



**Tideway**

**Investor Event**

**19 May 2017**

# **Introduction**

**Sir Neville Simms, Tideway Chairman**

# Management Overview



**Sir Neville Simms, Chairman of the Board of Directors**



**Andy Mitchell, CEO**



**Mark Corben, CFO**



**Mark Sneesby, COO**



**Andy Alder, Delivery Manager Central**

# **Introduction to Tideway**

**Andy Mitchell, Tideway CEO**

# Key Facts about Tideway

- The Thames Tideway Tunnel will be a major new sewer, which is urgently needed to protect the tidal River Thames from pollution
- Health, safety and the wellbeing of our people and the public are paramount – we intend to work safely or not at all
- It is being delivered by Tideway, an independent regulated water company
- We intend to deliver the project to the right quality, on time and budget, for the benefit of the environment, local stakeholders, Thames Water’s bill payers, and investors
- The tunnel is the largest project in the water sector since the construction of Sir Joseph Bazalgette’s interceptor sewers in the 1860s



# Tideway Delivery Model

- First project to be developed under the Specified Infrastructure Projects Regulations
- Tideway's business as a regulated utility company is to design, build, commission and maintain the Thames Tideway Tunnel, a simple asset with 120 year design life
- Being delivered through “design and build” contracts by major contracting joint ventures
- RPI-linked revenue collected from Thames Water's wastewater customers
- Fixed real WACC until 2030
- Benefits from a support package provided by the UK Government
- Owned by Allianz (34.26%), Amber (21.32%), Dalmore (33.76%) and DIF (10.66%)

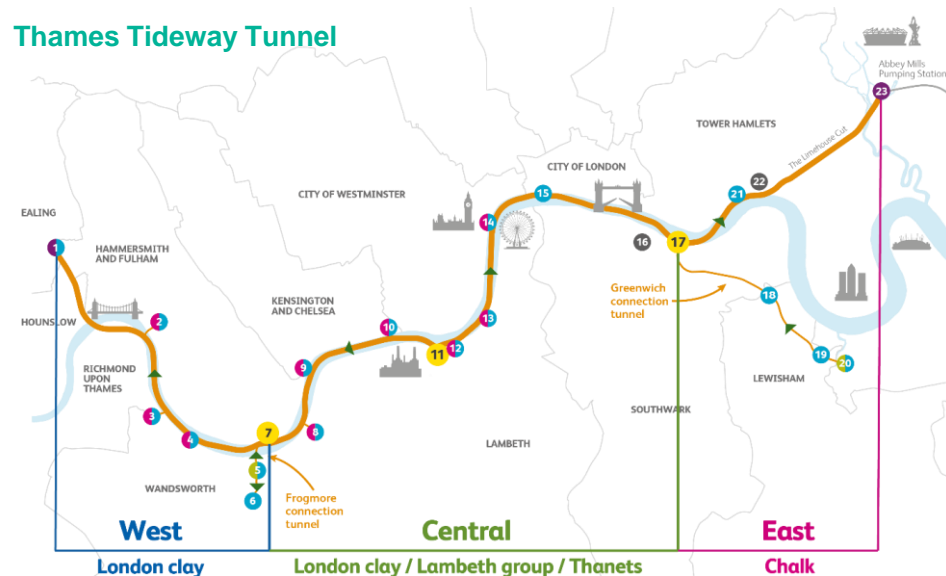
# Thames Tideway Tunnel

- London's combined sewerage system operates at capacity
- 50-60 CSO discharges, 39 million tonnes of sewage discharged to tidal River Thames in a typical year
- London Tideway Improvements incorporates integrated Sewage Works Upgrades, the Lee Tunnel and Thames Tideway Tunnel
- Thames Tideway Tunnel follows the river intercepting CSOs
- Recent experience of very successful London tunneling
- In the operational phase Tideway's only business is the maintenance of a gravity operated tunnel

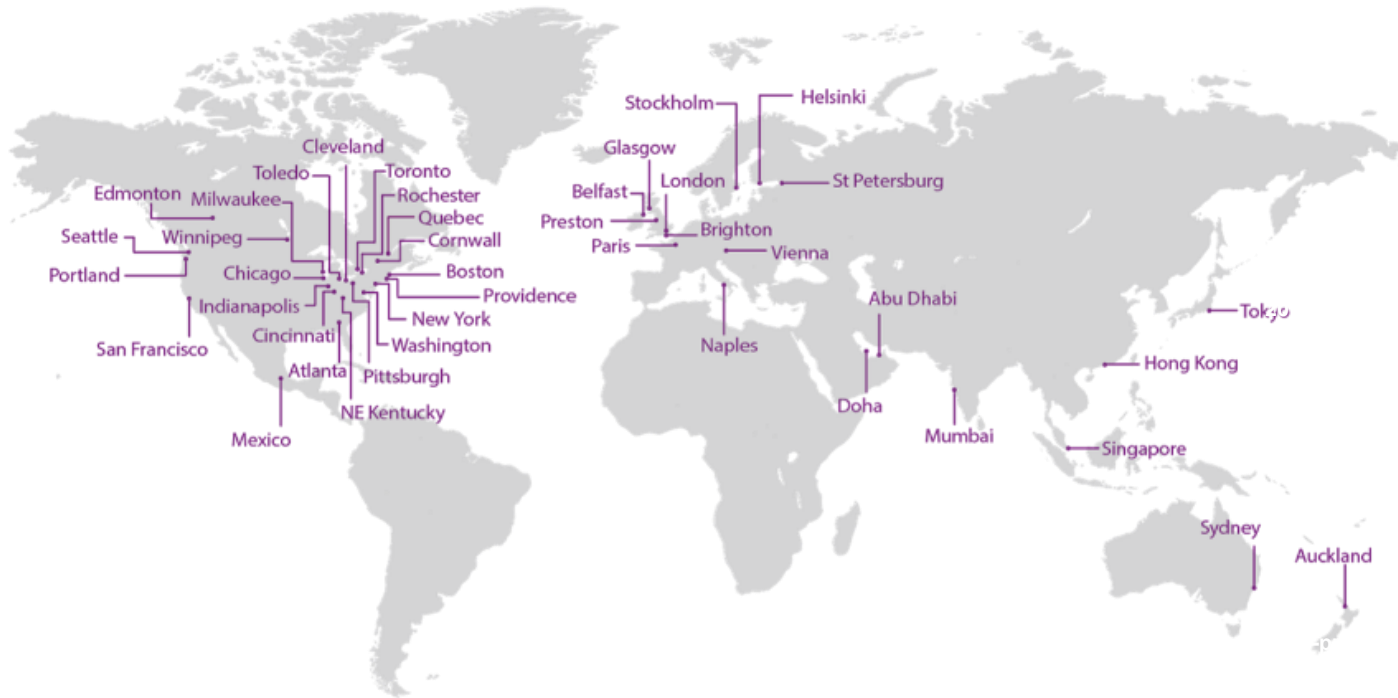
## London Tideway Improvements



## Thames Tideway Tunnel



# Relevant Global Projects



Well established solution



# Reconnecting London with the River Thames



## PLA Vision

- A healthy river
- A leisure river
- A commercial river

## Smart Cities

- “Smart Sewer”
- “Smart River”

# Stakeholders and Governance

Liaison Committee



Other key stakeholders



MAYOR OF LONDON



City of Westminster



# 2016/17 Highlights

- 2016/17 has seen Tideway make good progress towards its ambition to safely deliver the Thames Tideway Tunnel as early as possible.

Some of our key achievements this year included:

- Continuing to develop our approach to transformational health, safety and wellbeing, with no major injuries
- No change to the tunnel's estimated cost at completion at £3.144bn (2014/15 prices), in line with our regulatory baseline
- Progressing the construction schedule with the main drive sites mobilised between three and five months earlier than the original schedule
- Implementing the 'more by river' strategy
- Now working on nine sites
- Extending our liquidity to cover the entire construction period, taking advantage of the current low interest rate environment to lock in a low cost of finance through:
  - Securing a £700m, 35-year loan from the European Investment Bank
  - Raised £550m of debt from institutional investors

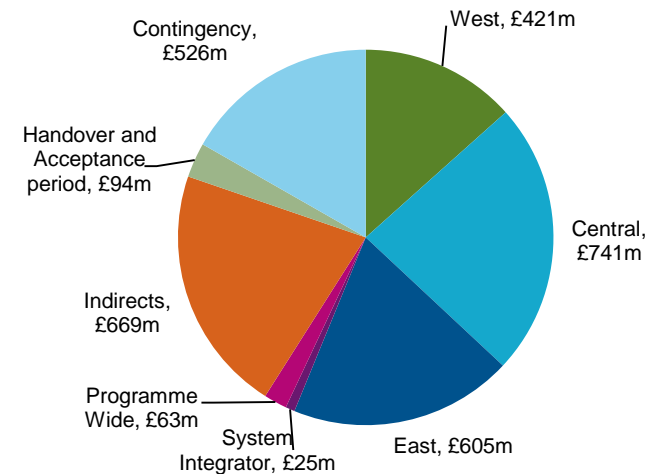
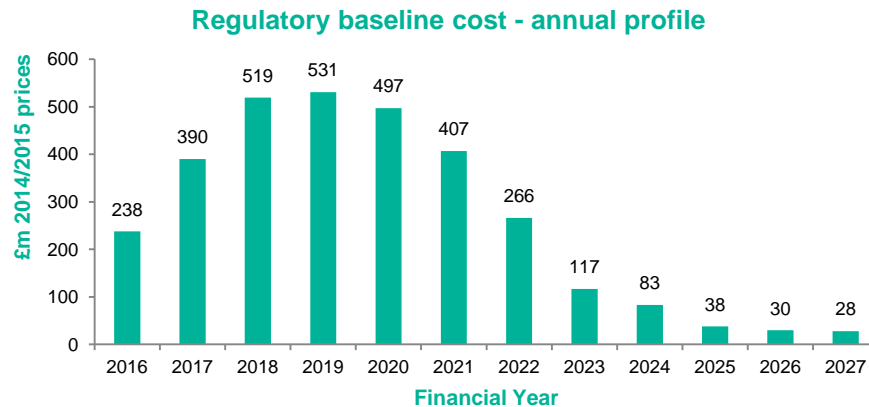
# Financing Tideway

**Mark Corben, Tideway CFO**

# Investment Programme

- Regulatory baseline cost of £3,144m (14/15 prices) was based on management’s detailed assessment of cost
  - Direct Works of £1,855m (Main Works Contractors, System Integrator and Programme Wide)
  - Indirects of £669m (resources, insurances, facilities, IT)
  - Handover and Acceptance period £94m
  - Contingency of £526m
- Annual profile reflects regulatory baseline construction programme

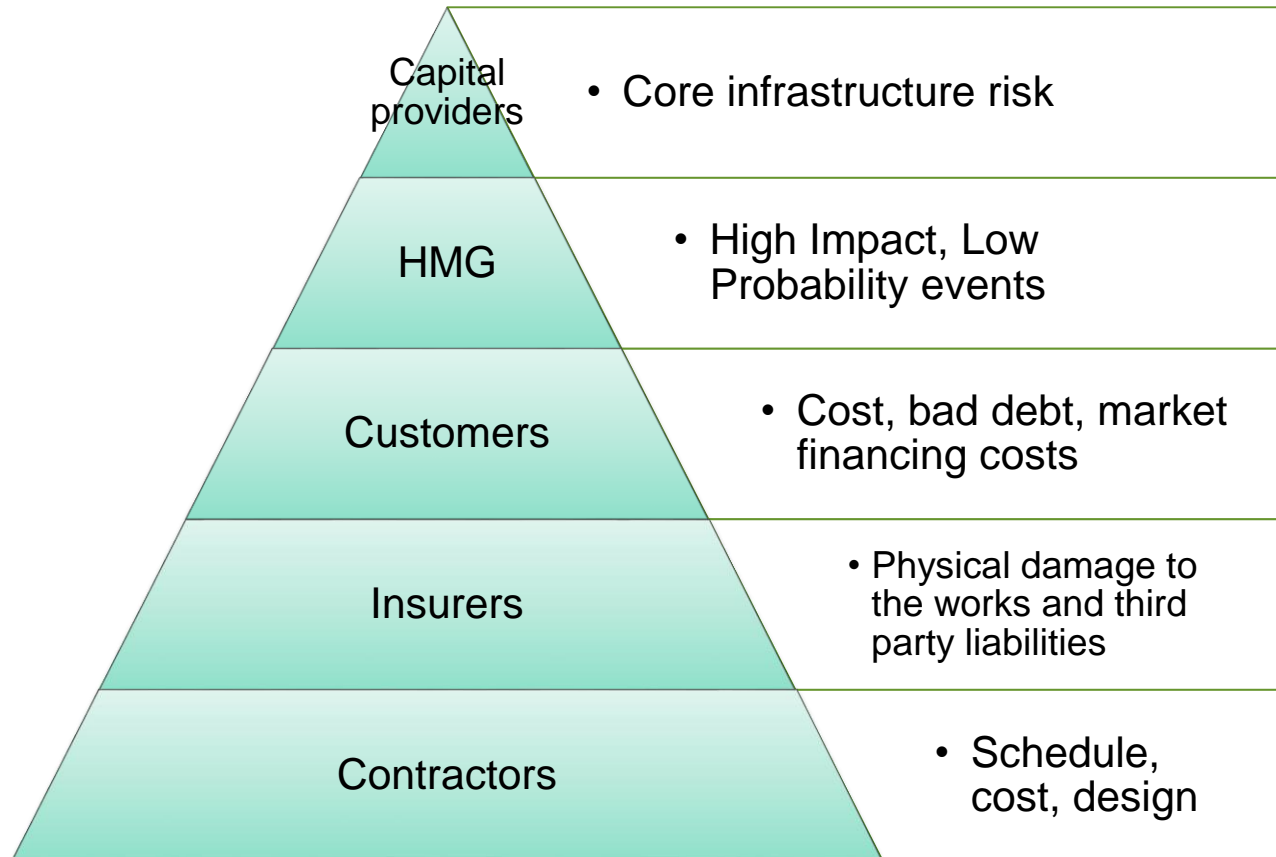
Illustrative management build up to regulatory baseline cost 2014/2015 prices



Regulatory funding baseline derived from robust bottom-up estimate

# Delivery Model – Risk Sharing

- Risks have been allocated to the party most capable of managing them
- Package targeted at all capital providers



# Regulation

- Tideway's Licence is based on the standard UK water and sewerage model
- Bespoke enhancements reduce risk during construction
- Subject to 5 year price control process during operational period
- No direct impact of PR 19

## Enhancements in Tideway's licence

<b>RCV</b>	<ul style="list-style-type: none"> <li>✓ During construction expenditure is logged up to RCV with no ex-post review</li> <li>✓ Additional revenue building block for investment on a one year forward look basis</li> </ul>
<b>Incentives</b>	<ul style="list-style-type: none"> <li>✓ Post Construction, RCV will be adjusted based on the net present value of any overspend or underspend</li> <li>✓ A step down will apply to the WACC if System Acceptance happens after 28 February 2027</li> </ul>
<b>WACC</b>	<ul style="list-style-type: none"> <li>✓ Fixed real WACC of c.2.5% until 1<sup>st</sup> April 2030 (assuming System Acceptance by 28 February 2027)</li> </ul>
<b>Financing Cost Adjustment</b>	<ul style="list-style-type: none"> <li>✓ Provides partial protection against movements in the cost of debt (measured as movements in the iBoxx GBP non-financials BBB 10+) above certain thresholds</li> </ul>
<b>Customer Bad Debt</b>	<ul style="list-style-type: none"> <li>✓ Tideway is allowed to recover customer bad debt on a rolling two year basis</li> </ul>
<b>Revenue Stream</b>	<ul style="list-style-type: none"> <li>✓ No change to revenue provision during construction</li> </ul>
<b>Threshold Outturn</b>	<ul style="list-style-type: none"> <li>✓ Provision for funding above the Threshold Outturn (£4.1bn 14/15 prices)</li> </ul>

Enhanced regulatory framework set until 2030 providing more certainty than peers

# Government Support Package

## Insurer of Last Resort

- The Government acts as insurer of last resort
- The Government provides cover for insurable events above the amount the market is ready to provide

## Contingent Equity Support

- In the event of cost overruns above Threshold Outturn, the Government can be required to provide equity financing to fund the shortfall otherwise it must discontinue the project

## Discontinuation

- In certain circumstances, the Government may elect to discontinue the project and pay compensation
- Compensation equal to 1 x RCV (with adjustment for break costs)

## Market Disruption Liquidity

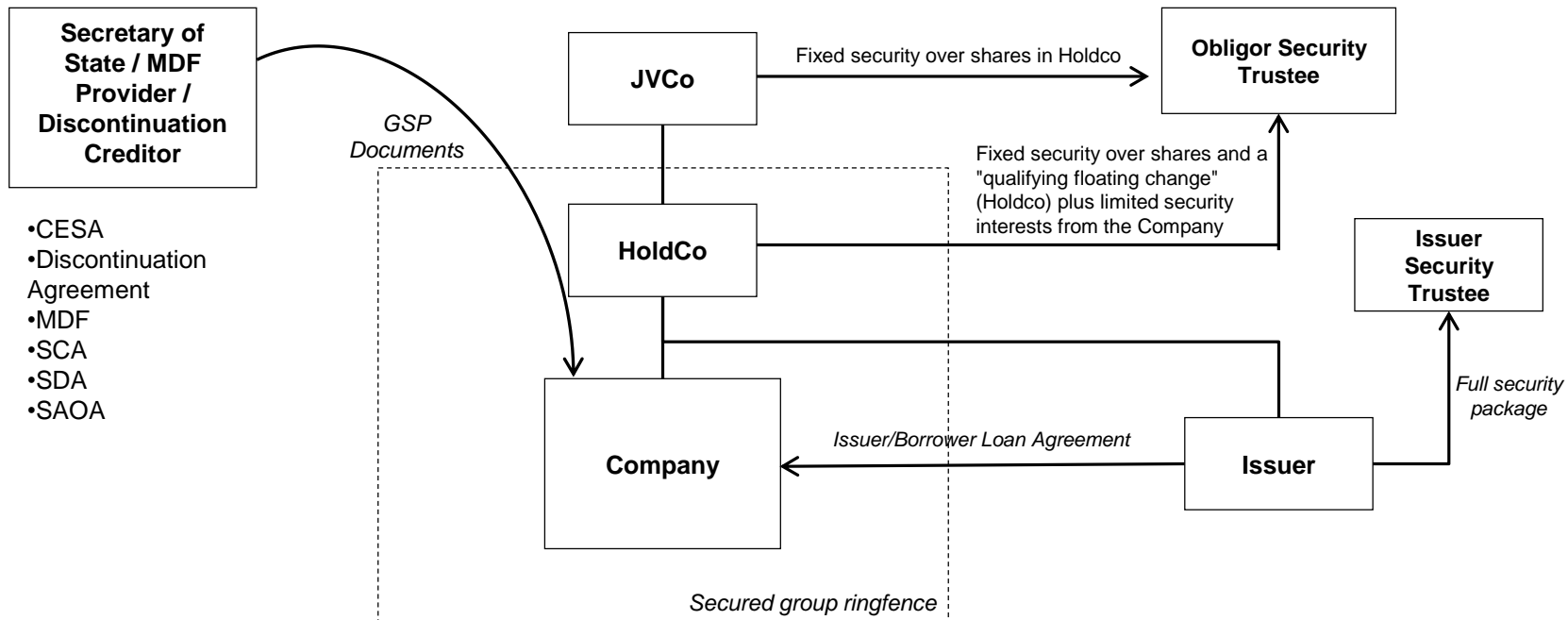
- £500m committed liquidity facility in case of market disruption

Government Support Package provides strong mitigation to highly unlikely scenarios during construction



# Tideway Financing Programme

- Typical WBS structure and covenant package
- Creditors have security over all the assets of the Holdco Group subject to usual regulatory restrictions
- Flexible, multi-currency platform at FinCo (Issuer) level
- Bank debt and Private Placements can be raised at Company level
- All debt is senior and ranks Pari Passu
- Trigger event at 70% net debt/RCV



Tideway's structure is very similar to other UK regulated utility securitisations

# Credit Highlights

**Critical UK infrastructure**

**Strong delivery capability**

**Supportive regulatory and contractual framework**

**Stable and highly visible revenue profile**

**Creditor friendly financial structure**

**Good progress on project delivery since Licence Award**

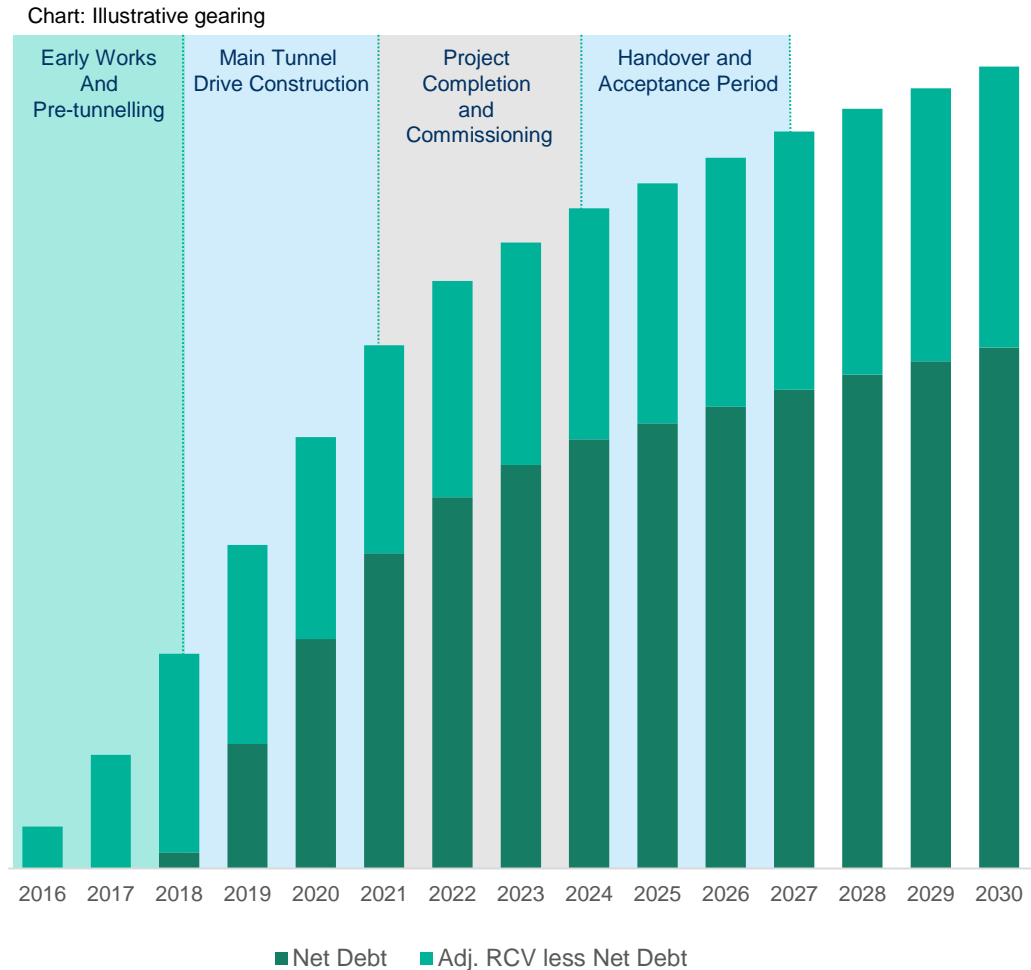
**Financing plan substantially de-risked**

# **Progress Update – Financing Plan**

**Mark Corben, Tideway CFO**

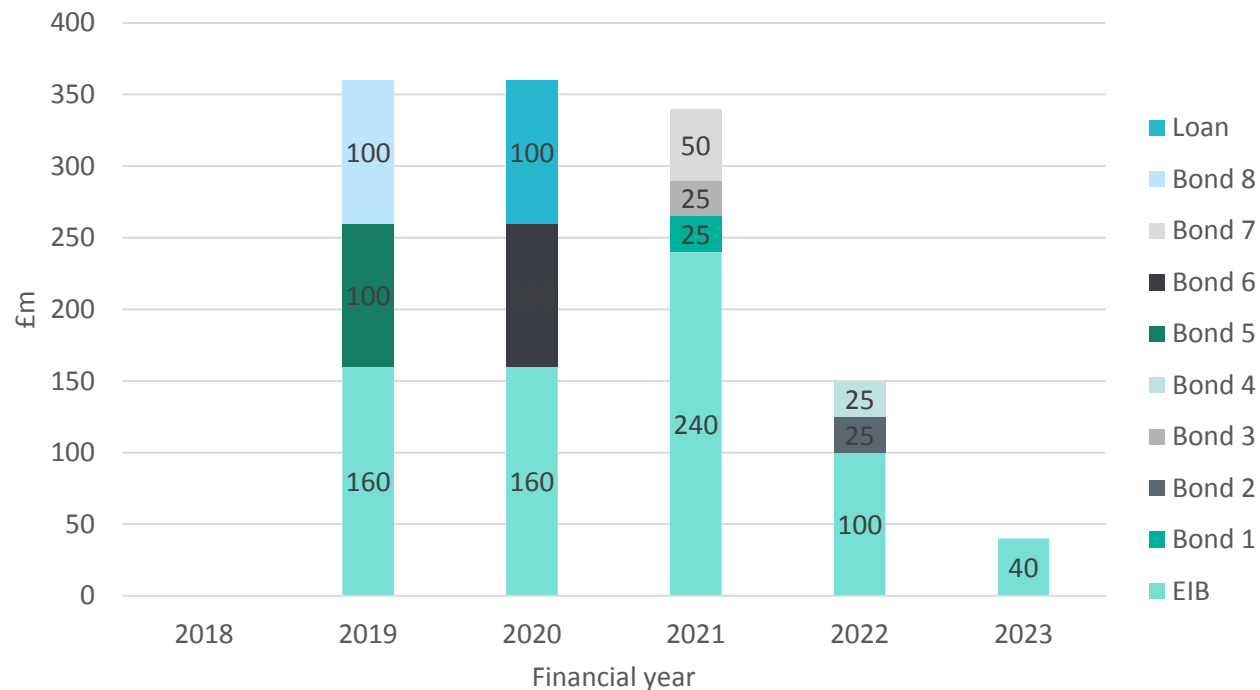
# Financing Strategy

- Maintain a low risk financing position, preserving the Baa1/BBB+ credit ratings and a strong liquidity position at all times
- “Equity first”: £1.3bn equity (committed and backed by LCs) is funding the investment programme to start of tunnelling
- Leverage only rises at the back end of construction, hand-in-hand with progress on the delivery of the investment programme
- Debt programme combining inflation linked debt to match RCV growth with nominal issuance
- Pre-financing in order to increase liquidity where this is consistent with our overall cost of debt targets



# Financing Activity

- On 12 May 2016, we signed a £700m 35-year loan with the EIB
- In May 2016, we published our prospectus
- In FY 2016 we priced a total of £450m RPI-linked bonds with deferred purchase dates of two to five years issued to institutional investors
- Post year-end, we signed a £100m RPI-linked loan with a 30-month deferred drawing
- EIB loan locked into RPI format during the course of the year



Financing plan substantially de-risked

# Liquidity and Debt Portfolio

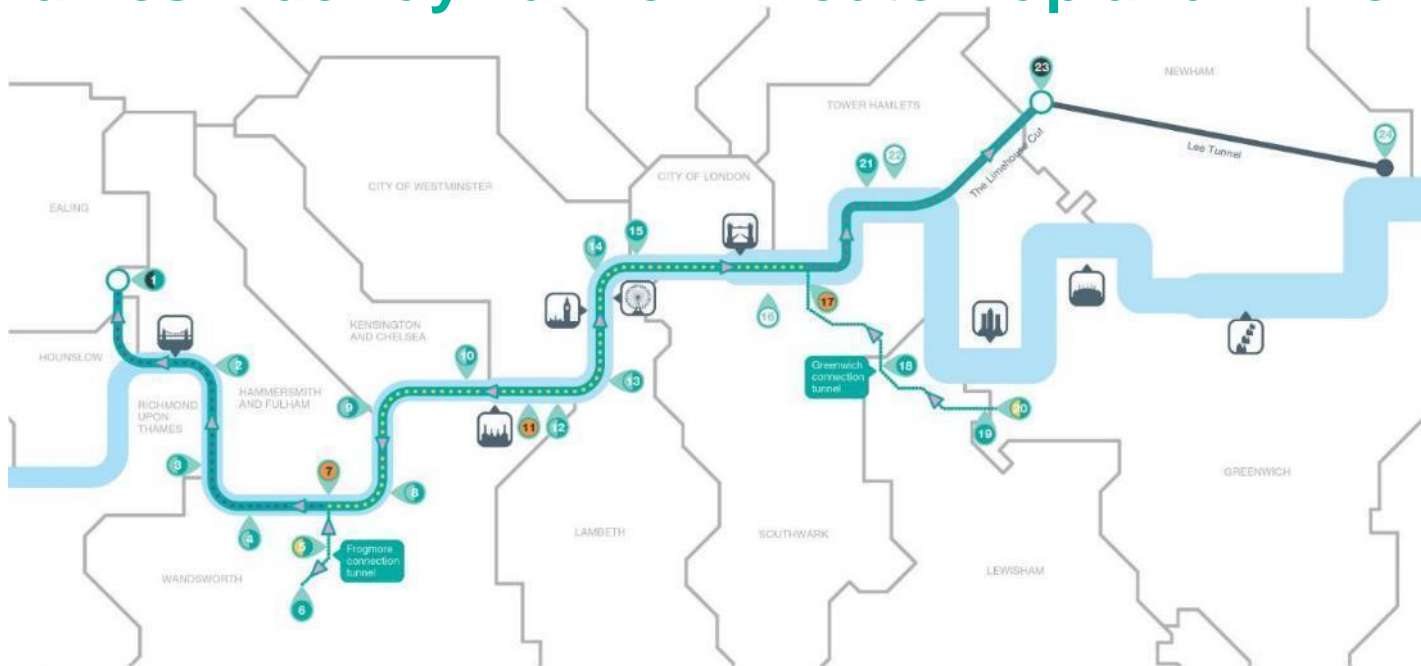
## Cash and available and committed funds

Facility	Amount (£m, £bn)	Type	Date signed	Drawdown	Maturity
Cash	> 0.3bn				
Outstanding Committed Shareholder Funds	348				
RCF	1bn	Revolver	Aug 2015	N/A	2025
EIB	700	Term Loan	May 2016	Jul 2018	2051
Bond	100	Bond	Jun 2016	Jun 2020/2021	2048-2054
Bond	250	Bond	Jun 2016	Jun 2018/2019/2020	2050-2052
Bond	100	Bond	Dec 2016	Dec 2018	2040
<b>Total Bonds</b>	<b>450</b>				
<b>Total as of Mar-17</b>	<b>2.8bn</b>				
Loan	100	Loan	Apr 2017	Sep 2019	2049
<b>Current total</b>	<b>2.9bn</b>				

# Progress Update – Investment Programme

**Mark Sneesby, Tideway COO**

# Thames Tideway Tunnel – Route Map and Drive Strategy



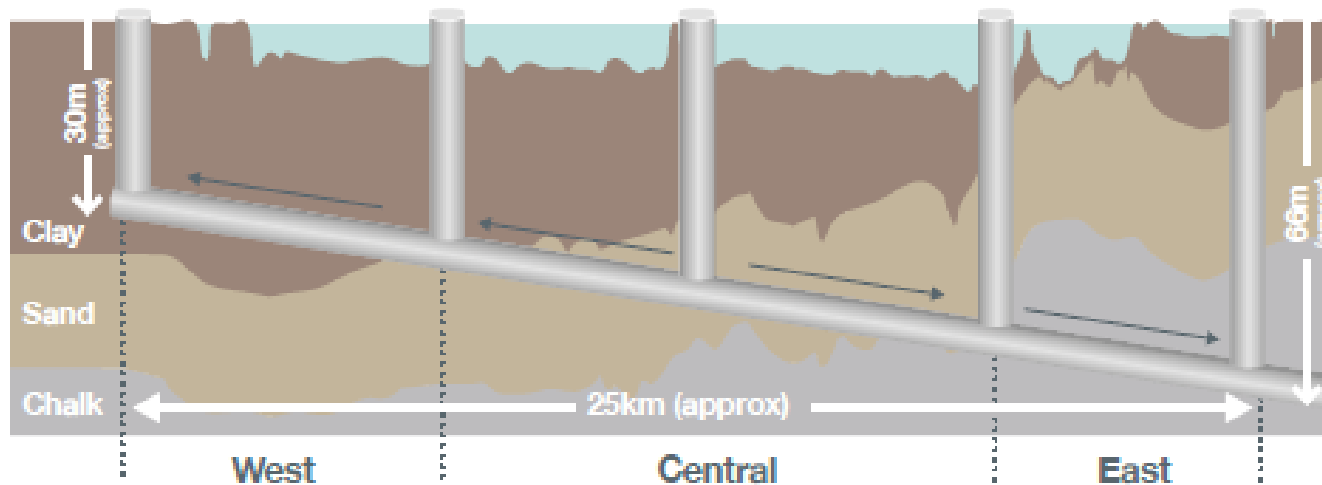
**Acton Storm  
Tanks**

**Camrath Road  
Riverside**

**Kirtling Street**

**Chambers Wharf**

**Abbey Mills  
Pumping Station**





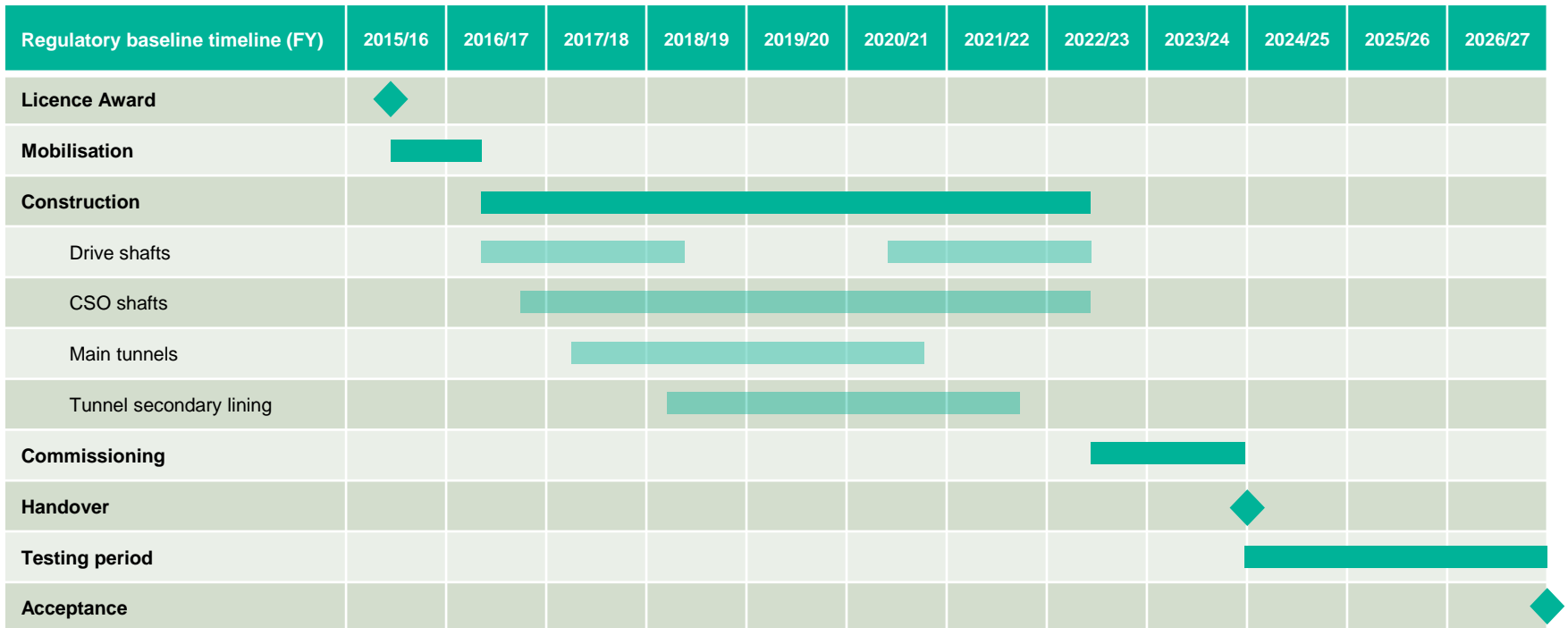
# Victoria Embankment CSO Section



# Construction Animation



# Regulatory Baseline



# De-risking Our Programme

Targeting an earlier delivery programme de-risks schedule

- Start on site earlier (and find the issues earlier!)
- Implement measures to reduce time to start of tunnelling
  - Additional design resources
  - Robust temporary works
  - Acoustic sheds – 24/5 shaft excavation
- Improve interface windows between contracts - Interface structures
- Resequence pre-commissioning and commissioning

Increase stakeholder engagement and support

- Sooner we start, sooner we finish - less disruption to residents and local area
- Early completion delivers project benefits earlier
- Schedule drives cost

Targeting an earlier delivery is protecting the regulatory baseline

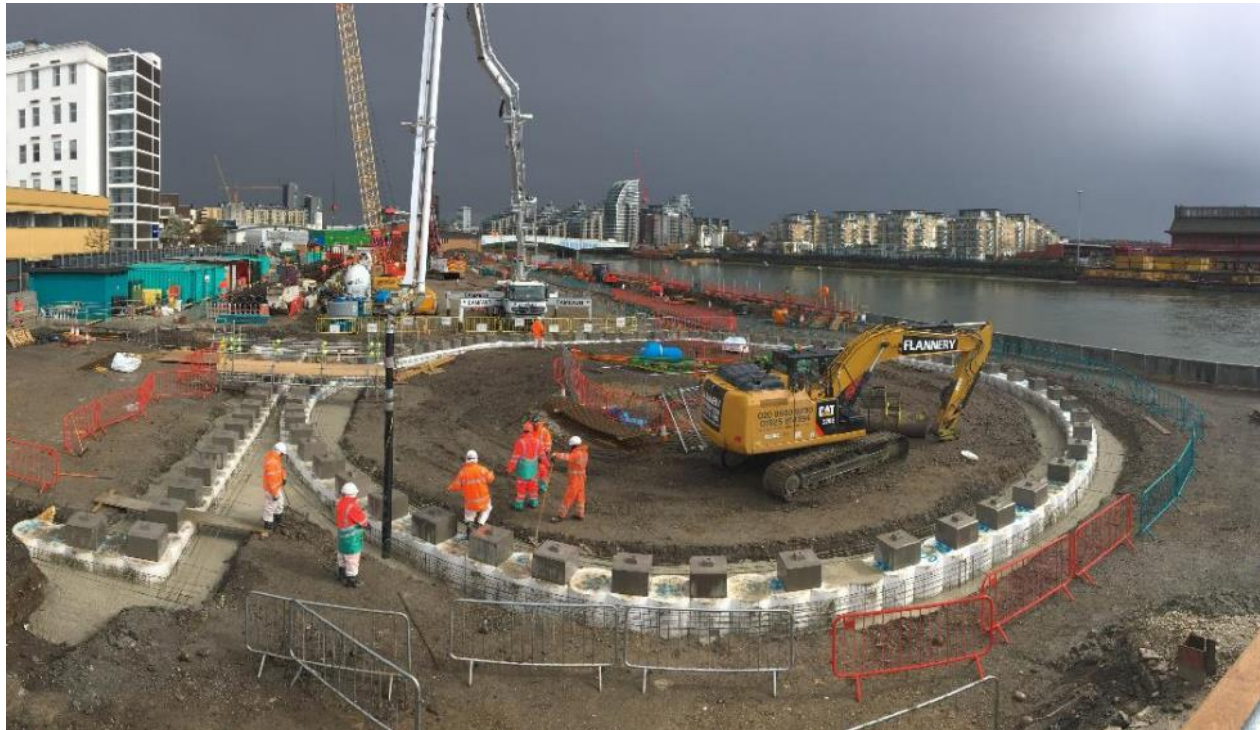
# Progress to Date - General

- Consents and site access working well
- All three main drive sites mobilised between three and five months earlier than the original schedule
- Started work on another six sites
- Construction schedule meets the regulatory baseline
- Key risks already retired:
  - Tideway reference design accepted by Main Works Contractors (MWC)
  - MWC detailed design progressed to allow the purchase of Tunnel Boring Machines (TBM)
  - Enabling works have been completed

# Progress to Date - West

- Started on Hammersmith Pumping Station, Putney Embankment Foreshore and Carnwath Road
- Started strengthening the river wall as well as shaft construction at Carnwath Road
- TBM factory acceptance testing during May/June
- Shaft construction started at Hammersmith Pumping Station
- Putney Embankment Foreshore slipway delivered ahead of schedule

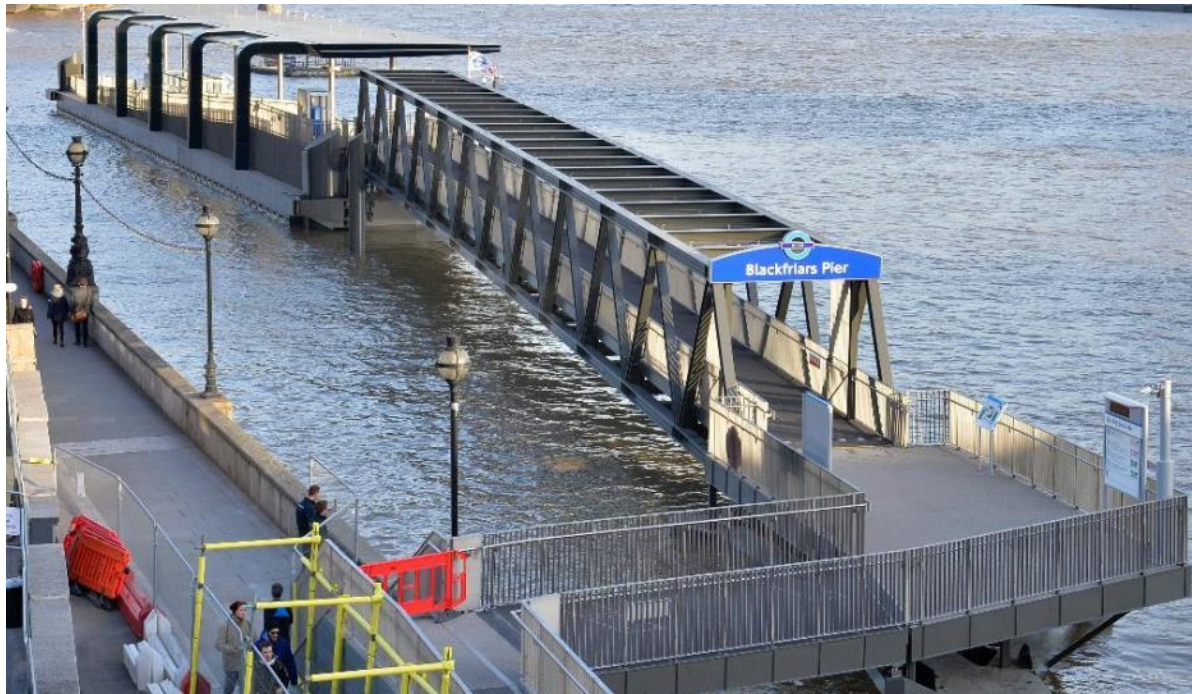
Picture: Carnwath Road construction site



# Progress To Date - Central

- Started on Kirtling Street, Blackfriars Bridge Foreshore, Victoria Embankment
- 70% of shaft diaphragm wall now built at Kirtling St (following varying ground conditions)
- Blackfriars new pier opened in October 2016, cycle superhighway diverted
- TBMs procured in December 2016
- Tattershall Castle relocated (including UXO disposal)
- Counter's Creek solution developed

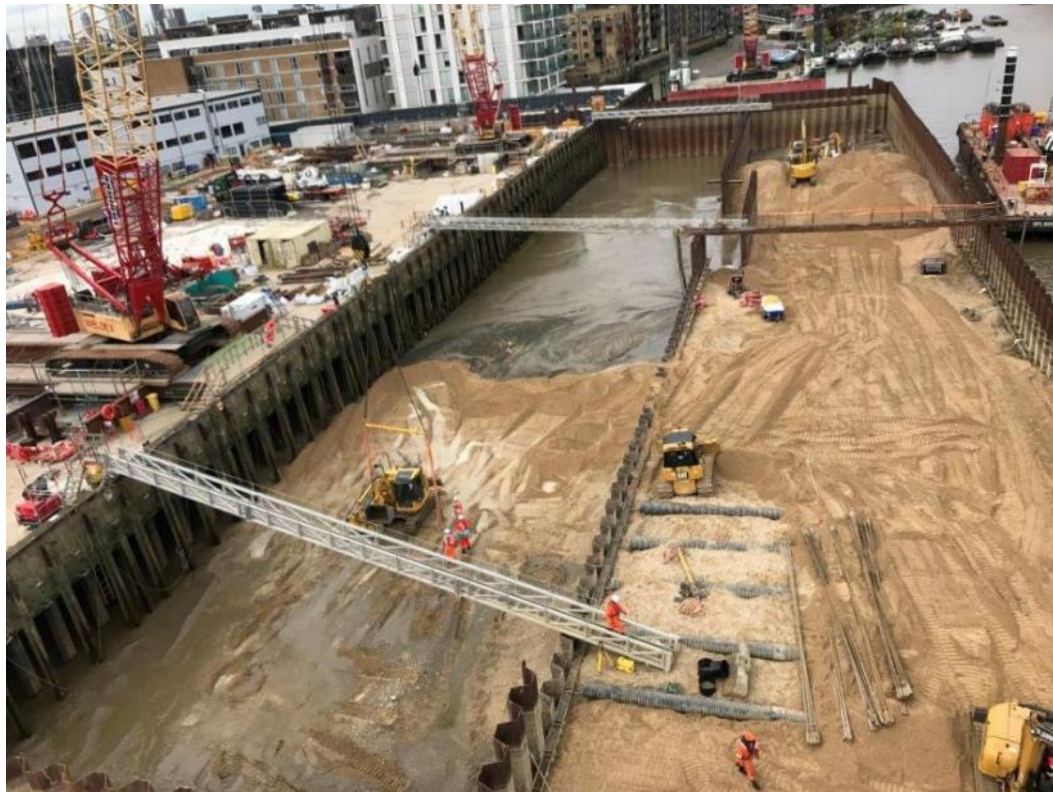
Picture: New Blackfriars Pier



# Progress to Date - East

- Started on Chambers Wharf, Greenwich Pumping Station and King Edward Memorial Park
- Chambers Wharf cofferdam nearly complete
- Greenwich utilities diverted and drive site preparation underway
- TBMs to be ordered in coming months

Picture: Cofferdam at Chambers Wharf





# Critical Success Factors – Health, Safety and Wellbeing

- No major injuries to date
- All of our workforce through our innovative induction centre
- Implemented the “Rightway” strategy for Health, Safety and Wellbeing

Picture: EPIC (Employee Project Induction Centre) induction

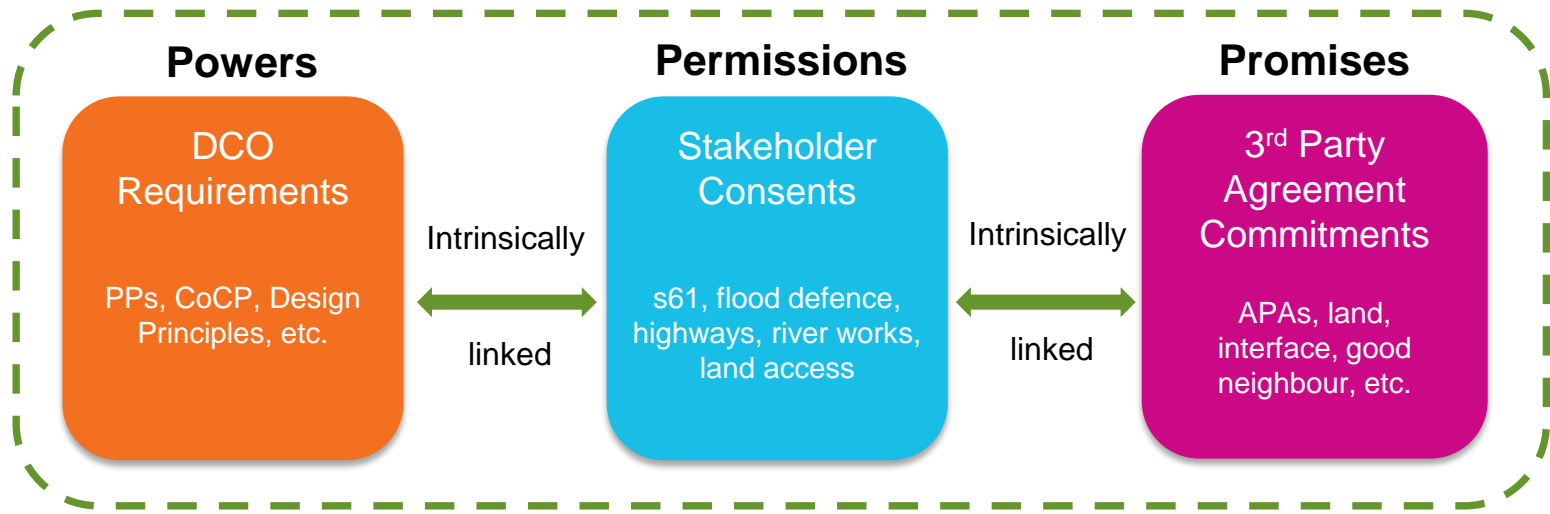


# Critical Success Factors - Tideway Alliance

- Overarching agreement above the Main Works Contracts
  - Sharing best practice and lessons learned
  - Addressing the interfaces between contracts
  - Targeting cost/time savings
- Incentivises all parties to work together to deliver the Project's objectives
  - Programme Incentive: £51m against delivery milestones
  - Cost Incentive: £25m against £3.144bn
- In our first year we have achieved 17 milestones against a target of 19
- Essential in starting on site early
  - Incentivised Thames Water to complete enabling works
  - Phasing site access
  - Prioritising key activities



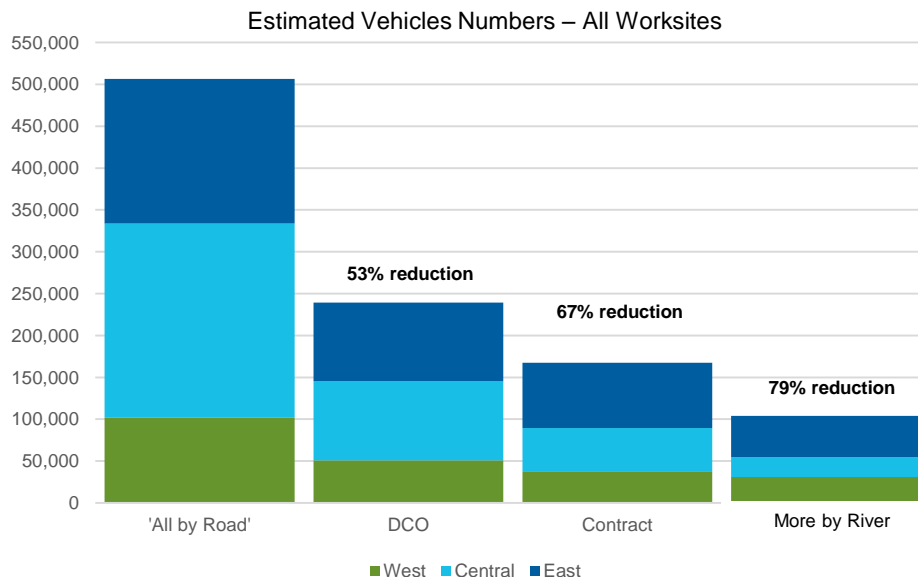
# Critical Success Factors - Consents



- Responsibility to deliver the consents transferred to our Main Works Contractors
- Relationships with the Consent Granting Bodies (PLA, EA, TfL, etc.) are good and they are working with and supporting us in securing the consents
- Colocation has been a real success
- Continued engagement with local residents and London
- To date over 750 principal consents required under the DCO have been obtained to enable us to get onto site and start the works. This figure represents 40-50% of the total number required
- There will be significant consenting activity this year and next as other sites become established

# Critical Success Factors - More by River

- Delivers on our commitments in the DCO River Transport Strategy
- De-risks tunnelling by providing a reliable logistics network
- Reduces the impact of construction vehicles to the local areas and wider road network – improving external relationships
- Further reduces the risk of incidents between construction vehicles and other road users and the consequential impact to project profile and reputation
- As part of delivering our Vision to maximize the use of the River
- Marine Simulator developed
- Thames Skills Academy launched



Picture: Marine Simulator



# The Year Ahead

- Mobilise safely at remaining sites
  - 9 completed, 10 planned in 17/18
  - Continue to successfully implement our Rightway – RightStart strategy
- Increase construction at river based sites
- Delivery of West and Central TBMs
- Start tunneling in West
- Excavating drive shaft in East
- Progress our Secondary Lining Strategy



Picture: West TBM

# QUESTIONS?



# APPENDICES

# Management Overview



## Sir Neville Simms, Chairman of the Board of Directors

Sir Neville Simms FREng is a Chartered Civil Engineer. He was previously Chairman of International Power plc for ten years, until the combination of the group with the international power generation assets of GDF Suez early in 2011, at which time he became Deputy Chairman of GDFSuez Energy International. Until 2005, Sir Neville was Chairman of Carillion plc, after the demerger, in 1999, of the company from Tarmac plc, where he had worked for 35 years; including as Group CEO and Deputy Chairman for the last eight years. He was, for the final three years of the project, joint Chairman of TML, the Channel Tunnel contractor's consortium.

Sir Neville has chaired a number of Construction Industry bodies and the Regional Leadership Teams for Business in the Community in the West Midlands and the Solent Region of the UK. He was a founder member of the UK Government's Private Finance Panel, Chairman of the Government's Sustainable Procurement Task Force, Deputy Chairman of Ashridge Management College, Chairman of the Building Research Establishment (BRE) Trust for ten years, member of the Presidents Committee of the CBI until 2015, and he also served for seven years on the Court of the Bank of England.



## Andy Mitchell, CEO

Andy Mitchell CBE FREng took the role as Tideway CEO after leaving his post as Programme Director and Board Member at Crossrail in summer 2014, where he was responsible for the agreement of the baseline schedule and budget for the project and the subsequent design and construction of the tunnels, the majority of which were finished by the time he left.

Andy has managed a number of high profile projects both in the United Kingdom and overseas. After 12 years working in the United Arab Emirates, France and South Africa, and on major developments such as Hong Kong Airport and the Hong Kong West Rail, he joined Network Rail in 2001.

He was Project Director for Network Rail's Southern Power Upgrade project, and was also the Senior Programme Director of the Thameslink Programme.

Since his arrival at Tideway, he has taken full responsibility for all aspects of bringing into being a new regulated water company, agreeing the baseline schedule and budget and the successful launch of the Company and the agreements and delivery mechanisms that are in place today. Since Licence Award a key area of focus has been the establishment of the best possible delivery and financing arrangements.

Mr Mitchell is a fellow of the Royal Academy of Engineers, a Fellow of the Institution of Civil Engineers, Chairman of the IUK Infrastructure Client Group, a visiting professor at Leeds University and has an MBA in Project Management. He was awarded the CBE for services to civil engineering.



## Mark Corben, CFO

Mark joined Tideway in February 2014 from his role as Head of European Power & Utilities at UBS, where he had extensive experience in the regulated water sector and advised Thames Water on the development of the delivery model for Tideway.

Over the last two years Mark has led a number of key projects for Tideway including negotiation of the Licence and Government Support Package, and establishment of controls and reporting systems of Tideway. His current responsibilities include chairing the Risk, Change, Funding and Financing and Information Systems committees.



## Mark Sneesby, COO

Mark joined Tideway as Chief Operating Officer in May 2014. Mark is a Chartered Engineer with extensive experience in delivering major infrastructure in the water industry. He was formerly Head of Major Projects at Thames Water, which included the Lee Tunnel project, the largest contract ever awarded in the UK water industry.

Mark is responsible for managing the construction of the TTT. He has also led the implementation of the company's systems, processes and capabilities to operate as a regulated water company and a major infrastructure delivery organisation, as well as the final negotiations in the procurement of the Main Works Contractors.



## Andy Alder, Delivery Manager Central

Andy is the Delivery Manager for the Central Area of Tideway. He is a Chartered Civil Engineer with extensive experience of leading the design and construction of major urban infrastructure, particularly tunnelling and underground construction. Prior to joining Tideway Andy led tunnel construction for Crossrail between Paddington and Farringdon, including the new Bond Street and Tottenham Court Road Stations. He has previously led the design of the London Underground Tottenham Court Road Station upgrade project, and the design of two extensions to the Docklands Light Railway. Andy has extensive tunnel design and construction experience in the UK and overseas.

Andy is a Fellow of the Institution of Civil Engineers, and has Masters degrees in Civil Engineering and Project Management.



# Key Financing Terms in the Common Terms Agreement

- Typical WBS covenant package
- Conservative end of the peer group

<b>Selected trigger events</b>	<ul style="list-style-type: none"> <li>• Financial Ratio breach:             <ul style="list-style-type: none"> <li>- FFO ICR: 1.30x (min); 1.40x (avg)</li> <li>- Net Debt / RCV: 70%</li> </ul> </li> <li>• Loss of investment grade rating</li> </ul>
<b>Selected trigger event consequences</b>	<ul style="list-style-type: none"> <li>• No Restricted Payment may be made by any Obligor</li> <li>• Information provision and remedial plan</li> <li>• Consultation on communication with regulator</li> </ul>
<b>Financial events of default</b>	<ul style="list-style-type: none"> <li>• Failure to pay by an Obligor</li> <li>• Financial Ratio breaches the Default Ratio (subject to equity cure right)             <ul style="list-style-type: none"> <li>- FFO ICR: 1.10x</li> <li>- Net Debt / RCV: 80%</li> </ul> </li> </ul>
<b>Liquidity</b>	<ul style="list-style-type: none"> <li>• Cash/liquidity facility covering minimum 18 months' interest</li> </ul>
<b>Additional financial indebtedness</b>	<ul style="list-style-type: none"> <li>• Subject to:             <ul style="list-style-type: none"> <li>- Compliance with hedging policy</li> <li>- No EOD</li> <li>- No Trigger Event caused by incremental debt</li> <li>- Maturity concentration limits</li> </ul> </li> </ul>
<b>Hedging policy</b>	<ul style="list-style-type: none"> <li>• Interest rate: 70-105% limit on exposure to floating interest rates</li> <li>• Currency: 100% hedged (less a de minimis threshold)</li> <li>• Minimum counterparty rating at inception and on transfer only</li> <li>• Aggregate accretion of super senior inflation hedging does not exceed 6% of RCV</li> <li>• Compliance with further restrictions on hedging by government during construction</li> </ul>
<b>Information covenants</b>	<ul style="list-style-type: none"> <li>• Website</li> <li>• Creditors' meeting once per year</li> <li>• Compliance Certificate</li> <li>• Investor Report</li> </ul>

Tideway has a conservative financing platform with a comprehensive suite of creditor protections

# Glossary

APA – Asset Protection Agreement

CESA – Contingent Equity Support Agreement

CoCP – Code of Construction Practice

CSO – Combined Sewer Overflow

CTA – Common Terms Agreement

DCO – Development Consent Order

EA – Environmental Agency

EIB – European Investment Bank

EoD – Event of Default

FFO - Funds from operations

GSP – Government Support Package

HMG – Her Majesty's Government

ICR - Interest Cover Ratio

LC – Letter of Credit

MDF – Market Disruption Facility Agreement

MWC – Main Works Contractors

PLA – Port of London Authority

PR19 – 2019 Price Review

RCF – Revolving Credit Facility

RCV – Regulatory Capital value

SAOA – Special Administration Offer Agreement

SCA – Supplemental Compensation Agreement

SDA – Shareholders Direct Agreement

TBM – Tunnel Boring Machine

TfL - Transport for London

TTT – Thames Tideway Tunnel

UXO - Unexploded Ordnance

WBS – Whole Business Securitisation

# QUESTIONS?

