

NORTH LONDON WASTE AUTHORITY

REPORT TITLE: NORTH LONDON HEAT AND POWER PROJECT UPDATE AND REPORTS

REPORT OF: PROGRAMME DIRECTOR

FOR SUBMISSION TO: AUTHORITY MEETING


DATE: 27 APRIL 2023

SUMMARY OF REPORT:

This report provides the Authority with an update on progress of the North London Heat and Power Project including the Energy Recovery Facility.

RECOMMENDATIONS:

The Authority is recommended to comment on and note the contents of the report.

SIGNED:  Programme Director

DATE: 17 April 2023

1. INTRODUCTION AND PURPOSE

- 1.1. The North London Heat and Power Project (NLHPP) is the programme of works authorised by Development Consent Order (DCO) granted in February 2017 through which the existing Energy from Waste (EfW) plant at the Edmonton EcoPark will be replaced with a new Energy Recovery Facility (ERF). The programme of works includes provision of a Resource Recovery Facility (RRF) for reception and transfer of waste, incorporating a public Reuse and Recycling Centre, EcoPark House, a visitor centre which will be used to provide community/education space and backup office space. In preparing for and carrying out the works in the NLHPP programme, the management team is working closely with LondonEnergy Ltd (LEL) the operators of the EcoPark and the current EfW plant.
- 1.2. This status report provides Members with an update on progress of the NLHPP. The report structure provides a narrative in the main body with supporting information in appendices.

2. PROGRAMME DIRECTOR'S SUMMARY

- 2.1. This report encompasses project activities throughout March 2023.
- 2.2. The programme remains on track to deliver its overall objectives, on time and within budget, with an overarching aim of takeover of the ERF in 2026.
- 2.3. The RRF project continue to make progress on both construction, testing and commissioning as the facility approaches completion. The team is driving toward a take-over date from the contractor, Taylor Woodrow, of July 2023. The takeover signals the ownership of the facility by NLWA and its occupation by LEL.
- 2.4. The takeover is dependent on the successful completion of the testing, commissioning, and training of LEL operatives for 42 mechanical/electrical systems, many of which are associated with the ability to safely operate the facility and within strict environmental performance criteria. It is imperative, therefore, that the process is managed and delivered rigorously. Take-over will also require the collation and transfer to LEL of over 10,000 items of detailed information for the RRF facility alone. This information will be handed to LEL well in advance of take-over for their own purposes; for example, the production of maintenance schedules.
- 2.5. The work involved in the lead-up to take-over remains a challenge for the teams who are working through a process of this scale for the first time on the project, especially in the context of a first-of-a-kind modern standards facility such as the RRF. However, the process is being carefully monitored and controlled and receiving significant management attention, given its criticality to the ability to take over the facility.

- 2.6. This month, the building's odour control system, which is critical to the successful environmental operation of the facility, has been successfully tested and commissioned, with LEL successfully completing a training programme related to its operation and maintenance.
- 2.7. On the ERF project, Acciona's piling programme has restarted following the necessary repairs to the piling mat due to ground conditions. The piling contractor is fully mobilised with the aim of recovering the time lost due to the delay, prior to the start of site of the main civil engineering works later in April.
- 2.8. Significant work is being progressed off-site related to the design of the facility and the process equipment plus procurement of various pieces of equipment.
- 2.9. The contractor, DSM, is progressing well with the site clearance in the northern area of the EcoPark in advance of the phased handover of further major sections of the ERF site to Acciona in May and June to allow for continuity of piling/foundation work extending beyond the current site occupied by Acciona. DSM have completed the demolition of the Temporary Bulky Waste Recycling Facility (TBWRF). A thorough approach to recycling/reuse of construction material associated with the demolition and clearance is being implemented, in compliance with the project's ambitions in the context of the circular economy, with both Acciona and LEL re-purposing materials and equipment made available from the TBWRF demolition and site clearance.
- 2.10. The last section of site to be handed over to Acciona relies on the design and construction of a new temporary facility to maintain LEL's incinerator ash handling capability on site until completion of the ERF, at which point the last section of the ERF site footprint can be handed over to Acciona. This is due to complete in October 2023. Acciona, LEL and the project team are working closely together to mitigate any potential adverse impact to the ERF programme.
- 2.11. This month the project launched a women in construction training programme, led by Acciona with the assistance of the Women into Construction (WiC) community interest company and supported by several other partner organisations on the project. A launch event was attended by 28 local women considering a career or return to work in the construction industry. The scheme will provide training placements for 15 women with a focus on providing onward employment.
- 2.12. The project held a celebratory networking event this month to share initiatives being supported by RE-Power Communities organisations. Key stakeholders were informed on how the community grant/support can benefit the boroughs directly surrounding the Edmonton EcoPark.
- 2.13. The project continues to forecast delivery within its cost performance budget of £1.2bn at 2019 prices, when the baseline was set. By definition, this budget did not

include subsequent inflation. However, inflation estimates were always included in supporting information provided relating to forecasts of future borough levies, and considered in subsequent procurement decisions. The report describes how NLWA has successfully mitigated its exposure to the subsequent exceptional levels of inflation, unlike many other major infrastructure projects which have been more adversely affected. The outturn cost including inflation is expected to be within a range of £1.42bn-£1.52bn.

3. SOCIAL VALUE

- 3.1. This month's social value activities include an update to Members on the ERF Social Value Governance Board (SVGB), commencement of the WiC training placements, engagement with young people, and the community projects workstream.
- 3.2. The SVGB met on 23 March to discuss the implementation of social value activities on the ERF contract. The Board meeting was well attended with representation from borough officers from Haringey, Waltham Forest, Camden, Barnet and Hackney, as well as Acciona, NLWA officers and Cllr Mike Hakata as an NLWA Member. A key item on the agenda was a discussion on facilitating the distribution of apprenticeship opportunities across seven NLWA boroughs. Borough officers expressed commitment to support the NLHPP with helping secure future apprenticeship from each borough, and the group discussed lessons learnt on what works best in the process which will be taken forward.
- 3.3. On the 7 March 2023, the project held an event to kick off the WiC training programme being sponsored by Acciona. The event was attended by 28 women who WiC have engaged with to be part of the programme, employers, CONEL as the training provider, and WiC as the coordinating organisation. Of those attendees, 15 women will be placed on the project for two weeks as part of the five-week training programme. The training commenced on 20 March 2023 with employability skills, Health and Safety Level 1 and a Construction Skills Certification Scheme (CSCS) card training for three weeks. This will be followed by a two-week placement on NLHPP in roles such as Engineering Assistant, Administration, Trainee Quantity Surveyor and Project Manager. The placement on NLHPP will commence in April 2023, with women from seven NLWA boroughs participating.



NLHPP Women into Construction kick-off event, 7 March

- 3.4. Further training placements commenced this month through the Enfield Construction Skills Bootcamp. The Skills Bootcamp is a nine-week programme which allows Enfield residents to gain employability training and a CSCS card and includes a two week placement with an employer. Acciona and their piling sub-contractor, Van Elle, are accommodating three training placements on the project. The first trainee has been on site gaining experience in IT, supported by Acciona's IT sub-contractor.
- 3.5. A trainee from Waltham Forest who completed a training placement with Acciona in autumn 2022 has started a Facilities Services Operative apprenticeship with the contractor in March. This continues the emphasis on using training as a pathway into employment on the project. Out of the three training placements completed on the ERF contract up to end of February, two trainees have secured apprenticeships on the NLHPP. The focus is to ensure that the WiC and the Skills Bootcamp trainees are also able to access job roles either on NLHPP, or more widely in the local area facilitated by the relationships with employment agencies in the boroughs.
- 3.6. Following the launch of the community projects initiative – RE-Power Communities – Acciona has been meeting the successful organisations who are receiving volunteering time and small grants from the project. The team has undertaken three site visits to assess the materials and labour requirements of the organisations which applied for volunteering time towards improvement projects. This included an assessment by Acciona's Quantity Surveyor which will allow to

map out which types of works and skills are required. Payments were made to successful organisations at the end of March.

- 3.7. A networking event provided further chances for the RE-Power organisations to share about their initiatives and how the support will aid their organisations. Held in the NLWA offices at Berol House on 23 March, eight community organisations were represented with Acciona chairing the event. The showcase was extremely well received by the groups and promoted further opportunities to connect like-minded organisations in the community to empower their offerings for residents. Cllr Hakata also attended the event representing NLWA's dedication to ensuring social value is central in the delivery of the NLHPP. Further case studies following the use of the grants and volunteer time will be published and showcased through communications channels as the initiatives are delivered over the next six months.
- 3.8. Throughout March 2023, the NLHPP team delivered schools engagement sessions as part of the National Careers Week (6-10 March 2023), including events at St Mary's and St John's School in Barnet and Whitefield SEN School in Waltham Forest.
- 3.9. In addition, the EcoPark South contractor Taylor Woodrow hosted 28 Year 12 and 13 students from Haringey Sixth Form College for work experience. As part of the visit, an induction session/presentation was delivered and a site visit/tour of the construction site. They then undertook a workshop session in the afternoon around 'journey into construction'. Feedback from students showed that:
 - 3.9.1. Over half of students had improved awareness of jobs on a large construction project and of the different career pathways as a result of the visit.
 - 3.9.2. The number of students saying that they would like to pursue a career in the industry increased by 15%, and the number who said they would consider it increased by 56% after the session.
 - 3.9.3. There was a 64% increase in the number of students saying they might consider doing an apprenticeship as a result of the session.



Haringey Sixth Form College students at NLHPP work experience

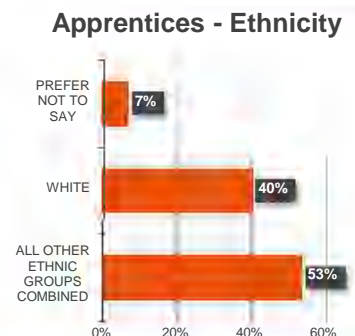
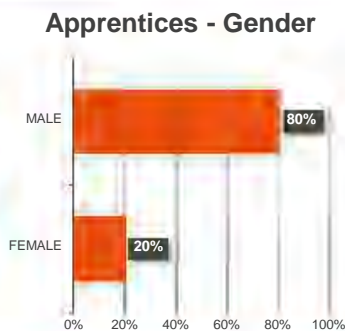
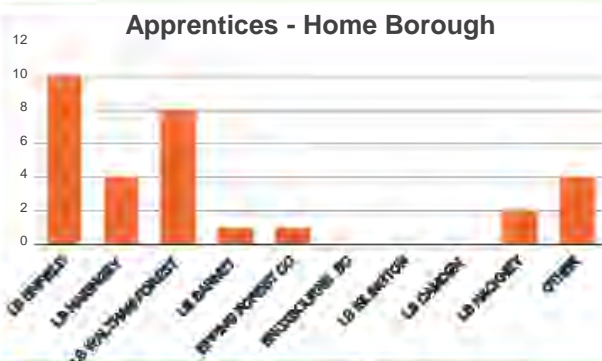
- 3.10. The Project explores innovative ways to engage with young people about career opportunities. As part of this, Acciona delivered a virtual Apprentice Panel event where students from three schools in Hackney could dial in to listen to NLHPP Apprentices give an overview of their role and different routes into employment, followed by a Q&A session with the students. The event proved very popular, with 175 students dialling in to attend.
- 3.11. The project team has now engaged with over 1,840 students from 34 schools across the seven priority boroughs.
- 3.12. The Social Value Dashboard overleaf provides a summary of progress against all social value targets, with data up to end of February.

Social Value Dashboard

Social Value Theme	Target	Progress
Development Consent Order (DCO) Obligations:		
Apprenticeships	100	85 years of apprentices' employment 30 individuals
On-site Skills Training Placements	225	141
LB Enfield targets, adopted as measure by NLHPP:		
Local Labour	25%	19%
Local Businesses	10%	15%
		£19.7m (local spend by contractors to date)
	-	£28.8m (local spend by NLWA & contractors to date)
Delivery against Industry Benchmarks:		
Equality, Diversity & Inclusion (EDI)	The project aims to promote women in on-site construction workforce The project aims to promote ethnic minority groups in on-site construction workforce.	3%* 14%*

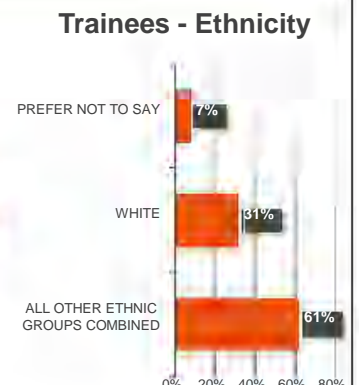
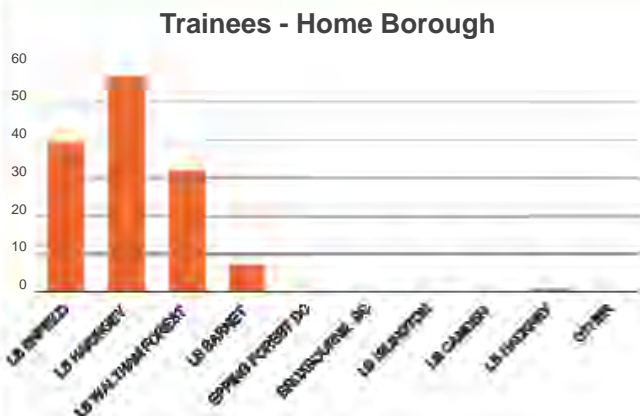
*Not all employees have chosen to report on ethnicity and gender, and the statistics are likely an underestimate. NLHPP is working with contractors to improve data collection.

Apprenticeships



Apprentices - Home Borough	Local Wards
LB Enfield	Bowes (1); Bullsmoor (1); Grange Park (1); Haselbury (1); Jubilee (2); Lower Edmonton (2); Southbury (2)
LB Haringey	Hermitage & Gardens (1); Tottenham Central (1); Tottenham Hale (1); White Heart Lane (1);
LB Waltham Forest	Higham Hill (1); Larkwood (1); Hatch Lane & Highams Park North (1); William Morris (1); High Street (1); Endelbury (1); Chingford Green (1); Chapel End (1)
LB Hackney	Haggerston (1); Woodberry Down (1)
LB Barnet	Barnet Vale (1)

Training Placements



4. COMMUNICATIONS AND STAKEHOLDER ENGAGEMENT

- 4.1. Opportunities to visit the construction site have been announced for the Spring. Interest has grown in recent months and a revised programme to offer councillors and borough officers a guided tour of the facility is available. Of specific interest is the completion of the EcoPark Array for solar panels on the roof of the RRF, which is the largest solar array in north London. An update to press was issued in March showcasing how the EcoPark Array will enable renewable energy, equivalent to powering to 300 homes, and with the combined use of ground source heat pumps has a yearly carbon saving equivalent to the carbon absorbed by 10,000 trees.
- 4.2. Across February 2023 and March 2023, a large focus in communications was promoting and showcasing the opportunities for women on the new WiC training programme. This included publishing updates on our website about the launch event and supporting the WiC press and social media activity. There has been strong positive engagement with the social media posts particularly on LinkedIn with companies involved sharing their support for championing women into construction.
- 4.3. The successful organisations on the RE-Power Communities were announced in February 2023 with all key stakeholders informed about the support being offered to local organisations in boroughs directly surrounding the Edmonton EcoPark. Another round is expected to open in Summer 2023 which will be open to all seven north London Boroughs.
- 4.4. National Careers Week was celebrated across March 2023 to showcase opportunities to progress in the construction industry and NLHPP showcased women who are working on the project to coincide with International Women's Day on 8 March 2023. An event was held at the NLHPP Project Hub to provide an opportunity for the project team to meet and speak about how everyone can be better allies for women on the project.
- 4.5. The latest construction Newsletter for Spring has been delivered to 28,000 properties around the Edmonton EcoPark. The focus for the latest issue covered the RE-Power Communities Scheme, WiC Opportunities and a female apprentice working with Acciona.

5. PROJECT DELIVERY SUMMARY

This section summarises progress up to 1 April 2023 in delivering the new facilities that comprise the NLHPP: the ERF, the RRF and EcoPark House. The overall summary below highlighting progress on each and other supporting works is followed by a short project report on the progress of each facility.

- 5.1. The construction of the ERF by Acciona continues to make progress on-site with foundation piling well underway and approximately 75% complete. The design is

progressing in detail to enable equipment to be procured and work packages to be contracted by Acciona.

- 5.2. The TBWRF has now been removed from site by DSM Demolition. They are now clearing the remainder of the northern area in preparation for full ERF site access in June 2023, except for a small section that needs to be retained by LEL for Bottom Ash handling until the temporary Ash Handling Area has been completed in October 2023. This facility has been designed and issued to Taylor Woodrow for construction.
- 5.3. The construction of the RRF by Taylor Woodrow has made progress on site with the continuation of the fit out of the building's 42 mechanical and electrical systems, working on all fronts. In April and May 2023, with building and installation works significantly complete, the main work will be the testing and commissioning of systems. The project is working towards takeover by NLWA and LEL in July 2023.
- 5.4. The external road works on the western side of the RRF were handed over in December 2022 enabling waste traffic to use the EcoPark southern entrance to access the EfW plant. Cadent, who are supplying the future gas supply to the ERF, have progressed into their construction phase and progressing their procurement of an installation contractor for the off-site works which are due to take place later in 2023.
- 5.5. This facility is needed to enable LEL to vacate the last section of the ERF construction area.
- 5.6. EcoPark House has made good progress with its mechanical, electrical fit out and external finishes in parallel to the RRF schedule.
- 5.7. Further details of progress of each major element of the project are provided in the Project Progress sections on the following pages.

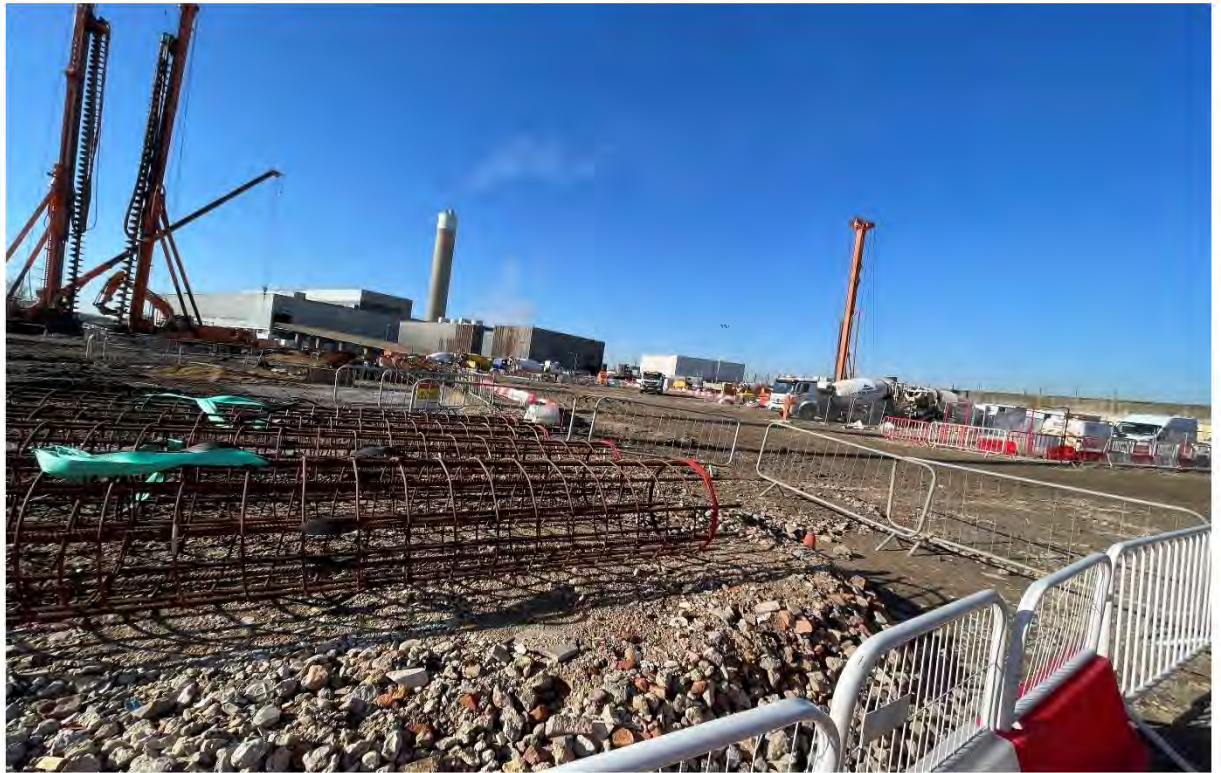
PROJECT PROGRESS: ENERGY RECOVERY FACILITY

Summary of Progress

- 5.8. Acciona continue to deliver against the approved programme and remain on plan to achieve take-over into service in late 2026. The key activities have been piling works around the waste bunker and boiler area. As of 1st of April a total of 297 piles have been installed.
- 5.9. Acciona's procurement programme is progressing at pace, with the placement of supply contract for the deaerator and development of the main civils package. Acciona continue to develop the engineering designs, although they are experiencing some delays against their programme. During April, Acciona will be review their engineering programme to reforecast any delayed designs. It is anticipated that this reforecast can be accommodated without impact to the take-over date in late 2026. The key focus has been the tipping hall and water treatment plant designs and process equipment safety studies.



Piling rigs with support cranes for the ERF



Prefabricated steel reinforcement cages for piles (concrete mixer in background)

Look Ahead

- 5.10. Handover of the next section of site to Acciona is on track for May and the team has finalised a handover strategy for the remaining areas. This plan includes an interim ash bay to support LEL's ongoing operations.
- 5.11. During April, subcontracts are expected to be placed for the process plant air cooled condenser, waste/ash cranes, and Shell and Tube Exchangers. In the following month procurement is planned for lifts, district heating heat exchanger and condensate preheaters.
- 5.12. In April Acciona plan to start procurement of the steel structure. They also plan to finalise the building services design package and complete the mechanical process equipment safety studies, which will lead to the next iteration of drawings.
- 5.13. The Acciona construction team will also continue to work towards the mobilisation of the main civils contractor.

PROJECT PROGRESS: RESOURCE RECOVERY FACILITY (RRF)

Summary of Progress

- 5.14. The external envelope of the RRF has been completed and the building is now weathertight allowing final testing and commissioning of the Odour Control system to be completed.



Arial view of the RRF

- 5.15. Good progress continued to be made with the electrical works to the RRF control room and link bridge. The control panels for the communications systems are now in place with the final termination of cables in progress. Testing and commissioning of the electrical distribution has commenced. The progress of the communication systems is one of the main time-critical factors.
- 5.16. The external cladding and canopy to the tipping hall are now completed with the final external mastic sealant being progressed. Lift installation to both north and south goods lifts have commenced and is on target for lifts to be operational by the middle of May.
- 5.17. The internal dry line partitions of the office areas have been erected and the mechanical and electrical works are being progressed throughout the building. Commissioning of the low voltage power distribution system has commenced.
- 5.18. The odour control system within the Tipping Hall is operational and undergoing final testing and commissioning. A key focus of the team has been to produce Operations and Maintenance manuals, training and handover documents early and

develop a timeline for their delivery to meet LondonEnergy Limited's readiness programme.



Testing and commissioning of the IOVS

Externally another two main sections of the district heating pipes have been laid and the trenches backfilled. The civil works for the first temporary weighbridges has been completed and second is now in progress. These temporary locations at the bottom of the EfW down ramp enables further areas to be released for ERF construction. Slab preparation works for northern tipping apron have commenced. The connections to the attenuation tank have been completed having overcome the challenges of dewatering of the ground.



District heating pipe installation

Look Ahead

- 5.19. Testing and commissioning of the 42 mechanical and electrical systems will be ramping up from now on as areas become available as the equipment installation and its utility connections completes over the next two months. There will be a focus on finishing office and equipment rooms to enable the facility wide communications equipment to be tested. In parallel to the physical works the asset information and manuals will be received progressively to enable LEL to incorporate into their operating procedures and receive training on the operation and maintenance of the systems.
- 5.20. Externally, the works will progress to complete the relocated temporary bridges allowing these to be relocated from the area required for the ERF construction in the north. Additional protection curbs to the roller doors off the northern tipping slab will be added and the construction of the eastern tipping slab will start in April.

PROJECT PROGRESS: ECOPARK HOUSE

Summary of Progress

- 5.21. The building envelope has been substantially completed and nearing weathertightness.
- 5.22. Good progress has been made with the mechanical and electrical fitout including the comms and fire detection on the ground and first floor. Building envelope close out has continued to the west elevation with foundations to the boat canopy and timber decking progressed on the east elevation.
- 5.23. Internally, works for power, lighting, communication and fire detection made good progress in readiness for testing and commissioning of the systems. Initial planting

to blue roof has now been completed and secondary planting will be undertaken in April.

- 5.24. The external terrace decking has been installed. Internally, the lift installation has been completed and awaiting testing. EcoPark House has so far attained a BREEAM rating of Very Good as planned.



EcoPark House view from the River Lee Navigation



EcoPark House soffit and shutters installation

Look Ahead

- 5.25. Screeding and final fix of high-level services to enable testing and commissioning will be progressed in the next period. The building construction will be completed by end of April followed by testing of all mechanical and electrical systems. The 'off-grid' power supply is planned to be switched on in April will be used to power the commissioning of the building's systems.

6. HEALTH, SAFETY AND WELLBEING (HSW)

- 6.1. Overall, HSW performance was good for the reporting period, with construction activities well managed, coordinated and controlled.
- 6.2. The Accident Frequency Rate (AFR) for reportable injuries in accordance with Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013 is at 0.098 for all projects. RIDDOR accidents must be reported where they result in an employee or self-employed person being away from work, or unable to perform their normal work duties, for more than seven consecutive days as the result of their injury.
- 6.3. The Lost Time Injury (LTI) AFR (a performance metric that mirrors the RIDDOR description noted but uses a three-day recordable injury baseline to measure performance for all projects) is also AFR 0.098.
- 6.4. **Key Performance Indicators**



- 6.5. **HSW Audits:** Each construction area is inspected and audited weekly with a minimum of four visits per live project during any month. The NLHPP targeted average compliance score is set at +90%. The recorded monthly average audit score for February 2023 period averages 96% reflective of the good levels of HSW performance. These in-depth audits review contractor HSW compliance in specific

areas for example: work at height, lifting operations, excavations, worker welfare, etc.

- 6.6. **Safety Observations:** The total number of observations remain high with 145 recorded for February 2023, a good increase from the previous month. Within these figures, 50 positive behaviours and interventions were recorded which is reflective of the proactive initiatives (safe start briefings, audits, etc) that are in place across the programme. We continually encourage reporting of observations (positive and negative) to support our drive for continual improvement. All observations are recorded and tracked to a satisfactory completion.
- 6.7. **Safe Start Briefings:** The number of prestart briefings delivered daily to the workforce remain consistently high and are primarily aimed at awareness of work hazards and ongoing daily site activities. These briefings are also utilised to undertake toolbox talks specific to the type of work being undertaken on the project.
- 6.8. The HSW Working Group forum met in the period with a focus around the HSW Culture survey planned for March / April 2023, alongside the design of the lessons learned portal.
- 6.9. The Wellbeing Team have been engaging with all relevant stakeholders to ensure successful implementation of the wellbeing initiatives. In February, the team successfully collaborated with Acciona in managing the coordination of weekly mental health awareness sessions: Start the Conversation.
- 6.10. **Wellbeing and Mates in Mind initiative:** Since its launch in early January, 7 consecutive, weekly sessions of 'Start the Conversation' have taken place, including both operative and office-based audiences. Overall, it has been positive:

97% would recommend this session to others.

92% found the session useful.

77% now feel more able to discuss mental health with others.

Despite this positive feedback, it is important to note that 32% feel as though they do not have good mental health currently, the majority of which are from the operative workforce. This statistic is in line with UK mental health statistics within construction, which reinforces the decision for NLHPP to be active in its pursuit of improvements. These sessions will continue in the coming periods alongside planning of actions and further initiatives to succeed here.



- 6.11. **EcoPark South Health & Safety Week:** w/c 27th March saw Taylor Woodrow implement a health and safety week with the key themes of:

Everyone has a Health & Safety responsibility;

Rolling out the Health, Safety & Wellbeing Survey;

Undertaking engagement with the workforce; and
Identifying and recognising strong health & safety practice.

The week has been a very positive reinforcement, well attended and of significant benefit to those taking part.

<div>  March 2023- Health, Safety & Wellbeing Week  </div>					
Mon 27 March	Tues 28 March	Wed 29 March	Thurs 30 March	Fri 31 March	Fri 31 March
Workers' Participation 'H&S is Your Responsibility' Event Introduction: Rob Langford/Neil Murray 07:15 / 08:00 / 08:45 Location: Canteen Sandwiches provided	H&S leadership 'You Are a Leader' 07:15 / 08:00 / 08:45 Location: Canteen Sandwiches provided	Emergency Procedure 'Fire drill Feedback' 07:15 / 08:00 / 08:45 Location: Canteen Sandwiches provided	Mental Health Awareness Session: Mates in Mind 07:15 / 08:20 / 08:45 Location: See Timeslot Sandwiches provided	Dramatisation "WALK ON BY" 07:15 / 08:00 / 08:45 Location: Canteen Sandwiches provided	Wrap Up Briefing – Steve Pate / Neil Murray
Inobeme Zibiri	Steve Pate	Inobeme/Richard	Mates in Mind Facilitators	VINCI UK	

HS&W week agenda



Attendees at one of the safety week sessions

7. ENVIRONMENT AND SUSTAINABILITY

- 7.1. The project continues to focus on environmental and sustainability considerations in the construction process, working to successfully manage environmental risks and identify opportunities for enhancing sustainability performance.
- 7.2. There has been continued good performance against Key Performance Indicators (KPIs).



- 7.3. **Environmental Incidents:** At the ERF, one level 2 incident (has caused or may cause minor harm or damage) was recorded in February, associated with spoil covering a borehole and causing damage to the borehole monitor. The borehole has subsequently been cleared and a replacement monitor is being procured.
- 7.4. **Environmental Site Inspections:** Surveillance visits have identified that in general, environmental items were being well managed in line with good practice. Areas for improvement are highlighted and followed up with the contractors on an ongoing basis.
- 7.5. **Environmental Observations:** Contractors continue to champion environmental and sustainability issues on site, through raising environmental observations and exceeding their monthly minimum target of two observations per contractor. Overall, 28 environmental observations were raised for EcoPark South (eight positive and 17 negative) and for the ERF (three negative, zero positive). The high number of observations raised is consistent with previous months.
- 7.6. **Sustainable Materials:** At the EcoPark South site, 100% of timber delivered to site has been from recycled or sustainable sources as defined by Forestry Stewardship Council (FSC) standards. The target for this KPI is 100% of timber procured is from recycled or sustainable sources. No data was available for the ERF site.
- 7.7. **BREEAM:** In line with our sustainability commitments, the project is required to achieve 'Very Good' (55%) rating in the Building Research Establishment's (BRE) Environmental Assessment Methodology (BREEAM) rating system, which provides a sustainability framework to deliver high sustainability performance across buildings whilst also creating positive environmental and social impact. Both EcoPark House and the RRF have currently achieved this rating and are targeting 'Excellent'. The ERF is working towards this commitment.
- 7.8. **Environment & Sustainability (E&S) Working Group:** The project E&S Working Group provides a forum to engage with contractors, to identify environment and sustainability improvements throughout construction delivery and provide a platform for communication. For example, a workshop is being planned for the coming months to focus on noise and vibration considerations on site, share lessons learned and best practice and identify potential opportunities for enhanced performance.

- 7.9. **Circular Economy:** The deconstruction of the TBWRF has given NLHPP the opportunity to celebrate and demonstrate NLWA's practical application of our circular economy principles. The project has identified as many materials as possible, to be reused rather than recycled, whilst maintaining the critical path of clearing the site for handover, to Acciona for the construction of the ERF.



Demolition of the TBWRF

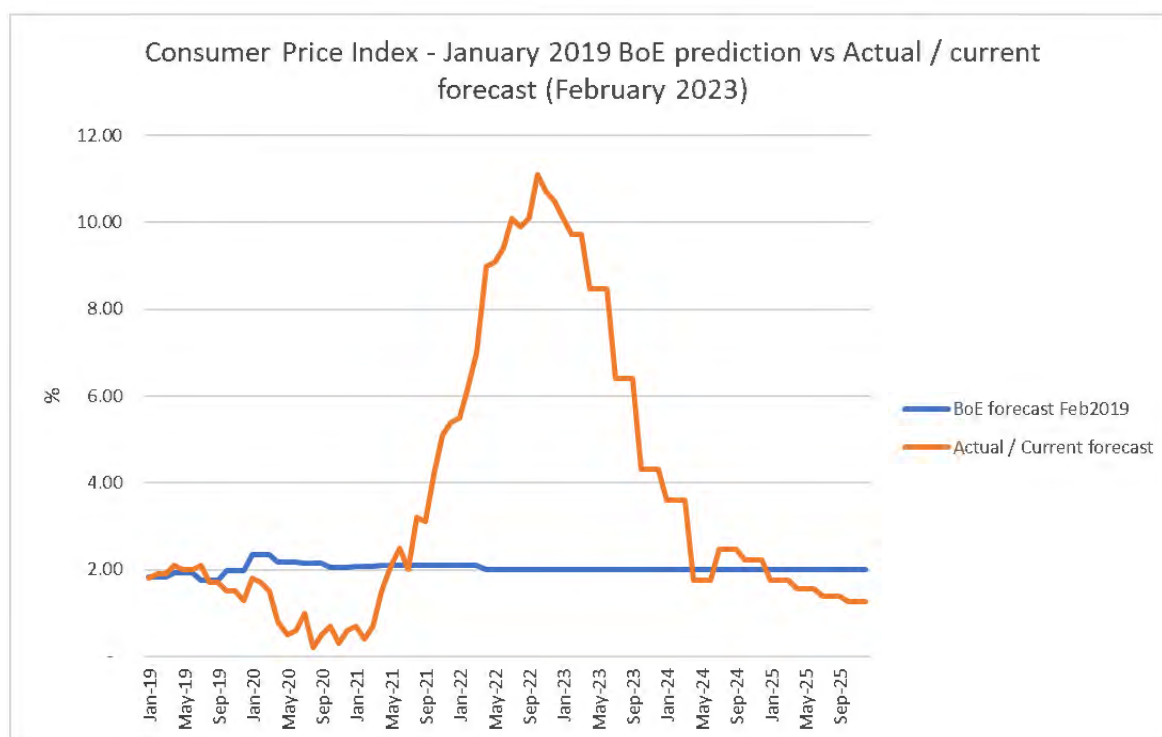
- 7.10. It is confirmed that all the undamaged concrete legato blocks (90% of the total) are planned to be reused by Acciona and LEL, with the remainder being recycled. Some will be retained on site for the construction of the Interim Ash Bay, providing immediate value back to the programme, and others will be transported to LEL's Wembley site.

8. PROJECT COSTS CONSIDERING INFLATION

- 8.1. Across the 2022/23 financial year the Consumer Price Index (CPI) measure of inflation peaked at 11.1% in October 2022 and impacted many capital projects both in London and nationally. Delays have been announced for some major projects, including HS2's Euston link, and councils have reported the pressures on capital projects in north London¹.
- 8.2. When the budget baseline for NLHPP was set and announced at £1.2bn in 2019 cash prices, it was recognised that inflation would be an uncertain factor given the long delivery time for the project and that the exact profile of expenditure would depend on procurements for the individual elements of the overall project. The Bank of England's assumptions at the time were that inflation would remain around the Bank's 2% target.

¹ <https://enfielddispatch.co.uk/fall-in-council-capital-spending-as-construction-projects-paused/>

- 8.3. The graph below shows the Bank of England's Forecast Inflation prediction in 2019 against the actual levels of inflation with a peak difference of 9.1% in October 2022 and showing a reducing trend more recently.



- 8.4. Despite the widespread inflationary impacts that the economy is facing, the upward pressure on the project's cost has been effectively mitigated with the careful management of borrowing and appropriate risk sharing with contractors. Over 80% of costs for the project are now secured under contract, and it is possible to forecast the outturn cost with a degree of certainty.
- 8.5. The contracts which have been let for substantive works – including the energy recovery facility - were all entered into before the rise in inflation which occurred in 2022. This enabled NLWA to secure advantageous bids for these works compared with tendering later.
- 8.6. Appropriate risk sharing has been built into contracts with main contractors. Some inflationary risks have been transferred to contractors at the point of contract and fixed prices for large ticket items are already set, such as the thermal equipment for the energy recovery facility.
- 8.7. As more of the project is delivered NLWA's exposure to inflation risk will continue to diminish, though there is still some uncertainty given the everchanging financial climate which is outside the project's control. The full outturn cost of the project, taking account of inflation, is now expected to be within a range of £1.42bn-£1.52bn, with a current central estimate of £1.47 billion.

- 8.8. NLWA is committed to delivering a project with high environmental standards and which provides a wide range of social value for the communities of north London – as described elsewhere in this report. Any cost savings would impact on these benefits and in that sense represent a false economy given that the project is on track to deliver within its overall budget.
- 8.9. In addition to containing inflation on the project, NLWA has been able to take advantage of lower borrowing rates with the Public Works Loan Board, particularly between 2019 and 2021, when interest rates were at historically low levels. £970 million has been borrowed at an average interest rate of 2.41%, with the rate fixed over the life of the borrowing. Interest rates have risen in the last year. However, further borrowing for the remaining elements of the project is not required before the 2024/25 financial year, so there is no requirement to borrow in the current highly uncertain times and officers continue to explore best value options for future financing.
- 8.10. Throughout the delivery of the project, borough finance directors have engaged with NLWA on the forecasts including inflation and low borrowing costs to ensure they are reflected within the respective local authorities' mid- to long-term forecasts. NLWA's long-term levy forecast also considers the impacts of inflation on ongoing operating costs for waste disposal and recycling. It should be noted that other waste authorities have different operational contracting arrangements from NLWA, which will be variable based on the timing and type of contract / contractor. With this considered, NLWA's arrangements following delivery of the NLHPP will remain among the most cost effective of all Joint Waste Disposal Authorities'. The cost of delivering the project remains beneficial compared to relying on third party waste disposal. In fact, while the project's exposure to inflation is being carefully managed as described above, and will provide a long-term publicly owned asset, the market price for third party waste disposal is currently increasing substantially, reflecting wider cost pressures for waste facilities.
- 8.11. As NLHPP regularly monitors and reports cost performance against the 2019 baseline and spend to date, it is proposed to update the project inflationary cost and borrowing information in NLWA reports on a periodic basis.

9. EQUALITIES IMPLICATIONS

- 9.1. There are no impacts on equality to be noted arising from the content of this report.

10. COMMENTS OF THE LEGAL ADVISER

- 10.1. The Legal Adviser has been consulted in the preparation of this report and comments have been incorporated.

11. COMMENTS OF THE FINANCIAL ADVISER

- 11.1. The Financial Adviser has been consulted in the preparation of this report and comments have been incorporated.

Contact Officer:

David Cullen
Unit 1b Berol House
25 Ashley Road
London N17 9LJ