

NORTH LONDON WASTE AUTHORITY

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

REPORT OF: PROGRAMME DIRECTOR

FOR SUBMISSION TO: PROGRAMME COMMITTEE

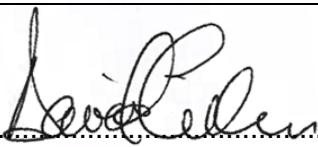
DATE: 13 January 2020

SUMMARY OF REPORT:

This report provides the Committee with an update on progress of the North London Heat and Power Project (NLHPP) current at the end of the November reporting period.

RECOMMENDATIONS:

The Committee is recommended to note the contents of this report

SIGNED:  **Programme Director**

DATE: 23 December 2019

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, and EcoPark House (EPH), a visitor centre which will be used to provide community / education space and back up 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. This report reflects the status of the programme on the 29 November 2019, the end of the most recent reporting period. Where significant updates have occurred to this status since that date, an update has been included. The report structure provides a narrative in the main body with a dashboard style report on the status of the programme included in Appendix A.

2. PROGRAMME DIRECTOR'S STATEMENT

Status Summary

- 2.1. Several key milestones have been met successfully in the reporting period, relating to award of preparatory works contracts and obtaining planning permission for the development of Hawley Road as a temporary transport yard for LondonEnergy Ltd (LEL). The relocation of LEL's transport facilities is essential to progress the sewer diversion on the EcoPark.
- 2.2. The Project continues to forecast 12 weeks delay to the completion of the preparatory works contracts. The key opportunity for avoiding most of this delay lies with securing a timely start on site for the temporary transport yard through meeting all the pre-construction planning conditions and completing the works in May 2020 in accordance with the contract schedule. With the support of the transport yard contractor we will be analysing thoroughly how to expedite the schedule to achieve early completion.
- 2.3. We judge that it is too early in the programme to conclude that this delay is irrecoverable, and the team are driving to a completion of the Energy Recovery Facility in 2025. It is important, however, to note that the critical path for the project is very challenging and offers little opportunity for resequencing the works.
- 2.4. The current incurred expenditure on the programme is relatively minor given the early stage of construction. Contract sums awarded in the period continue to align well with the project baseline budget.
- 2.5. Of note this month is the confirmation of the first local apprenticeship created within the portfolio of preparatory works contracts, starting in January 2020 with Galldris Construction Services. Other preparatory works contractors will follow suit early in 2020. The considerable groundwork that the team has carried out to date in establishing working arrangements for the creation of apprenticeships and pre-

employment on-site skills training places is starting to be implemented. The project team, well supported by London Borough of (LB) Enfield, has engaged with a network of supporting organisations and training providers, for example Capital City College Training and the Kings Cross Construction Skills Centre.

Project Progress Highlights In-Period

- 2.6. The Project has made significant steps forward with works needed to enable the RRF to be built as part of the EcoPark South construction works namely:
 - 2.6.1. The award of contracts for the sewer diversion and the enabling works that precede it.
 - 2.6.2. The granting of planning permission for the Project's use of the Hawley Road site as temporary transport yard for LEL.
- 2.7. Progress has been made in planning for the procurement of the ERF and site clearance works that are needed before it can be constructed.

Key Achievements in Period

- 2.8. **Site Wide Surveys Procurement.** Further to the completion of the Priority Intrusive Surveys project (in support of the Sewer Diversion Enabling Works), the Site Wide Intrusive Surveys procurement process has reached a milestone with publication of the Contracts Finder Notice on 21 November. The output of these surveys will be added to the existing information and 3D model of the utility services needed to complete the site wide design.
- 2.9. **Transport Yard Planning Permission.** The Hawley Road Transport Yard has now been granted planning permission by Enfield Council. This milestone brings the Project a step nearer to the essential relocation of the current EcoPark transport yard to provide space for the sewer diversion works.
- 2.10. **Sewer Diversion Enabling and Main Works Contract Awards.** The contract for the Sewer Diversion Main Works was awarded to Barhale Plc and signed on 22 November 2019. Barhale are starting the design of the new sewers, shafts and connections. The contract for Sewer Diversion Enabling Works was awarded to Galldris Construction Services Ltd and signed on 12 December 2019
- 2.11. **Laydown Area (West) and Eastern Access Contract Award.** The contract for the Laydown Area (West) and Eastern Access has been awarded to Buckingham Group and was signed on 29 November 2019. Construction works will start on site in early 2020, upon completion of the Laydown Area (East) works.
- 2.12. **ERF Gas Options Study** – Cadent completed the options study to determine the preferred route for the new gas connection to the ERF. The study confirmed the baseline assumption of a gas supply coming in from the northern end of the EcoPark along Ardra Road, having considered three options. Work is now underway to develop and plan implementation of the preferred northern route in detail.

- 2.13. **Project Conference** – On Wednesday 13 November, the North London Waste Authority (NLWA) held the very first North London Heat & Power Project conference, for 60 invited participants from across the Project supply chain including advisors and contractors. The theme of the conference was to re-connect with the Project vision of “Creating a waste management facility in which local communities take pride, which demonstrates value, and is a model for public sector delivery”. The conference took the opportunity to showcase the diverse range of activity across the programme and strengthen the ties between the broad range of organisations working to deliver the Project.
- 2.14. **First Apprentice**– The first apprentice working on the Project has been confirmed and details are being finalised to prepare for the commencement of the apprenticeship in January 2020. The apprentice will be working at Galldris Construction Services Limited, the Northern Access Works contractor, as a Business Administrator. This is the first achievement of the Project’s social value strategy and is the first of 100 apprenticeships that will be created as a result of the Project.

Key Focus of Activity

The following items are areas of the programme which the team will be particularly focussing on in the coming weeks:

- 2.15. **Health and Safety Programme** – A client led Health and Safety Programme (HSP) has been initiated that will deliver a greater maturity of health and safety behaviours and performance. As client the NLWA is taking a pro-active lead in developing the programme using the collective expertise of the current supply chain of advisors and contractors. This HSP will enhance the current health and safety management activities with visible leadership and empowerment throughout the project to put safety first.
- 2.16. **EcoPark South Procurement** – The procurement of the EcoPark South works has started with the issue of the OJEU at end October. The Project team is now focussing on collating all technical information required for the Invitation to Submit Initial Tender (ISIT) which will be issued in early 2020.
- 2.17. **Construction Phase Planning** – A detailed exercise has been undertaken to model the construction phasing and how ongoing waste management logistics will be maintained in the EcoPark. This work mitigates the risk of unplanned disruption to operations and enables contractors to plan their work.
- 2.18. **Utilities** – The identification of existing underground utilities in the EcoPark continues to be a priority. The information is needed to complete the site wide design of services and plan construction to avoid the risk of damaging existing supplies.
- 2.19. **Digital Strategy** – The Project aims to be at the forefront of the use of digital technology and automation in its delivery. To this end, work has commenced on the development of a digital strategy which will help inform activities required to achieve this aim in the months ahead.

- 2.20. **ERF preparation for procurement** – Preparation has begun for the ERF market engagement early in the new year. The ERF project and delivery strategy will be presented to the market to gain feedback. An update on the ERF delivery strategy will be taken to the February Authority meeting. Technical specifications are now developed to a stage that will inform the next stage of tender document development. Preparation for an independent third-party review is also under way to provide assurance that the project will be capable of progressing from pre-procurement to procurement ahead of an OJEU Notice expected in mid-2020. A short video of the architectural Computer Generated Imagery (CGI) rendering of the ERF has been produced, which will be presented to the Programme Committee on 13 January 2020.
- 2.21. **Social Value** – The Project team continues to work closely with the current and new contractors with recently awarded contracts to establish arrangements for creating apprenticeships and onsite skills training places associated with the contractual obligations.
- 2.22. **Stakeholder engagement** – Engagement of Project stakeholders including the local communities continues to be a priority with further road shows being planned as well as ongoing engagement with local press in responding to queries and the benefits of the NLHPP.
- 2.23. **Northern Area Clearance** - The team are continuing to develop a baseline position on schedule and cost for the clearance of the area where the ERF will be constructed. Workshops are ongoing to refine the scope and schedule the activities required for permitting, procurement, demolition and remediation in addition to engagement with the Environment Agency.

3. **PROJECT SUMMARY**

- 3.1. The NLHPP programme has been structured as a series of individual projects. The current status of each is presented below.

Project	Progress in Period	Activities Next Period	Key focus	Next Milestones
E1a1 (Laydown Area East)	Continuation of construction activities (pumping station and temporary works for outfall), completion of perimeter fencing, foul water network and road and hardstanding.	Prove the water retention performance of the rainwater run-off water attenuation tank.	Safety of ground works in winter conditions.	Construction completion
E1a2 (Laydown Area West and Eastern Access)	Contractor programme has been agreed and the contract has been signed	Kick off meeting prior to site mobilisation	Mobilisation of contractor and lessons learnt from Laydown Area East	Construction start on site
E1b (Northern Access)	Continuation of construction activities and mobilisation of soil stabilisation system	Acceptance of contractor designs. Confirm utility service locations. Start soil remediation.	Preparation for start of soil remediation.	Construction completion and handover
E2a (Transport Yard relocation)	Planning permission granted by LB Enfield Tenders received, and evaluation commenced. Completion of ground investigations.	Completion of tender evaluations and contract award. Contract kick off meeting. Completion of lease agreement.	Discharge of planning consents to enable works to start on site.	Contract Award Completion of lease with LB Enfield
E2b (Sewer Diversion Enabling Works)	Programme review Preparation for statutory undertaker works Contract signature.	Third party statutory undertaker works.	Mobilisation of contractor and establishment of collaborative working with others in the EcoPark	Construction start

Project	Progress in Period	Activities Next Period	Key focus	Next Milestones
E2c (Sewer Diversion Main Works)	Contract signature	Contractor mobilisation and kick off meeting. Issuance of remaining design information to contractor	Mobilisation of contractor and establishment of collaborative working with others in the EcoPark	Design (for Design and Build) Start
E3a (EcoPark South)	Responses to SQ clarifications.	Receipt and review of SQ responses Preparation for Invitation to Submit Initial Tenders (ISIT)	Procurement	Invitation to Submit Initial Tender (ISIT)
E3b (Northern Area Clearance)	Review of schedule timeline and scope definition on the permitting timeline	Further scope and scheduling workshops to explore assumptions on interfaces	De-risking programme to enable more time for ground investigation to confirm ERF foundation design.	DCO Discharge requirements application
E4 (Utility Corridor and Main Distribution Network Operator (DNO) connections) –	Completion of feasibility study for gas route supply for the ERF. Ongoing construction for UKPN electrical supply	Continuation of construction of UKPN electrical supply.	Utility services master planning	Design completion
E7 (ERF)	Completion of architectural design for application to LB Enfield to discharge DCO requirements. Development of the detailed plan for procurement	Progressing design and planning for stage gate approvals to gain the governance required to proceed to procurement	Design for discharge requirements and preparation for procurement.	DCO Discharge requirements application Start of Procurement
E8 (EfW demolition and decommissioning) and E9 (Southern Access widening)	No current activities.	No current activities.	No current activities.	No current activities.

4. SCHEDULE SUMMARY

- 4.1. The following milestones (reflecting significant points in delivery) have been identified and highlighted for Authority awareness, along with progress against them and where appropriate mitigation plans to recover identified delays. The deviations reported in the table below are based on working days.

Milestone	Baseline Date	Forecast Date	Deviation to Baseline	Recovery Action
Complete works to Hawley Road site (Temp long term LEL Transport Yard)	6 July 2020	6 July 2020	0	
Complete Laydown Area	30 October 2020	30 October 2020	0	
Start Enabling Works to Shaft A Area on site	7 July 2020	7 July 2020	0	
Start Sewer Diversion Works on site	16 November 2020	16 November 2020	0	
Start EcoPark South Works on site (with some restrictions)	25 January 2021	25 January 2021	0	
Complete Sewer Diversion work	25 August 2021	18 November 2021	-12 weeks	Schedule enabling works in greater detail to give earlier access to start of sewer drive shaft.
Completion of Construction works of EcoPark South (RRF)	1 August 2022	11 November 2022	-14 weeks	12 weeks will be recovered by recovery of sewer diversion completion. Remaining 2 weeks arise from reassessment of risks in achieving commissioning timescales. Early contractor involvement will seek opportunities to de-risk in design.
Northern Area Clearance - Remediation Complete	31 March 23	31 March 23	Under Review	The practicalities of bringing this forward is being investigated to re-risk the programme.
ERF – Commissioning – Take over (O&M engaged in operations)	19 Dec 2025	19 Dec 2025	0	

Milestone	Baseline Date	Forecast Date	Deviation to Baseline	Recovery Action
EfW – Demolition Complete	19 June 2030	19 June 2030	0	
Southern Access Road – Works Complete	14 May 2031	14 May 2031	0	

5. RISK SUMMARY

- 5.1. This section summarises in-period risk management activity and key risks with an overview of mitigating actions.
- 5.2. The November period has seen several project level risk reviews held with a focus on capturing progress against mitigations. Through these reviews, five opportunities have been opened. These pertain to possible early migration of Transport Yard facilities, re-phasing of enabling works, investigation into partial handovers between Sewer Diversion Enabling and Main Works, improved constructability on EcoPark South e.g. off-site works and optimisation of shared working areas between the Sewer Diversion Main Works and EcoPark South. Actions are underway to actively pursue these opportunities.
- 5.3. Previously we forecasted closure of three Laydown Area (East) risks in November. However, due to slower site progress these risks are still applicable. It is now expected that these risks will be closed following completion of relevant works through December and into January.
- 5.4. The following risks continue to be the key “proximity” risks, i.e. they will either occur or require significant mitigating actions in the next 3-6 months.

The table below provides a detailed update on actions against each “proximity” risk.

EcoPark South Site - operational conditions during construction	Commentary
Mitigation update	<ul style="list-style-type: none"> Design validation process sign-off (NLWA & LEL) on Value Engineered design; Complete Construction Management Plan; Complete Strategy for procurement/build of north weighbridges agreed – to be procured outside of EcoPark Contract.
Further mitigations planned	<ul style="list-style-type: none"> Establish specific dates associated with delivering enabling works and integrate these into master schedule.
Statutory undertakers (UKPN, Cadent) may not complete works to	Commentary

programme and impact Sewer Enabling Works	
Mitigation update	<ul style="list-style-type: none"> • UKPN delivery teams have been engaged (11kva and 33kva units) and have visited site to confirm works required to make cables redundant. • Appropriate Contractor to expose UKPN cables identified.
Further mitigations planned	<ul style="list-style-type: none"> • Establish strategic communication channels with both Statutory Undertakers. • Agree suitable Cadent and UKPN access dates to site to undertake works.
LVHN interface with NLHPP works	Commentary
Mitigation update	<ul style="list-style-type: none"> • LVHN Programme has been received and is subject to critical review to understand implications to NLHPP.
Further mitigations planned	<ul style="list-style-type: none"> • Evaluate LVHN programme to confirm the schedule aligns with the NLHPP sequencing & summarise critical issues • Agree approach to the monitoring and management of LVHN works.

6. HEALTH, SAFETY & WELLBEING

- 6.1. As highlighted above, the project team have developed a revised Health and Safety Programme (HSP) focussed on accelerating progress towards the NLHPP health and safety vision. To this end, new resources have been brought on board with specific expertise in behavioural change management and health and safety strategy implementation experience. Engagement with all stakeholders will be a key focus in the coming period and a schedule will be prepared to communicate the stepwise implementation of the planned HSP activities.
- 6.2. A number of activities are already underway or completed, and these include:
- 6.2.1. The Health, Safety and Environmental requirements for tender documentation is now full in line with the project goals.
- 6.2.2. Evaluation of Health, Safety and Environmental elements of contractor's Participating in tender submissions is ongoing. Tender evaluation site visits now confirmed.
- 6.2.3. A CDM (Construction Design & Management) Regulations briefing has been created for all team members and successfully piloted with an initial group. This will provide the team with guidance on responsibilities of individuals and organisations in being compliant with these regulations and supporting a safe environment for all those who interface with the NLHPP.
- 6.2.4. A video communicating the importance of Health and Safety to the NLHPP Project is planned for to be filmed in the next period for use across the programme.

- 6.2.5. A Health, Safety and Welfare briefing and induction for NLWA staff is planned with focus on addressing site specific risk assessments and lone working.
- 6.3. In terms of site-based activities, there are currently two active construction sites Northern Access Works and Laydown Area East.
- 6.3.1. The Northern Access Works site has shown good health and safety performance to date.
- 6.3.2. A series of non-compliant health and safety observations over the past couple of months have prompted a client-initiated safety stand-down on the Laydown Area (East) site. The stand-down consisted of stopping work for an hour to enable to discussion about safety with everyone on site and the contractor's management team demonstrating commitment to the improvements required. The specific non-compliances that prompted the stand down included:
- 6.3.2.1 Poor management of walkways - unmade ground with severe mud problems, some walkways ill defined (for example, no barriers demarcating walkways)
- 6.3.2.2 Unsafe work in excavation and at height – poor access and egress to excavation and instances of no emergency rescue equipment immediately on hand.
- 6.3.2.3 Poor communication of control measures to operatives was perceived.
- 6.4. Health and safety concerns outside Project activity have been a theme, with RSD (respirable silica dust) and noise issues at Northern Access from neighbouring businesses. There are also potential or current problems with vehicle movements outside both Northern Access and Laydown East. Further, adjacent building works at Ashley road have been raised as potentially dangerous for project and NLWA staff. The Project is actively addressing these matters through various channels and has already seen improvements.

7. SOCIAL VALUE

- 7.1. NLWA's vision is that the NLHPP provides a model for other public sector projects in the way it maximises benefits for local people and the wider community. In recent months, NLWA has been liaising with LB Enfield and has initiated relationships with a range of agencies such as Capital City College Training (CCCT), A Fairer Chance and the Kings Cross Construction Skills Centre in order to identify the most effective options for achieving our social value ambitions. We are currently working closely with Galldris to deliver the social value requirements within the Northern Access Works contract, and will shortly commence work with two more contractors appointed to deliver site preparation works. We are also developing new social value workstreams, for example relating to community projects and a schools programme, so they can be reflected within future, more substantial NLHPP contracts.

- 7.2. Arrangements are being finalised for the first apprenticeship created by the NLHPP to commence in January 2020. The apprentice, an Enfield resident, will be undertaking a Business Administrator course (level 3), working at Galldris Construction four days a week and studying one day at the College of North East London. The apprentice will be at Galldris for at least one year, during which time she will follow a bespoke plan of work to ensure exposure to relevant parts of the business and continuous learning and development.
- 7.3. The first training places created by the NLHPP are also due to commence in early 2020. Capital City College Training (CCCT) is identifying unemployed Enfield residents who could benefit from the ten NLHPP training opportunities via their 'Enfield into Employment' ESF programme; CCCT will provide the classroom-based element of training while Galldris will provide a week's work experience.
- 7.4. Galldris have confirmed that all staff working on the NLHPP are being paid at least the London Living Wage (LLW). Their two apprentices will also be paid the LLW. NLWA is pursuing Living Wage Foundation accreditation; this requires assurance that all directly employed and third party contractor staff across the organisation are being paid the LLW.
- 7.5. Galldris is a local business, based in Enfield. Galldris are monitoring their external spending on goods and services associated with the NLHPP contract and have reported that that 34% of orders to date have been with local businesses (i.e. businesses located within Enfield and surrounding boroughs).
- 7.6. The NLHPP is aiming for 25% local employment on the project. Initial data indicates that local employment on the Northern Access Works contract exceeds 25%; this reflects that Galldris is an Enfield-based company.

8. STAKEHOLDER ENGAGEMENT

- 8.1. A third roadshow was held at Edmonton Green Shopping Centre on 19 December 2019. Members of the project team were able to speak about the plans for Edmonton EcoPark to members of the public and answer their questions, which ranged from construction timescales through to the waste process and the wider regeneration of Edmonton. The roadshow was an excellent opportunity for the team to connect with local people and ensure that their priorities are relayed to the wider project team as the Project progresses.
- 8.2. A campaign in December on the project's social media accounts, Twitter and Facebook, boosted the profile of the North London Heat and Power Project's successes that were achieved across the year. The successes included;
- 8.2.1.** progress of construction for preparatory works,
 - 8.2.2.** positive engagement with the community through roadshows, newsletters and meetings,
 - 8.2.3.** and the launch of procurements which will help secure increased recycling in north London.

These highlights were complemented by the activity to showcase the environmental standing of the project through;

8.2.4. securing a discounted funding rate for £100m due to the environmental and societal benefits, as well as

8.2.5. releasing a carbon impact report on the project's carbon saving against landfilling.

8.3. Drone video footage of the existing site at Edmonton EcoPark was taken on 17 November to provide a record of the site as it looks prior to construction starting. Videos will continue to be uploaded to the project website (northlondonheatandpower.london) as the Edmonton EcoPark site changes over the project. The video taken in November is available to view on the project website here: www.northlondonheatandpower.london/documents/drone-footage-at-edmonton-ecopark/

8.4. Management of enquiries from local press outlets continues, providing cohesive responses relating to NLHPP on behalf of the Authority. Heads of Communications and press officers across the constituent boroughs remain engaged with the North London Waste Authority officers when responding to enquiries.

9. GOVERNANCE

9.1. The governance of the project continues to be informed by both officers from the Constituent Boroughs and experts in the work of the project, in particular the technical advisers for the construction works and the new ERF. As the project progresses, and construction work on the EcoPark itself is being prepared, the liaison with LEL is being developed through site working arrangements as well as at a management level, to provide health and safety leadership on site, and coordination of operational and construction work.

10. EQUALITIES IMPLICATIONS

10.1. No items in this report compromise the NLHPP equality objectives.

11. COMMENTS OF THE LEGAL ADVISER

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

12. COMMENTS OF THE FINANCIAL ADVISER

12.1. The Financial Adviser has been consulted during the preparation of this paper and comments have been incorporated.

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APPENDIX A: DASHBOARD REPORT



Programme Committee Meeting 13 January 2020

Appendix A NLHPP – Dashboard Report



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Please note that the dashboard contains information updated to the date of report publication (17/10/19). The project reports contained in Appendix A of the Programme Update (Part 2) reflect the most recent period-end of 27/09/19. Any discrepancies between these reflect events and information coming to light in the period in between.

Programme Summary

Completed within previous period:	Look ahead for next period:
<ul style="list-style-type: none"> • Laydown Area (West) and Eastern Access (E1a2) – Contract signature • Transport Yard (E2a) <ul style="list-style-type: none"> – Receipt of tender responses and commencement of evaluation. - Planning permission granted for site development • Sewer Diversion Main Works (E2c) – Contract signature • Site Wide Surveys Procurement – Publication of Contracts Finder Notice • Cadent Gas supply route – Completion of options study for supply route • Schedule Forecast Improvement – Following contract signature for E2c, the forecasted delay has improved by 4 weeks. • Project Conference – First project conference held for advisors and contractors working on the Project • Social Value – First apprenticeship confirmed to start in 2020. 	<ul style="list-style-type: none"> • Transport Yard (E2a) <ul style="list-style-type: none"> – Completion of tender evaluation and notification to winning bidder - Signing of the lease for the Hawley Road site • Sewer Diversion Enabling Works (E2b) – Contract signature [now completed] • Cadent Gas supply route – Narrowing down the northern options presented in the study • EcoPark South – SQ evaluation and Invitation to Submit Initial Tender (ISIT) preparations • Northern Area Clearance – Further workshops to define schedule and scope • Laydown Area (West) and Eastern Access (E1a2) – Mobilisation of contractor
Not achieved in previous period:	Issues for resolution:
<ul style="list-style-type: none"> • Sewer Diversion Enabling Works (E2b) – Contract awaiting execution, the Project Manager is pursuing [now completed] 	<ul style="list-style-type: none"> • Laydown Area East – Works remain in delay and programme yet to be accepted. Project Manager continuing discussions to resolve. • Interface Management – Development of agreed phasing drawings to support the management of site sequencing and construction activities.




Project Health Check






Project	Cost		Schedule		Risk		H&S		Overall	
	In-period	Period Trend	In-period	Period Trend	In-period	Period Trend	In-period	Period Trend	In-period	Period Trend
Laydown Area (East) - E1a1	●	→	●	→	●	→	●	→	●	→
Laydown Area (West) & Eastern Access - E1a2	●	→	●	↑	●	→	●	→	●	↑
Northern Access - E1b	●	→	●	↓	●	→	●	↑	●	→
Transport Yard - E2a	●	↑	●	↓	●	↓	●	→	●	↓
Sewer Diversion (Enabling Works) - E2b	●	→	●	→	●	↓	●	→	●	↓
Sewer Diversion (Main Works) - E2c	●	→	●	↑	●	→	●	→	●	↑
EcoPark South – E3a	●	→	●	↑	●	↑	●	→	●	↑
Northern Area Clearance – E3b	●	→	●	→	●	→	●	→	●	→
Utility Corridor and Main DNO connections - E4	●	↑	●	↑	●	→	●	→	●	↑
Energy Recovery Facility (ERF) - E7	●	→	●	→	●	→	●	→	●	→
EfW demolition and decommissioning - E8	●	→	●	→	●	→	●	→	●	→
Southern Access Widening - E9	●	→	●	→	●	→	●	→	●	→

See next page for key to RAG status

Project Health Check - Key

Key	Cost	Schedule	Risk	Health and Safety	Overall
	Understood and being managed appropriately for the stage of the project, with performance in line with baseline.	Understood and being managed appropriately for the stage of the project, with performance in line with baseline.	Understood and being managed appropriately for the stage of the project, with performance in line with baseline.	Health and Safety risks understood and being managed effectively. No minor or major incidents reported.	All green
	Minor concerns emerging, mitigations developed and prepared to keep performance in line with baseline.	Minor concerns emerging, mitigations developed and prepared to keep performance in line with baseline	Minor concerns emerging, mitigations developed and prepared to keep performance in line with baseline	Minor incidents occurring with root causes known and action plans in place.	Two or more amber assessments in functions.
	Issues being actively managed but high risk of impact on Baseline performance.	Issues being actively managed but high risk of impact on Baseline performance.	Issues being actively managed but high risk of impact on Baseline performance.	Major incidents occurring with senior management intervention.	Any red assessment in any function

Key	Context
	No material change in status between the current and previous period
	Adverse change in status between the current and previous period
	Positive change in status between the current and previous period

Health Safety & Environment Dashboard



Health and Safety Programme

A client led Health and Safety Programme (HSP) has been initiated that will deliver a greater maturity of health and safety behaviours and performance. As client the NLWA is taking a pro-active lead in developing the programme using the collective expertise of the current supply chain of advisors and contractors. This HSP will enhance the current health and safety management activities with visible leadership and empowerment throughout the project to put safety first

In Period Commentary on Health, Safety and Environmental issues

Headline figures remain good, with low Accident Frequency Rate (AFR). Reporting has improved markedly, with alignment between contractors' internal systems and NLHPP requirements finalised mid-month. There is still some under reporting and/or mis-categorisation apparent from one subcontractor, to be addressed for future reporting. External impacts on H&S continue to be a focus of attention, with improvements at Northern Access regarding ingress of dust and noise from neighbours - a collaborative approach by the Project Manager and others has been successful, and the workforce is no longer exposed to traffic hazards. Laydown East faces comparable issues with traffic, which are being actively addressed.

Environmental assurance visits are now being conducted separately from the H&S function, with initial visits by environmental specialists during December and to be continued. These will be health checks on contractor arrangements, with formal audits at appropriate intervals. Future reports will include metrics from this activity.

Construction industry Accident Frequency Rate (AFR*)

2.32

NLHPP Accident Frequency Rate (AFR*)

0.55

Strategic Overview

Activities completed in Period	Look ahead for next period
<p>H&S strategy document completed; reporting structure for site activity aligned with NLHPP definitions.</p> <p>The HSP has been developed to support deliver several key initiatives in the coming months. Additional specialist resources have also been deployed to support the plan.</p>	<p>Implementation and communication of the HSP – a schedule of tasks towards implementing the assurance plan to be developed</p> <p>Utilisation of the collaboration tool to automate gathering and reporting of HS&E metrics. Liaison with new contractors to implement NLHPP requirements.</p> <p>Work with Thames Water/Camden Plant on LDE safety issues at site entrance.</p>

Trends/observations

As last month, external H&S impacts are prominent, with good progress especially at NAW. Good preparation for winter conditions has paid off at both sites, with good lighting in place. No significant incidents reported during the reporting period.

* The Accident Frequency rate enables comparison of accident rates against hours worked rather than the number of accidents. The calculation is (number of accidents) / (number of hours worked) x 100 000. Thus, a project with 1 million hours worked and 3 LTIs would have an AFR of 0.3. The values shown above represent the cumulative AFR incorporating hours worked from April till this reporting period.

Schedule Dashboard



Milestone (Critical)	Baseline Date	Forecast Date	Deviation to Baseline	Interface	Recovery Plan
Complete works to Hawley Road site (Temp long term LEL Transport Yard)	6 July 2020	6 July 2020	0	Enables start of enabling works to Shaft A	
Complete Laydown Area	30 October 2020	30 October 2020	0	Enables new Eastern Access road to open to light traffic.	
Start Enabling Works to Shaft A Area on site	7 July 2020	7 July 2020	0	Requires relocation of Transport Yard to Hawley Road	
Complete Enabling Works	2 Oct 2020	2 Oct 2020	0	Enables access to the Sewer Diversion Main Works contractor.	
Start Sewer Diversion Works on site	16 Nov 2020	16 Nov 2020	0	Requires enabling works to Shaft A area to be completed	
Start EcoPark South Works on site (with some restrictions)	25 Jan 2021	25 Jan 2021	0	Access to sewer shaft construction area not available until December 2021	
Complete Sewer Diversion work	25 Aug 2021	18 Nov 2021	- 12 weeks	Enables access to full EcoPark South work site	Schedule enabling works in greater detail to give earlier access to start of sewer drive shaft.
Completion of Construction works EcoPark South (RRF)	01 Aug 2022	11 Nov 2022	- 14 weeks	Enables transition of existing operations and commencement of Northern Area Clearance.	12 weeks will be recovered by recovery of sewer diversion completion. Remaining 2 weeks arise from reassessment of risks in achieving commissioning timescales. Early contractor involvement will seek opportunities to de-risk in design.
Northern Area Clearance - Remediated Complete	31 March 23	31 March 23	Under Review	Enables the commencement of ERF construction works	As the later projects are still being developed in detail, we have assumed no immediate impact, and that any delay to the EcoPark South completion date can be recovered subsequently.
ERF – Commissioning – Take over (O&M engaged in operations)	19 Dec 2025	19 Dec 2025	0	Requires construction to be complete.	
EFW – Demolition Complete	19 June 2030	19 June 2030	0	Requires ERF to be fully operational.	
Southern Access Road – Works Complete	14 May 2031	14 May 2031	0	Overall programme complete	

Risk Dashboard

Risk Register Summary Statistics

Summary Statistics	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19
In-period active risks	372	372	353	346	353
Risks raised in period	5	8	6	3	7
Risks closed in-period	14	8	25	10	0
Risks Expiring Next Period	1	2	5	3	4

Risk count by RAG (score) categorisation

		Risk distribution (Probability x Impact)				
Probability	VH	4	2	1	1	1
	H	3	10	16	15	2
	M	15	30	26	15	13
	L	26	53	31	25	18
	VL	3	4	1	1	0
		VL	L	M	H	VH
		Impact				

Key risks by impact

Project	Risk Event	RAG	Mitigation Control Plan
E3a (EcoPark South Construction)	Scope for southern site utilities is immature at current and may change		1) Produce Utilities scope/brief to inform the D&B contract and clarify Utilities risk profile for inclusion during procurement 2) Trial pits to be completed in order to validate utility model by Mar-20.
E3a (EcoPark South Construction)	Enabling works to support operations during EPSC may not be completed in time for construction start on site.		1) Agree programme to design, procure and construct EPSC enabling works pre-contract start on site.
Programme Wide	Project delivery works impact LEL site operations beyond planned scenarios		1) Establish NLHPP presences in Operator site offices. 2) Continue collaborative site planning procedures in preparation for ramp-up in works on LEL site with Sewer Enabling Works.

Key risks by proximity (next 12 months)

Project	Risk Event	RAG	Mitigation Control Plan
E2b (Enabling Works)	Access to Transport Yard Building Area not provided on Advised Date (July 2020)		1) Finalise Lease with LBE and complete procurement. 2) Investigate alternative access strategies e.g. partial access to phase 2.
E2b (Enabling Works)	UKPN & Cadent may fail to meet delivery programmes		1) Obtain programme from each statutory undertaker and agree access dates and communication protocols.
E2c (Sewer Diversion)	LVHN design / programme of works may interfere with E2c Contractor works.		1) Evaluate LVHN programme to confirm the schedule aligns with the NLHPP sequencing & summarise critical issues 2) Agree approach to the monitoring and management of LVHN works.