



Market Information Day

EcoPark South



Building the best environmental solution for north London's waste

Introduction

Martin Capstick, NLWA Managing Director



Housekeeping



North London Waste Authority



To be covered today

North London Heat and Power Project

David Cullen, Programme Director

Scope of EcoPark South works

Mat Ray, Project Manager

Site Operator: LondonEnergy

Mark Beattie, LondonEnergy

Form of procurement & contract

Ursula Taylor, Legal & Governance Lead

Questions & feedback



Martin Capstick
Managing
Director



David Cullen
Programme
Director



Mark Beattie
Head of Development
and Property
LondonEnergy



Mat Ray
Project Manager



Ursula Taylor
Legal and
Governance
Lead

North London Heat and Power Project

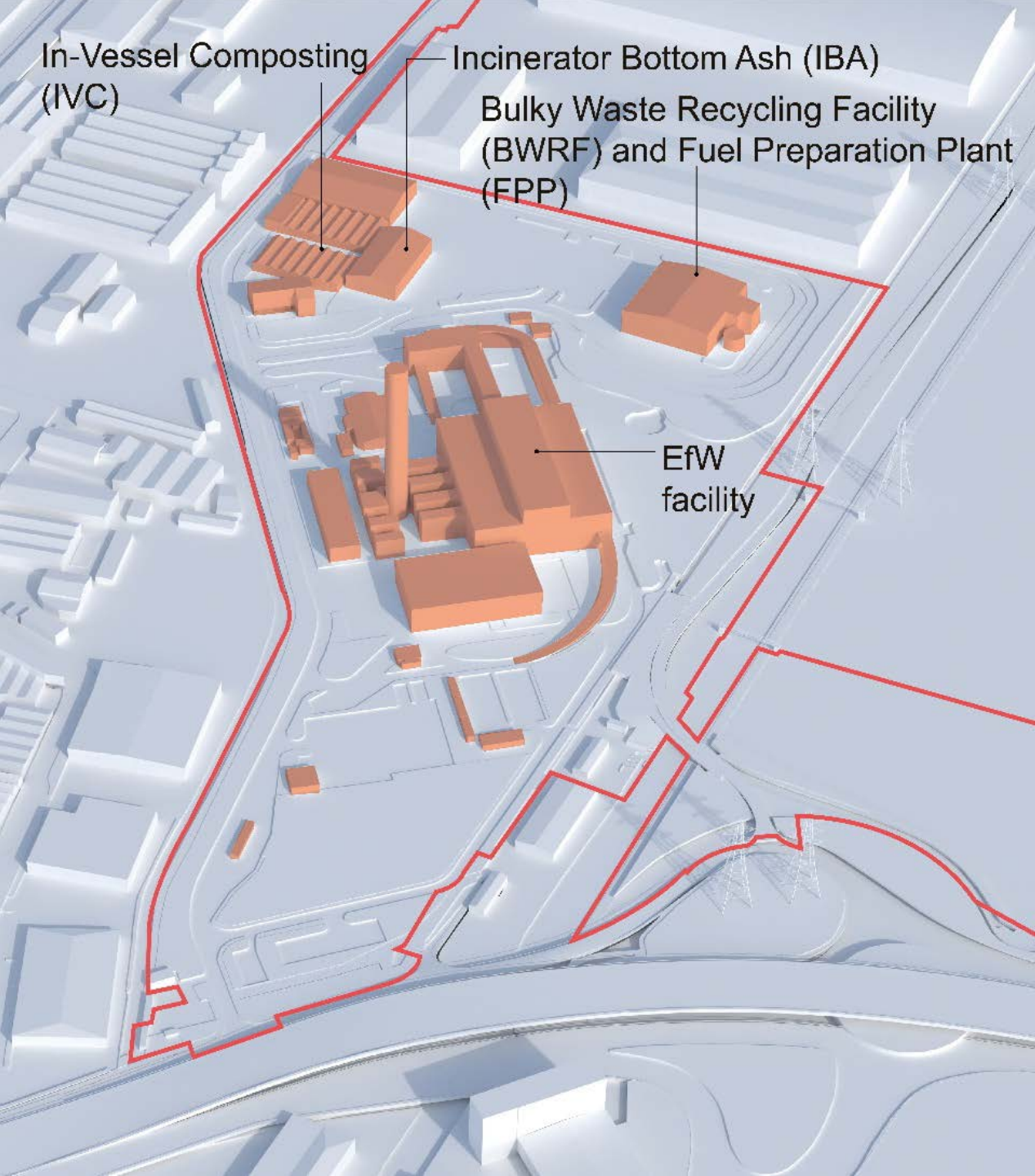
David Cullen, NLHPP Programme Director



Safety Moment; Behavioural Safety

- Road-building in mountain gorge in Albania with highly faulted and friable geology
- Road redesigned with construction safety in mind and constructed in controlled sections after inspection/ release by geologists and then targeted scaling by alpinists
- 3 alpinists killed after unauthorised working outside controlled zone
- What can we learn from this?
 - Work which is planned well for safety has productivity benefits
 - **But** RAMS must be communicated and enforced with no compromise
 - **But** we must test workers' understanding and keep SSOW under review with feedback from the workforce
 - **But** workers tend not to think the worst will happen to them, so need to continually focus management attention and action on reinforcing safe behaviour





Edmonton EcoPark & Current Operations

- NLWA's wholly owned company, LondonEnergy Ltd (LEL) operate the EcoPark

Key facts:

- 16 ha operational site
- Energy from Waste (EfW) facility operating since 1970 with a capacity of ~550ktpa (continuous operation)
- Incinerator Bottom Ash Reprocessing facility (to be relocated off-site) – will have ceased operations
- Bulky Waste Recycling & Fuel Preparation to maximise recycling and energy recovery (relocated on-site)

Future Edmonton EcoPark Layout

North Circular

Resource Recovery Facility

Energy Recovery Facility

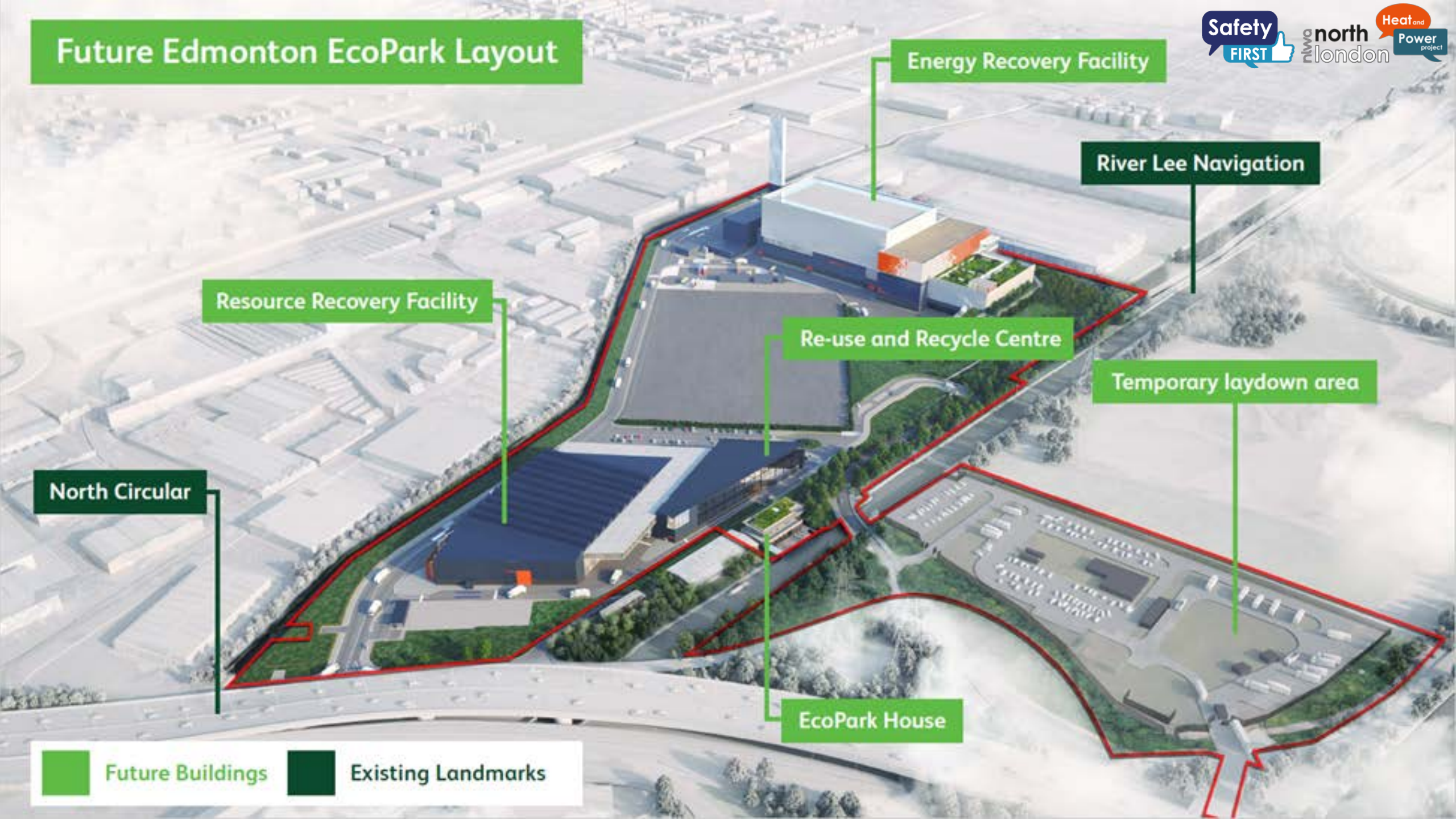
River Lee Navigation

Re-use and Recycle Centre

Temporary laydown area

EcoPark House

 Future Buildings  Existing Landmarks



What's important to us as a client



- Help us deliver the NLHPP Vision
- Support Health, Safety & Well-being Excellence
- Maintaining waste management operations at EcoPark
- Be a Positive Model for Employment Relations
- Be Welcomed by the Community
- Provide Apprenticeships, Training and Local Employment Opportunities

NLHPP Programme Vision



“Create a waste management facility in which local communities take **pride**, which demonstrates **value**, and is a model for **public sector project delivery**.”



Safety First Culture

- We are committed to delivering a project that puts the **health, safety and wellbeing of everyone involved in the project** and those working and living in the local community as the **number one priority**.
- We want you to share our goals and achieve sustained Health & Safety excellence through **collaboration** and **continuous improvement**. We will articulate our expectations of you through our **statement of requirements**, and will measure the effectiveness and drive excellence through our safety assurance programme.
- Our **'Safety First'** campaign underpins our safety leadership identity.



Approximate Construction Timetable



NLHPP

Preparatory Works

EcoPark South Works

ERF Construction Works

Post-ERF Works

Works begin 2019

Works ends 2021

Works begin 2020

Works ends 2023

Works begin 2023

Works ends 2025

Works begin 2027

Works ends 2031



Scope of EcoPark South works

Mat Ray, Project Manager



Eco Park South Package



Resource Recycling Facility

Existing Laydown Area

EcoPark House



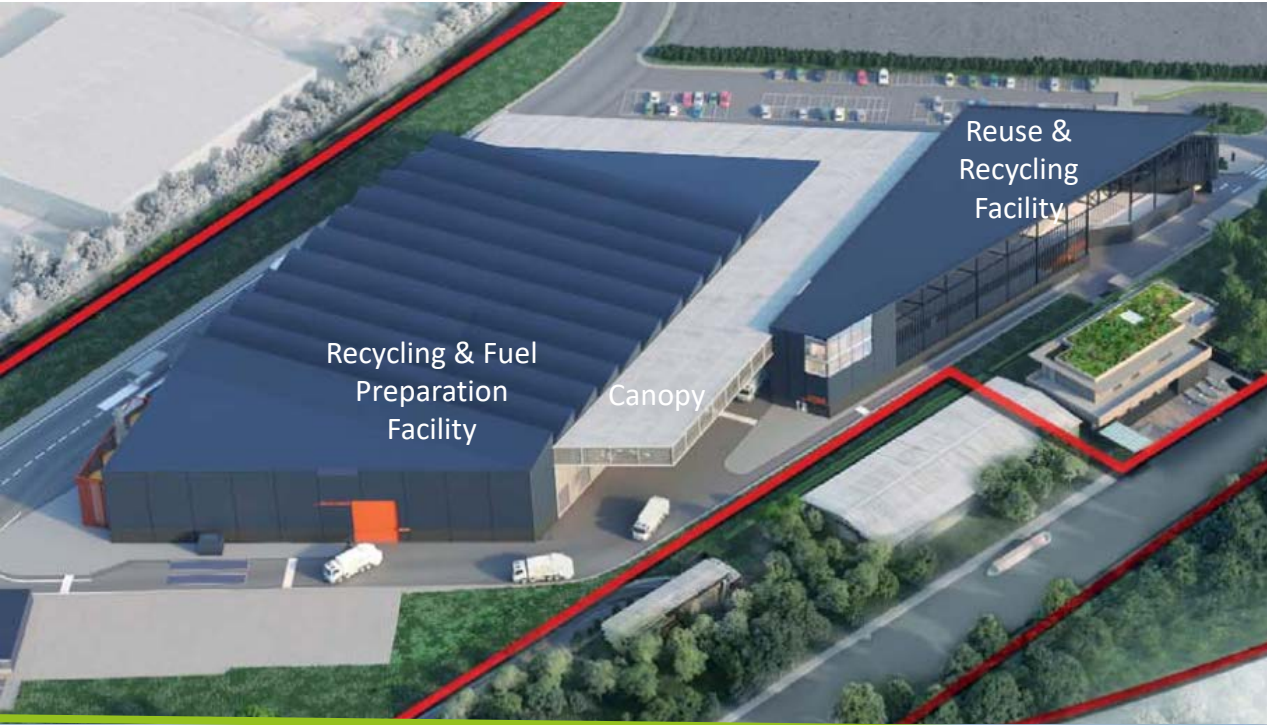
Safety
FIRST

nwa north
london

Heat and
Power
project



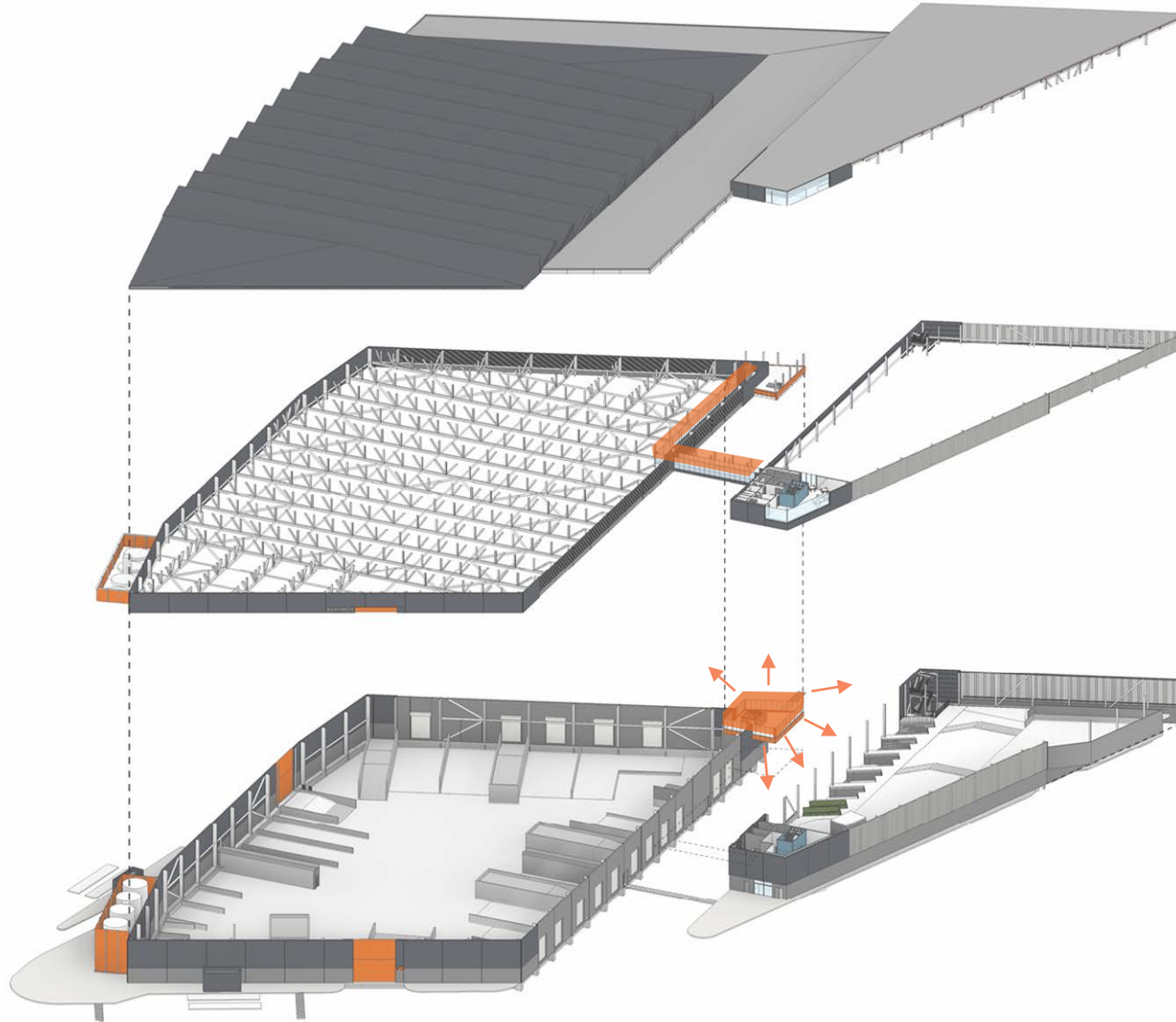
Resource Recovery Facility



A facility capable of processing over 430,000 tonnes of waste per year.

- 2 Piled Steel Framed Buildings
- Single span roofs, optimised for natural light
- Solar panels
- Interconnecting canopy
- Highspeed doors for delivery of waste
- Rainwater harvesting
- Gully waste collection and treatment
- In & Out twin weighbridges, ANPR & vehicle management system
- Surrounding roads and hardstanding

Resource Recovery Facility



A facility capable of processing over 430,000 tonnes of waste per year.

- Steel lattice roof structure
- Concrete waste bunkers including push-walls
- Suspended mezzanine plant floors within roof
- Crows nest control centre
- Gulley waste water processing
- Odour abatement and dust control system
- Industrial fire suppression and abatement system
- Fire water storage and pumps
- Welfare and office facilities
- IT, SCADA, Tannoy & access systems

Safety
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london

Heat and
Power
project



EcoPark House



A two-storey pavilion adjacent to the River Lee Navigation.

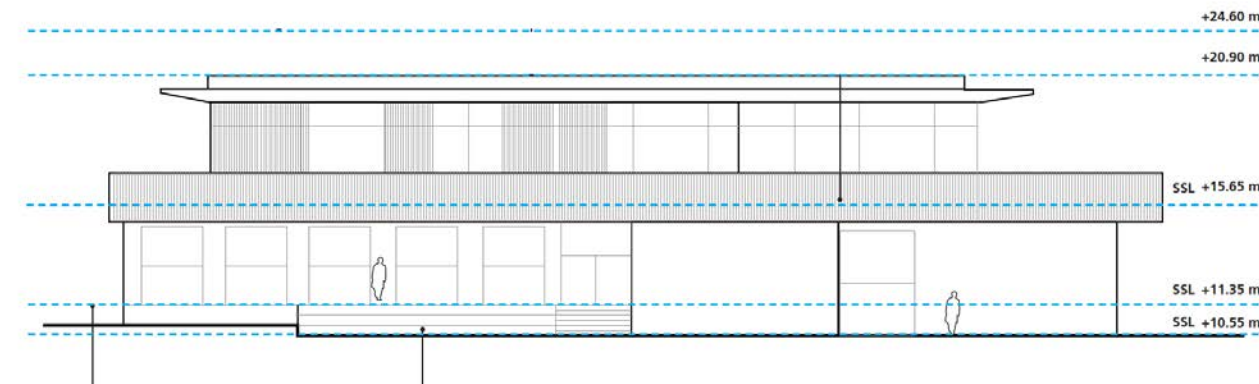
- A visitor centre
- Community and education facilities
- Stores and facilities for Edmonton Sea Cadets.

The premises will provide community space, including dedicated lecture rooms, exhibition space and accommodation for the Edmonton Sea Cadets, as well as classrooms, toilets, showers, changing rooms.

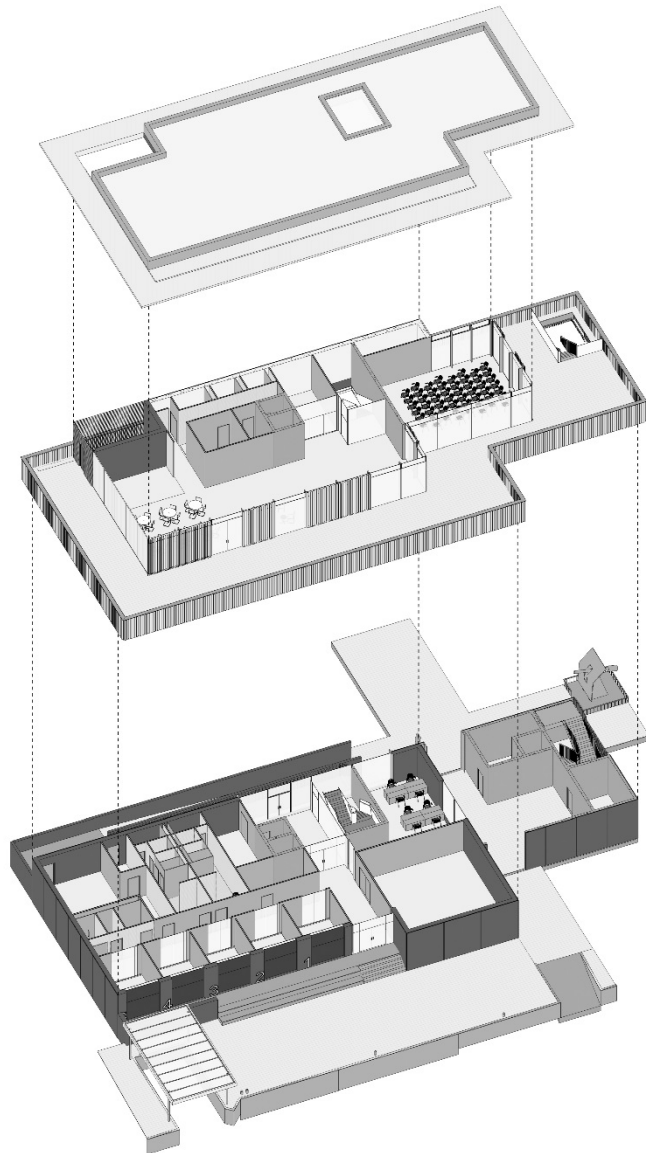
The external area and existing wharf will be refurbished and secure storage provided for canoes, toppers and dinghies



Stationary Gun Enfield Ditch Access to Lee Navigation through Boat Shed Concrete Driveway Main Entrance



EcoPark House



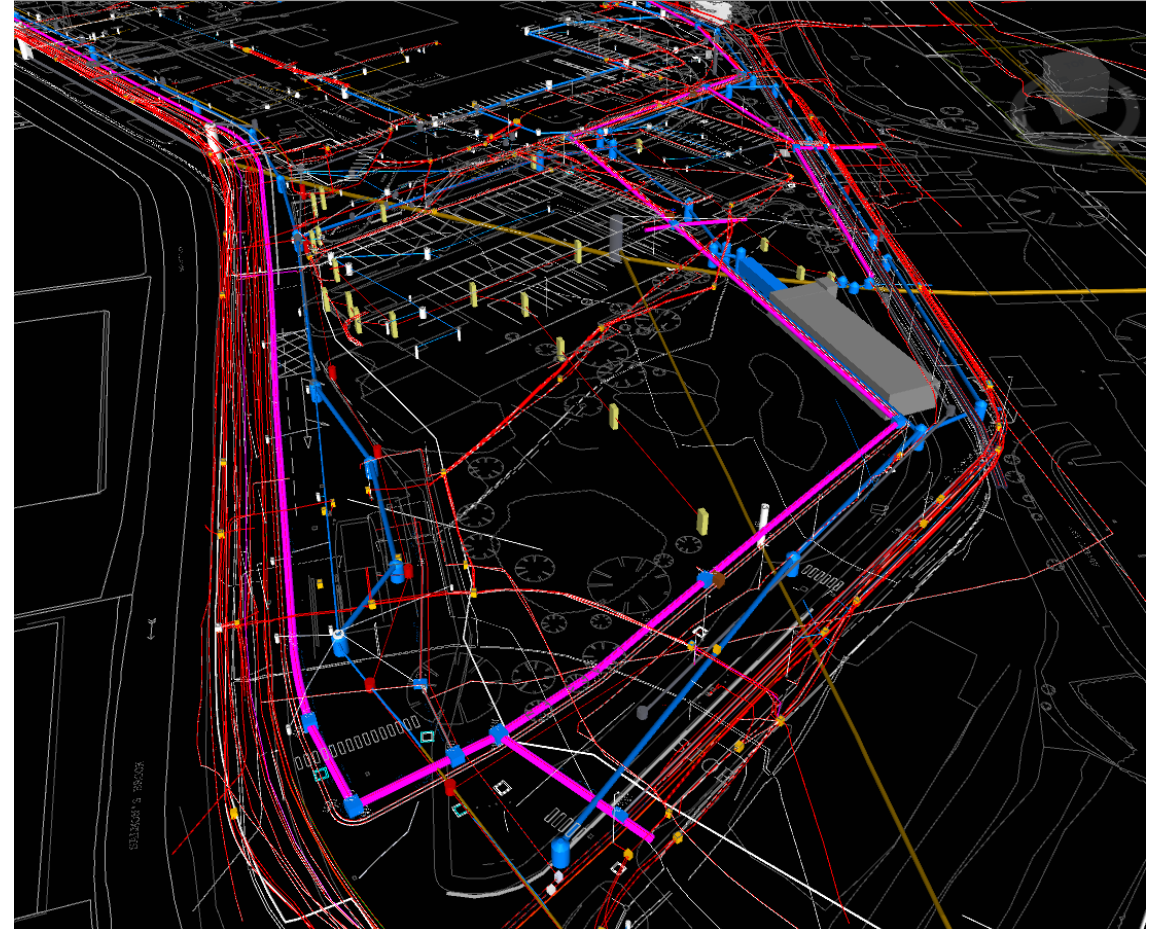
A two-storey pavilion adjacent to the River Lee Navigation:

- Demolition of existing facilities
- Steel building on slab & strip foundations
- Partitioned ground floor, including storage
- Classrooms, changing rooms & welfare
- Planted roof
- Large upper decking with timber balustrade
- Conferencing facilities
- Office facilities
- IT & access systems
- Refurbishment of wharf, landscaping and planting
- Removal and remounting of Sea Cadet's gun

Utilities

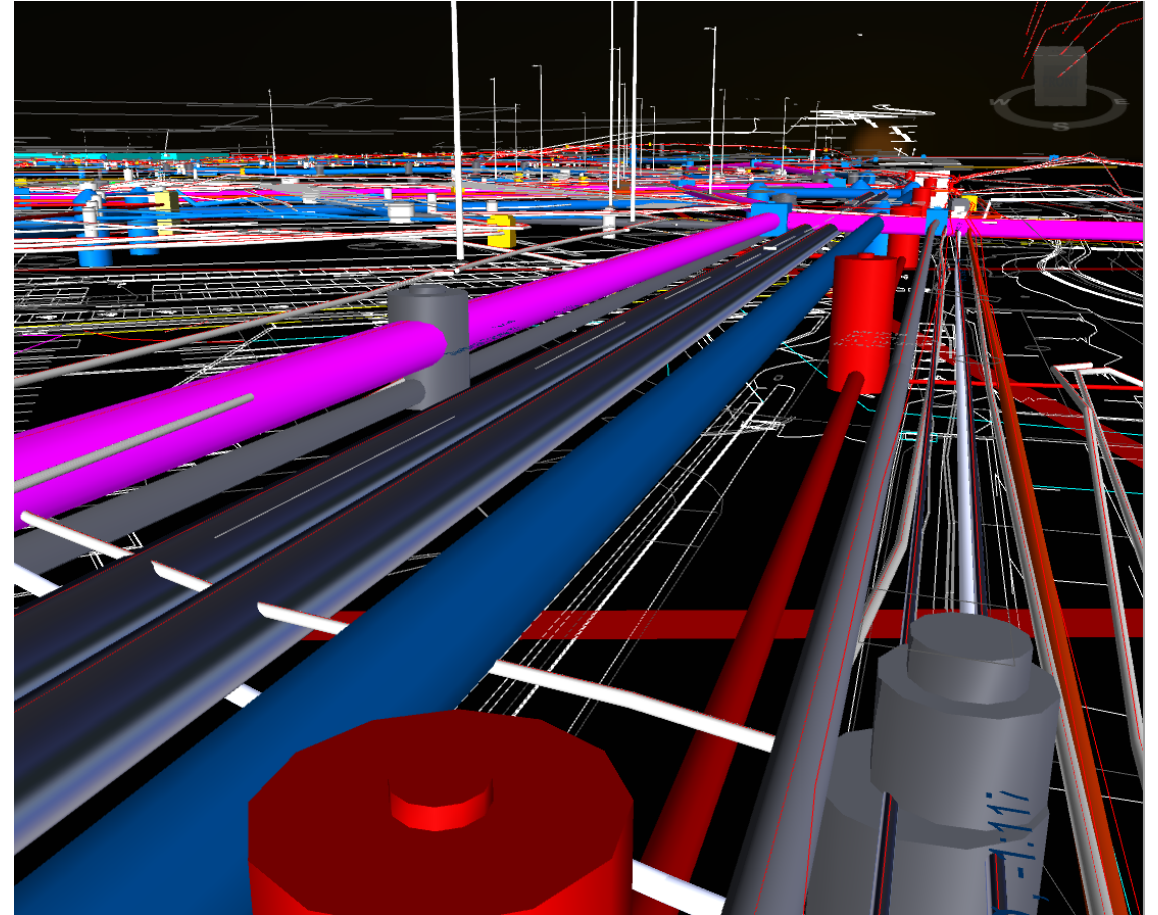
Across the south of EcoPark:

- Diverting & decommissioning existing services
- Constructing service culverts for new site wide services
- Installation of services for RRF and EPH; including:
 - Potable water
 - Waste water drainage
 - Foul water drainage
 - Fire main
 - Surface water drainage
 - Raw water supply
 - Electrical supply
 - CCTV
 - Telecoms and data

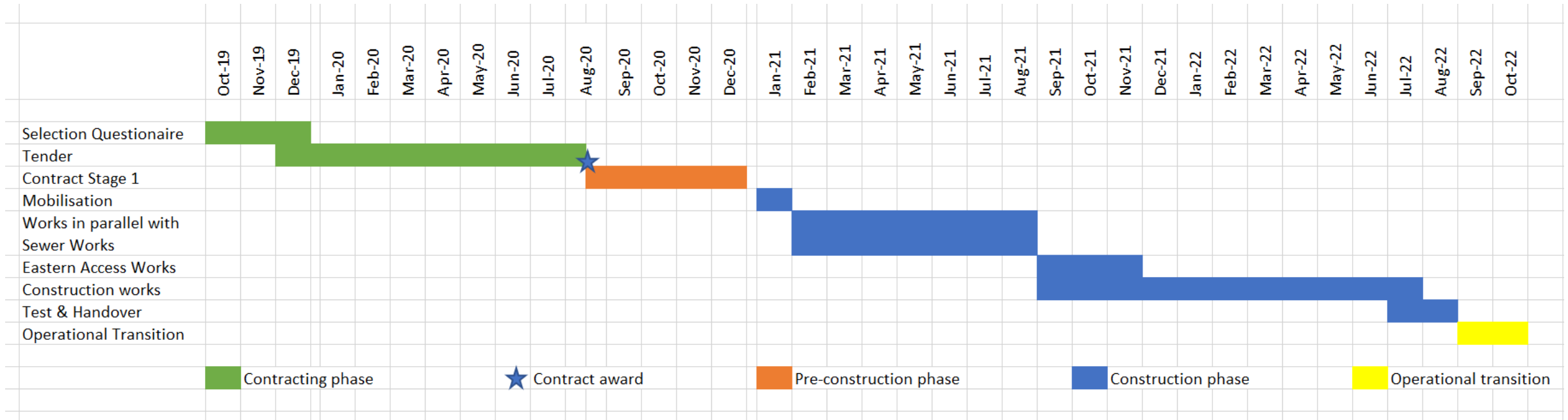


Utilities

- 3-D model available of all services
- Trial pits underway
- Design interaction with other parties
 - Utility providers
 - Site operator
 - ERF designer
 - District heating supplier

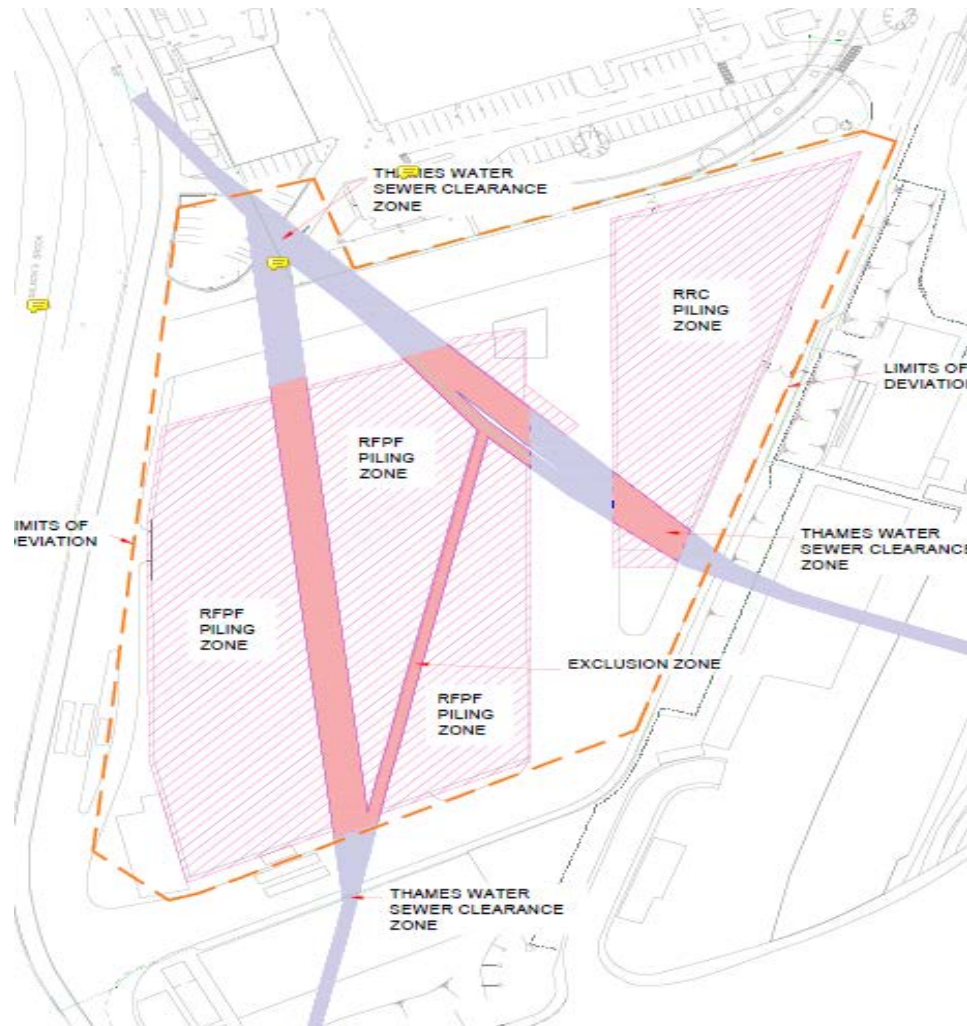


Schedule for Works



- NEC4 Design & Build Contract with Early Contractor Involvement

Stage 1: Pre-construction (ECI)



- Mitigation of risks
 - Further intrusive surveys
 - Interface with existing systems
- Co-located team
- Design development
 - TW, EA & final DCO consents
 - Process system development
- Cost efficient delivery
- Agreement of contract programme
- Sub-contractor procurement
- Project delivery plans:
 - Health, safety & environment
 - Quality management
 - Social value



Construction Phase 1



- Contractor responsible for laydown area
- Contractor takes PC role
- Site entrance security managed by operator
- Site Working Group will coordinate
 - Operational waste traffic
 - District heating construction
 - EcoPark South Contractor
 - Sewer Diversion Contractor
- Utility diversions
- Removal of temp access road
- Permitted Access for Sewer Contractor



Construction Phase2 & Commissioning



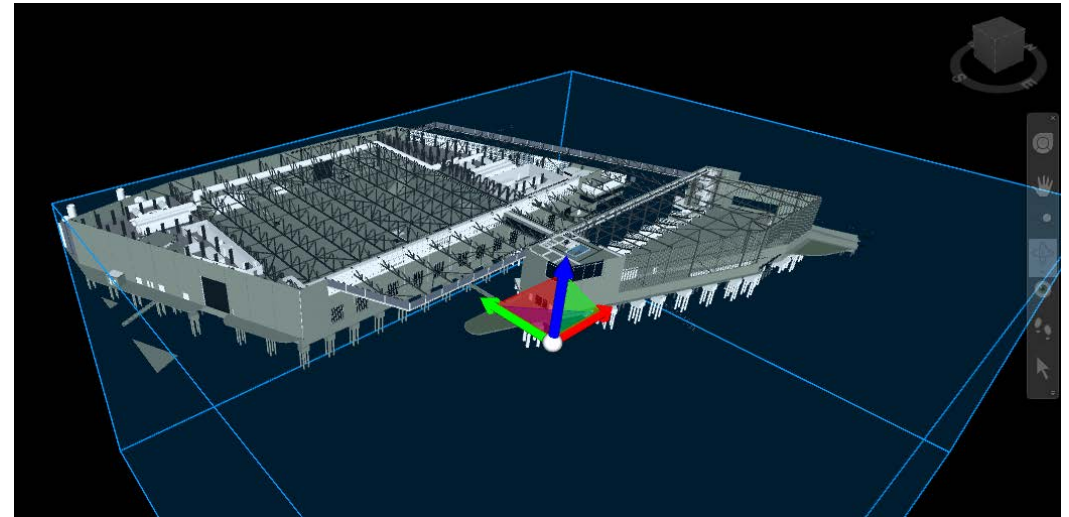
- Contractor has full site access to RRF footprint
 - 3 month window at start for Construction of Eastern down ramp
 - District Heating construction continues
- Contractor undertakes testing & commissioning
- Contractor supports transfer of operations



Reference Design



- Architectural ref. design at RIBA Stage3
- Technical ref. design at RIBA Stage 2+
- Reference design is accepted by site operator
- Ref design envelope is bound by:
 - Development Consent Order (DCO)
 - DCO conditions discharged
 - Environmental Permit obtained
- Ref design responsibility:
 - Buildability of ref. design with Contractor
 - Operability of ref. design with Client
 - Amendments to Ref design with Contractor
- All design information provided within Pt3 or Pt4



Management of Risk



- Risk will be allocated to the organisation most able to mitigate

Risk	Risk Owner	Mitigation
Maintaining EcoPark waste operations	Client	<ul style="list-style-type: none"> • Segregated working areas and traffic routes, arrangements detailed within tender documents • Close liaison of all site activities through SWG
Ground conditions	Anticipated: contractor Unanticipated: client	<ul style="list-style-type: none"> • Extensive site investigations completed, and detailed with tender documents. • Opportunity during Stage1 to undertake further surveys
Overrun on related works	Client	<ul style="list-style-type: none"> • Timescales for related works (sewer diversion) are contained within the contract and will be monitored via the master programme • Early awareness of potential overrun via SWG
Odour abatement system performance	Contractor	<ul style="list-style-type: none"> • Preliminary design and assumptions undertaken for DCO included within Scope, Section4 • Modelling, Design, equipment and commissioning arrangements to be developed during Stage1
Obtaining remaining statutory consents	Contractor	<ul style="list-style-type: none"> • All consents, except those requiring detailed design completed prior to contract • Residual consents detailed within tender documents

Social Value

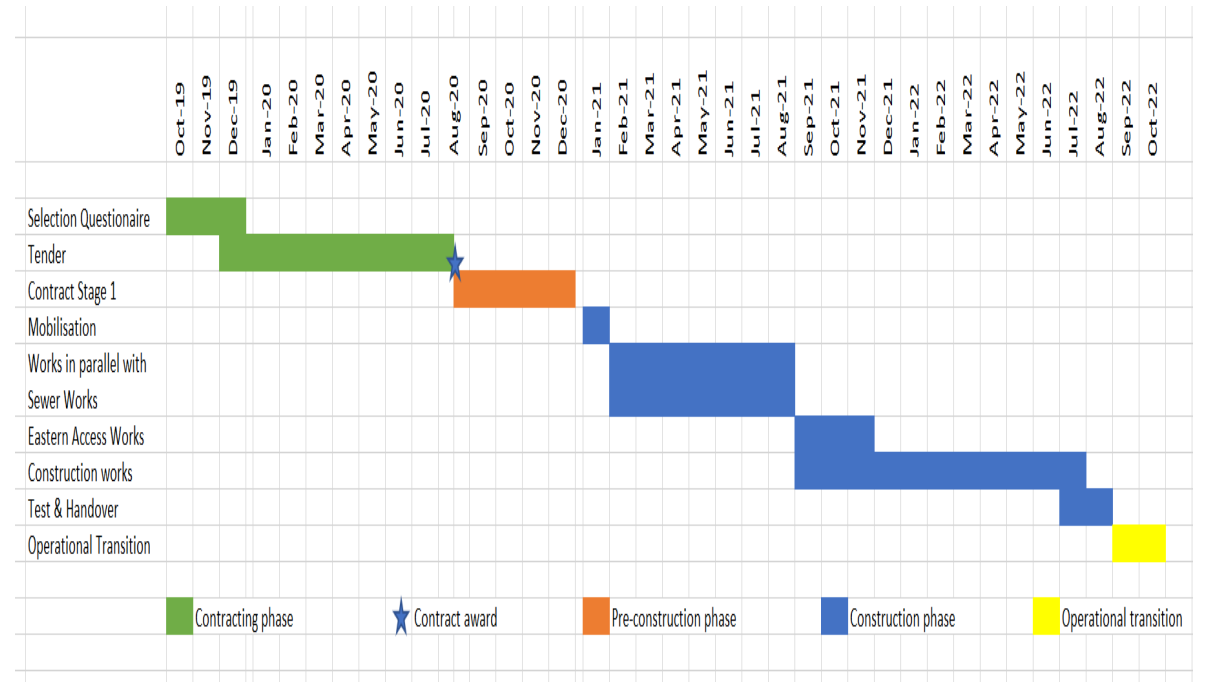
EcoPark South will:

- Deliver 20 apprenticeships
- Deliver 60 weeks on-site skills training opportunities.
- Promote employment opportunities for the local community
- Employment relations code of practice
 - Employment status
 - Value equality, diversity and Inclusion
 - Adoption of London living wage
 - Positive trade union engagement
- Promote opportunities for local businesses



EcoPark South Summary

- 2-stage design & build contract
- PC role (client appoints PD)
- Contract duration:
 - 9 month SQ & tender
 - 5 month pre-construction
 - 20 month build & commission
- Risk allocated to party most positioned to mitigate
- Contract value £106.64m



Site Operator: LondonEnergy

Presented by Mark Beattie, Head of Development and Property, LondonEnergy



Introduction to LondonEnergy



LondonEnergy
Powering the Circular Economy

Background

1. Limited Company with NLWA as shareholder. Arms length company with independent Board
2. Based at EcoPark, N18 3AG
3. Provide waste reception, recycling and processing services for NLWA and other local authorities across 9 sites in North London
4. 330 staff employed
5. Current EfW Generates electricity powering 80k homes



EcoPark

1. Operational Site
2. Shared Entrance with waste vehicles, deliveries, LEL vehicles staff and visitor cars
3. Team working with common goals have enabled a wide range of smaller projects to be delivered
4. Facility operates 24/7/365 with guaranteed service levels
5. Safety is paramount to our activities
6. Team of experienced LEL staff ready



LondonEnergy

Powering the Circular Economy

Procurement and Contract

Ursula Taylor



Procurement and Contracting Strategy



- The procurement and contracting strategy that is judged most likely to deliver successful outcomes for the Authority and the Contractor:

Procurement Strategy

Two-Stage Design and Build Contract with Early Contractor Involvement

Contract Form

NEC4 Engineering and Construction Contract, Option C - Target Cost

Procurement Procedure

Competitive Procedure with Negotiation (CPN)

Contract Form – NEC4



- NEC4 was endorsed in June 2017 by the Cabinet Office;
- Described as '**evolution not revolution**' from NEC3;
- Amendments driven by users' feedback therefore less need for bespoke amendments ('Z clauses');
 - We have included project specific Z clauses, and provisions relating to public sector points, in particular Freedom of Information requirements;
- Parties act in a spirit of mutual trust and co-operation. More proactive and collaborative;
- Acts as a project management tool, as well as a set of contract documents;
- Advantages include:
 - proactive risk management;
 - open communication; and
 - the willingness to work together to solve problems.

Contract Form



Contract Value

£106.64m

Award Criteria

Quality 50%, Price 50%

Fee Incentivisation

Target Cost adjustment at Notice to Proceed results in Fee adjustment through an incentive mechanism

Pain / Gain

50/50 split between -90% to +120% range.

Sections

Section 1: RRF
Section 2: Remainder of the *works*

Contract Form



Time
Incentivisation

Early Completion Bonus (and Delay Damages)

Retention

Stage One ECI period is retention free. 5% retention thereafter

Payment Terms

30 days

Insurance

Authority to provide Owner Coordinated Insurance Programme (OCIP)

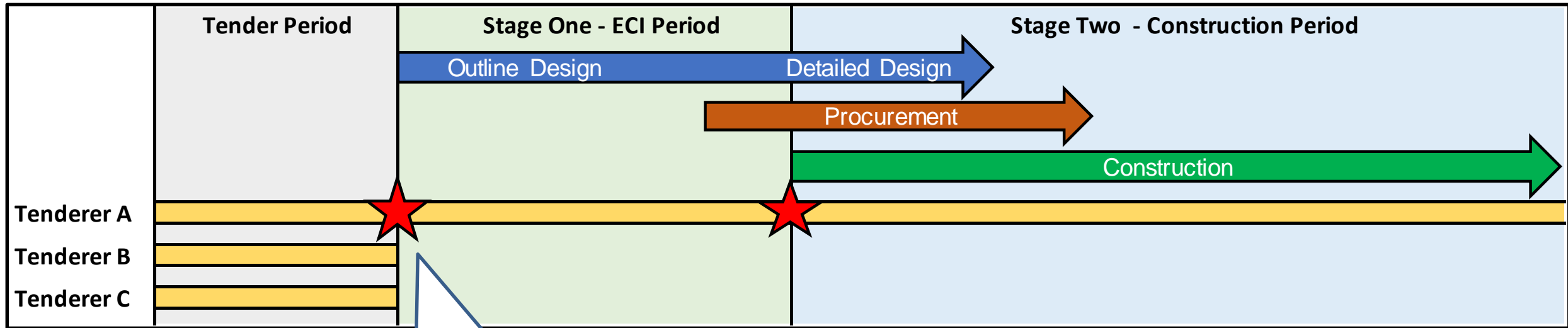
KPIs

KPIs for 'out performance' to be rewarded. Defined in Stage One

Procurement Strategy - How it Works



- Competitive Procedure with Negotiation
- Cost focused procurement
 - Collaborative working interviews
 - Qualitative evaluation of submissions

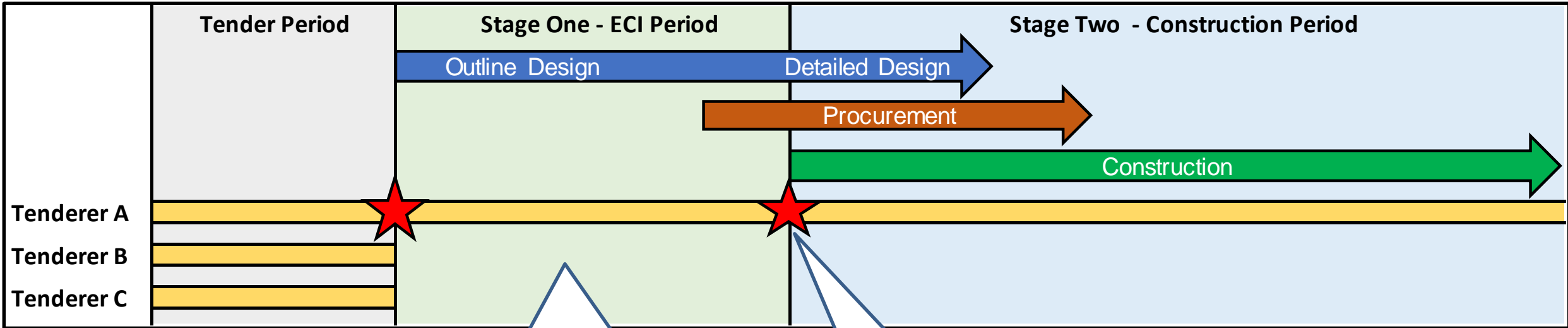


Deselect to single bidder.
Target Cost contract awarded

Procurement Strategy - How it Works



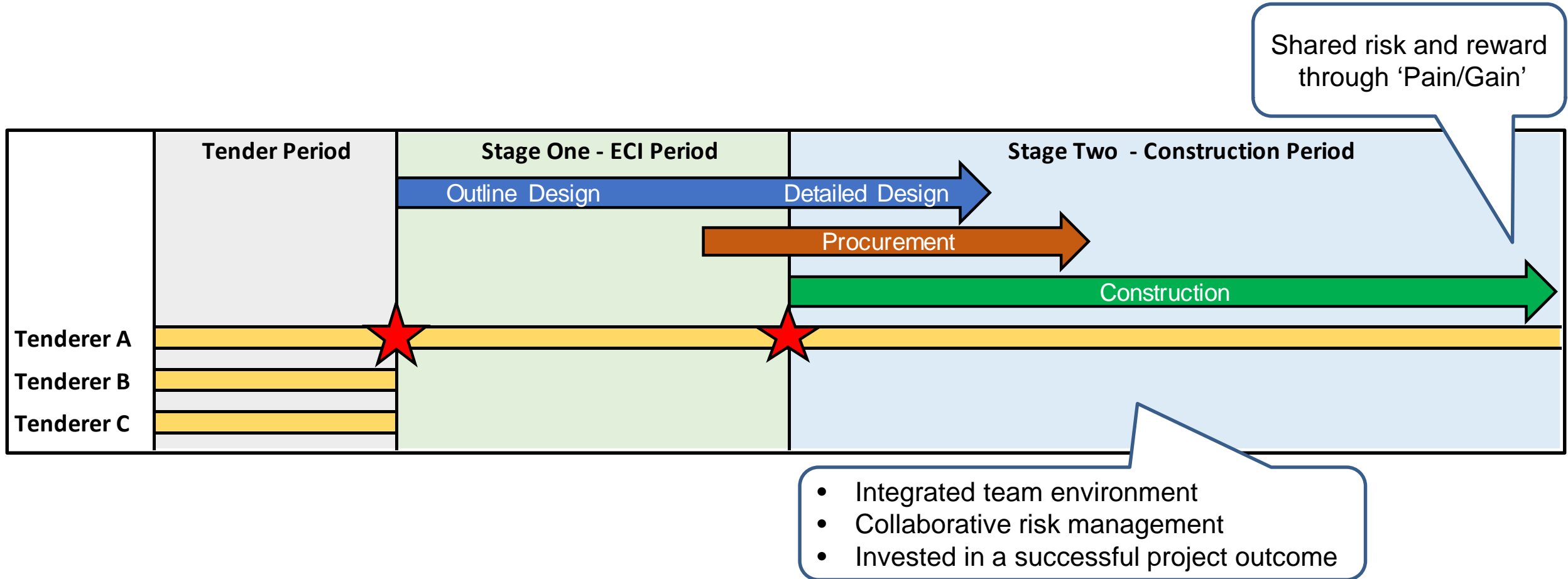
Optimised technical solutions developed
Open Book procurement
Integrated 'one team' approach



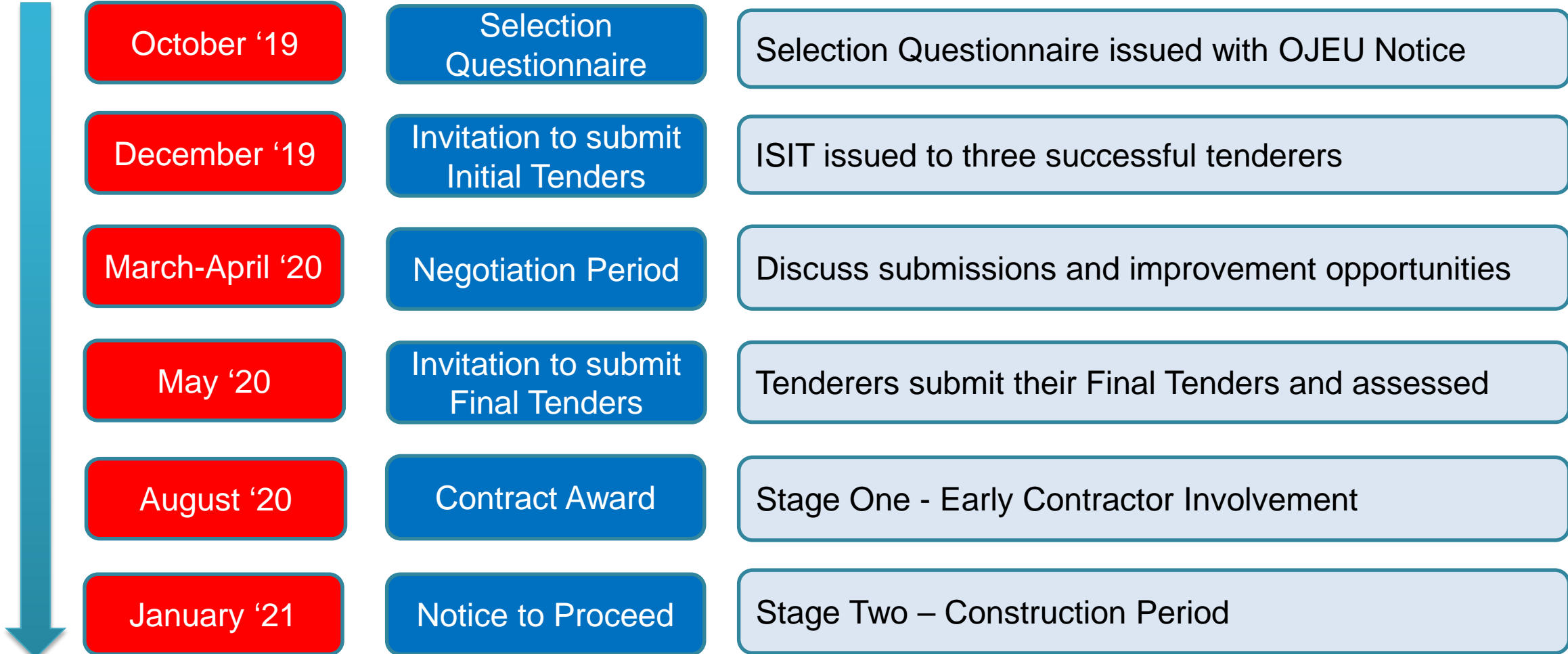
Value Engineering
Safe ways of working
Collaborative risk mitigation
Social values benefit

Notice to Proceed

Procurement Strategy - How it Works



Procurement Procedure / Next Steps





Questions?



Building the best environmental solution for north London's waste