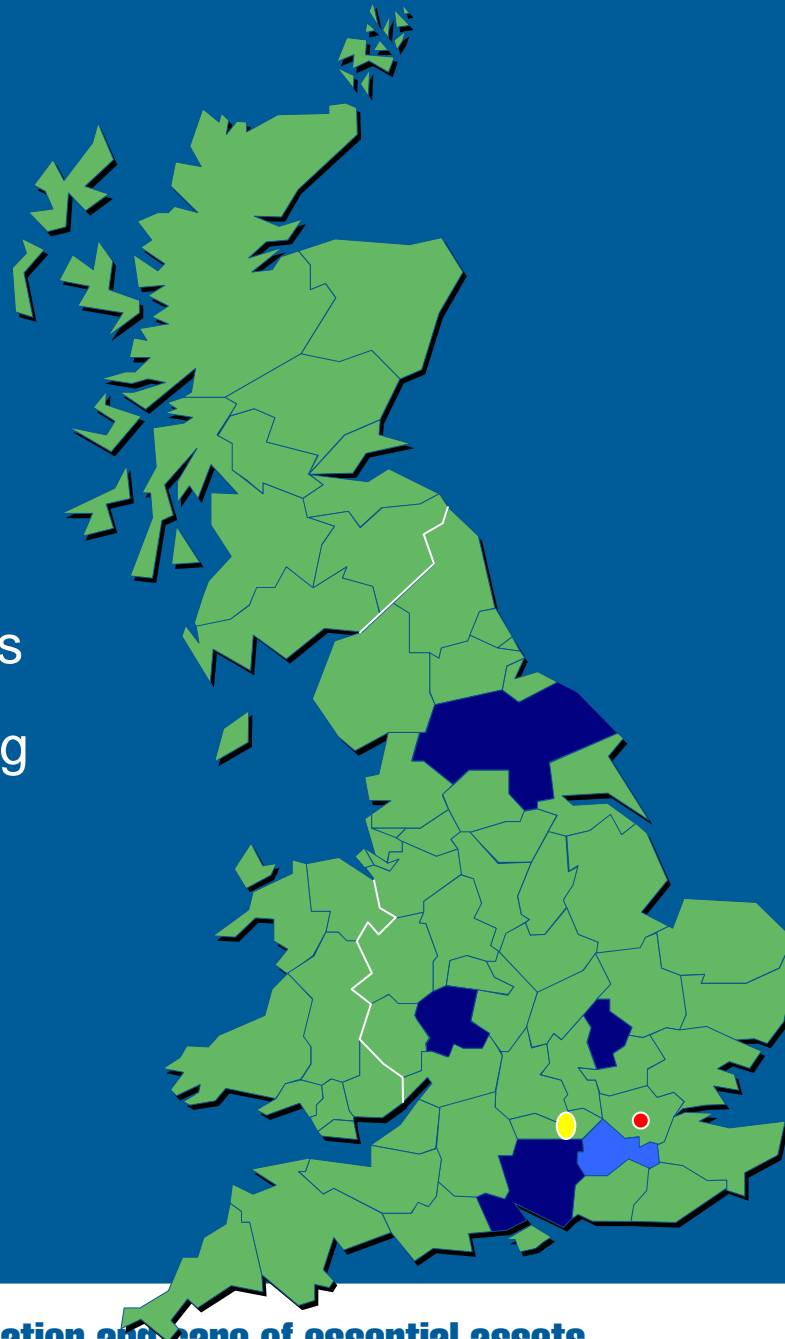
Key:



County Roads



Street Lighting



Bedfordshire  
Hampshire  
North Yorkshire  
Surrey (Street Lighting)  
Westminster  
Wokingham  
Worcestershire

**Balfour Beatty – The creation and care of essential assets**

# RCS

## Key:

- County Roads
- Street Lighting
- Trunk Roads & Motorways



Bedfordshire  
Hampshire  
North Yorkshire  
Surrey (Street Lighting)  
Westminster  
Wokingham  
Worcestershire

HA Area 2  
HA Area 3  
InterRoute HA Area 4  
M77 GSO Project  
A1/M1 Link Road JV



**Balfour Beatty – The creation and care of essential assets**

# Road maintenance & management prospects

	Annual Value £m	Approx total value £m	Commence
Highways Agency - Area 2 EMAC	60	400	2005
Essex, Beds, Worcs, West Sussex	100	500	2005
Kent, Cambs, Bucks, Glos, Wilts	130	700	2006
Birmingham PFI*	40	1000	2006
M25 DBFO*	70	1500	2007

\* Excluding capital works

# US roadbuilding and widening

	Order Book \$m
Texas	452
California	163
Central Region	189
<b>Total</b>	<b>804</b>



**Balfour Beatty – The creation and care of essential assets**





**Balfour Beatty – The creation and care of essential assets**

# **The Highways Agency – an innovative client**

Design and Construct

DBFO

Early Contractor Involvement

MACs

Quality evaluation in bidding

# **Peter Anderson**

Project Director

**Balfour Beatty**

# Presentation Overview

Tender Adjudication

The Project Team

Project Description

Construction Overview

Traffic Management

Community Contact

Works in Progress – Photo Library

# Tender Adjudication

## Quality Score Envelope A (threshold 65 / 100)

- Technical, approach, mgt structure, customer care, supply chain

## Financial Score Envelope B

- Adjusted Tender Price determined to reflect proposed programme duration (£140k / wk)
- Score awarded for proximity of ATP to mean of the prices

Final Tender Assessment = A + B (50:50)

# The Project Team

Highways Agency

Client for M25 Widening

HAL

Client for the T5 Spur

Atkins

Employers' Agent

Balfour Beatty

Principal Contractor

Gifford WSP

Designer

Principal Subcontractors

Stent, McArdles, Websters,  
Balmer Lindley, Tarmac,  
RMC, AA, Saunders.

# Project Description

## Motorway Widening

- All widening within existing Highways Agency's land
- Five lanes between Junctions 12 and 14
- Six lanes between Junctions 14 and 15
- Provision of new hard shoulders
- Upgrading & widening of existing structures

## M25 Spur Road

# Project Description

- Widening existing embankments using retaining walls and steepened earthworks slopes
- Narrowing of existing central reserve using vertical concrete barriers
- Existing bridge parapet replacement and bridge refurbishment/widening
- New and higher noise absorbent environmental barriers
- Pavement strengthening and resurfacing
- Installation of new motorway drainage
- Replacement of Highway communications, signing and lighting



# Key Dates

Contract Award (detailed design)	5th May 2003
Commence Construction	5th January 2004
Complete Construction	19th December 2005
Project split into 2 sections	(each of 5 phases)
Section 1 Junction 12 to 14	Jan 2004 to Feb 2005
Section 2 Junction 14 to 15	Feb 2005 to Dec 2005

# Scheme Benefits

## Environmental Barriers

- Existing noise barriers are being replaced by higher and more noise absorbent
- New and higher environmental barrier at Thorpe and Egham

## Low-Noise Thin Surfacing

- Noise reducing thin surface course on road pavement

Ultimately improved through flow of traffic on this congested section of M25

# Scheme Benefits

Replacement of existing lighting with full cut-off lanterns reducing intrusion to surrounding properties

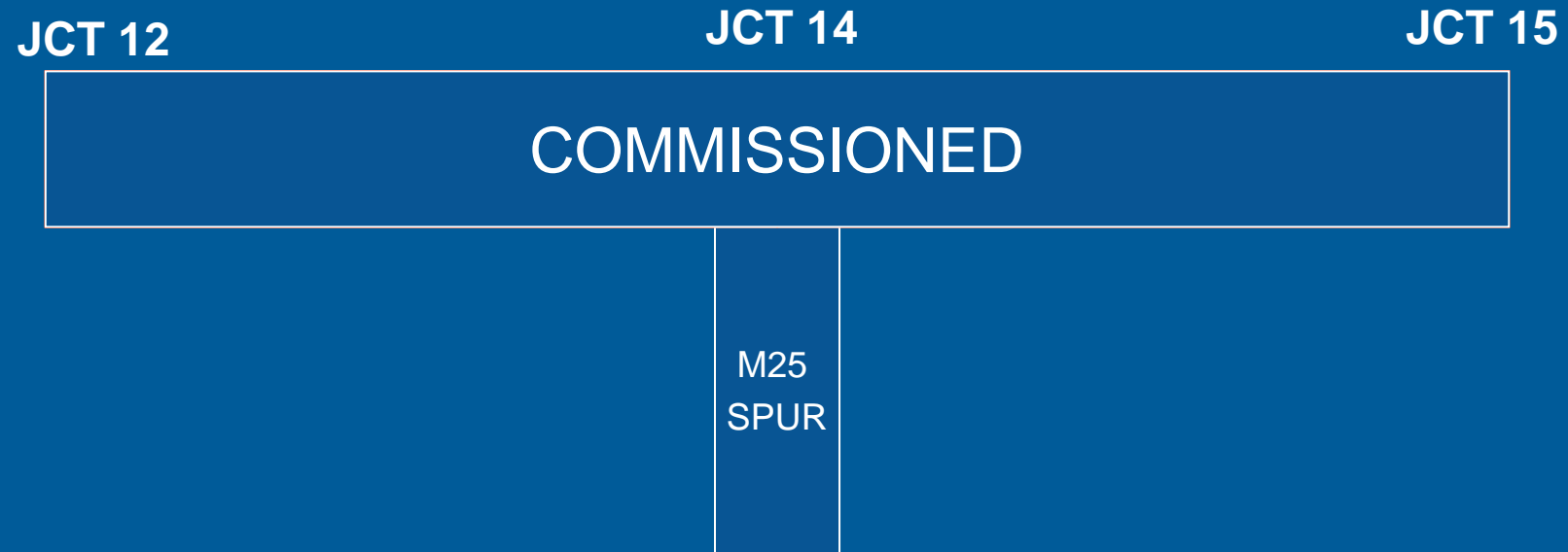
Retention of existing vegetation where practicable

New planting to replace lost vegetation

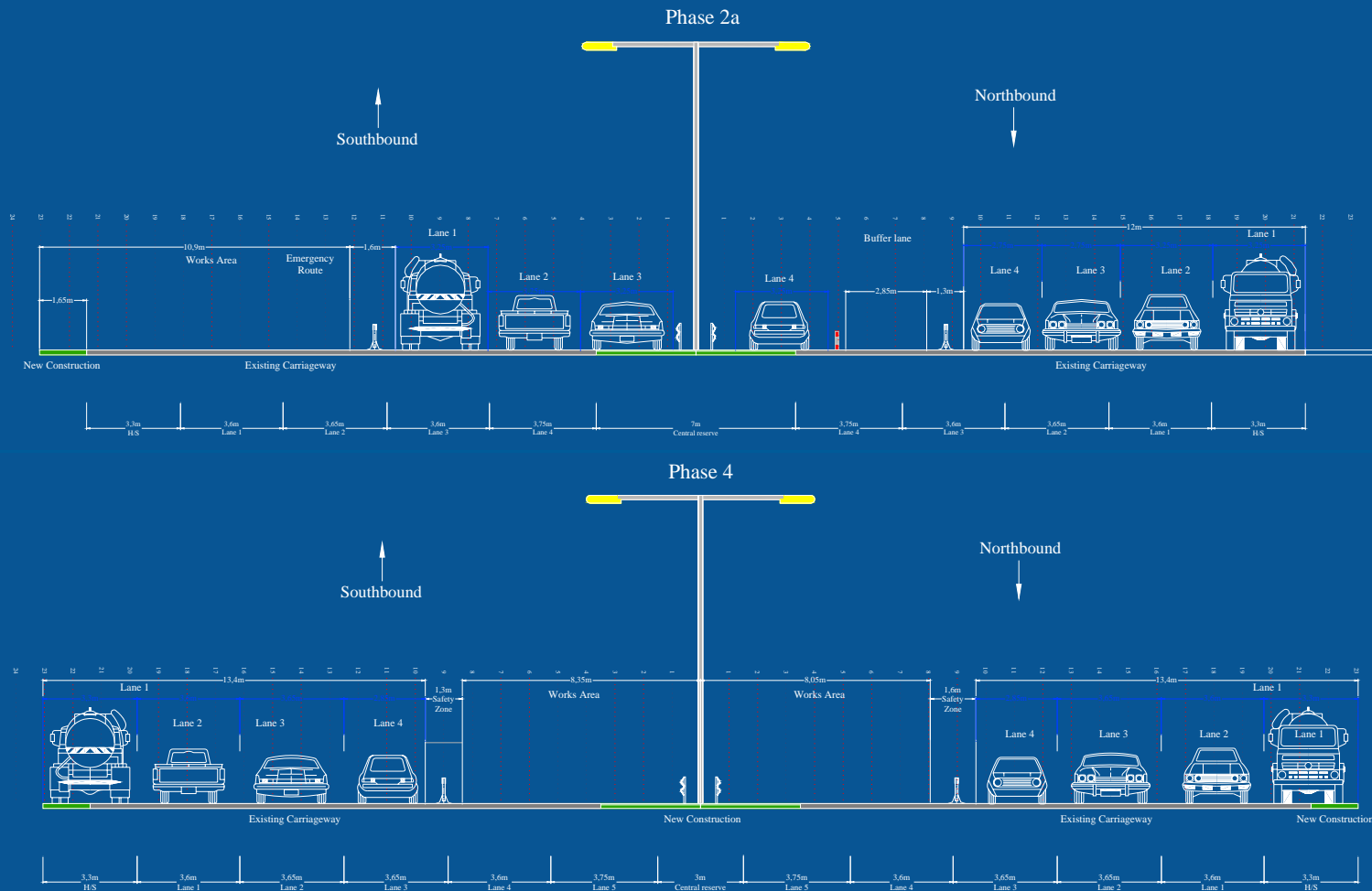
Replacement of the existing motorway drainage system, to include:

- throttling surface water flow during heavy rainfall
- installation of petrol/oil interceptors
- installation of emergency shut off valves

# Construction Sequence Overview



# Traffic Management Scheme (Typical)



# Motorway Management

## Responsibility for Motorway Junction 12 to 15

- BBCEL is responsible for maintenance of the M25 within the limit of the works
- A 40 mph limit has been established for the protection of the public and the workforce
- Reduced lane widths in order to facilitate the works

## Vehicle Recovery

- 110 CCTV cameras monitor traffic 24-hours a day
- Stricken vehicles quickly removed from motorway to safe compound area
- Facilities provided for stranded travellers at the Balfour Beatty Project Offices

# Progress to Date

**Enabling Works Completed** (survey, interrupter cable installed, detailed design complete, CCTV & vehicle recovery operational)

**Phase 1 completed** (hardening existing central reserve)

**Phase 2 completed** (southbound verge widening)

**Phase 3 ongoing** (northbound verge widening)

# Health & Safety Strategy

## Aims

- Secure a project AFR of 0.15
- Complete 1 million man-hours worked without a RIDDOR accident
- Develop our behavioural based safety skills



# Mitigation measures during construction

Noise levels agreed with Local Authority

Noise and air quality monitoring during construction

Dust minimisation through damping/cleaning haul routes, enforcing site speed limits, covering wagons

Ecological Surveys and monitoring

# Advising the Public

## The Local Community

- Provision of a dedicated Community Relations Team
- Pre-Construction Exhibitions – November 2003
- Regular newsletters distributed to the public
- Regular liaison with Councillors and MPs
- Section 61, noise monitoring / vibration monitoring

## The Local Community

- Successful liaison with local authorities, police, emergency services
- Regular presentations to the local community
- Maintaining an inquiries/complaints database and close out process
- Providing a telephone help line (01784 488 217)
- Email help address (M25CommunityRelations@bbcel.co.uk)

# Advising the Public

## Vehicle Travellers

- Video and “infomercials”, distributed to airports, ferry ports, motorway service areas, authorities and councils
- Early warning leaflets issued during August 2003
- Press releases issued throughout the works period
- Third party claims process established
- The Highways Agency’s website ([www.highways.gov.uk](http://www.highways.gov.uk))
- The Highways Agency Information Line (08457 50 40 30)



**Balfour Beatty – The creation and care of essential assets**



**Balfour Beatty – The creation and care of essential assets**



**Balfour Beatty – The creation and care of essential assets**



**Balfour Beatty – The creation and care of essential assets**



**Balfour Beatty – The creation and care of essential assets**





**Balfour Beatty – The creation and care of essential assets**



**Balfour Beatty – The creation and care of essential assets**



**Balfour Beatty – The creation and care of essential assets**



**Balfour Beatty – The creation and care of essential assets**



**Balfour Beatty – The creation and care of essential assets**



**Balfour Beatty – The creation and care of essential assets**



**Balfour Beatty – The creation and care of essential assets**



**Balfour Beatty – The creation and care of essential assets**