

## **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:** 22 APRIL 2021

### **SUMMARY OF REPORT:**

This report provides the Authority Meeting with an update on progress of the North London Heat and Power Project (NLHPP).

### **RECOMMENDATIONS:**

The Authority is recommended to note the contents of the report.



**SIGNED:** ..... Programme Director

**DATE:** 12 APRIL 2021

## **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. The report structure provides a narrative in the main body with a dashboard.
- 1.3. The progress data provided within the report, including the status dashboard in Appendix A, reflects the status of the programme on the 26 February 2021. This is the most recent reporting period for which project-approved data is available at the time of preparing this status report to Members. Where significant progress updates have occurred since this date, a narrative update has been included in this report.

## **2. PROGRAMME DIRECTOR'S SUMMARY**

- 2.1. The Project continues to be on track to deliver the programme and cost objectives as agreed in the March 2019 baseline.
- 2.2. With major earth works and piling underway by Taylor Woodrow, there has been a substantial and visible increase in construction activity within the EcoPark. For a sense of scale, the workforce on site has doubled in size since December to approximately 140 workers and, as of the end of March, around 20,000m<sup>3</sup> of material has been excavated from the footprint of the future RRF building.
- 2.3. The project has been able to progress through this stage safely and efficiently due to the extensive risk identification, logistics planning and coordination activities that have taken place between all parties on the EcoPark. The uninterrupted delivery of LEL's operational activities, including co-ordination with their delivery of a replacement turbine, is testament to the positive and collaborative work achieved in this area.
- 2.4. The project can report another positive month in terms of Health and Safety performance with no serious or loss time incidents, near misses, or reportable incidents.

- 2.5. In a month of significant construction progress, at the time of writing, the highlights are; Taylor Woodrow have installed 66 Continuous Flight Auger (CFA) piles from a total of 650; DSM demolition have completed the demolition of the former In-Vessel Composting (IVC) facility in the northern area of the EcoPark; and Barhale have successfully completed the 320m of tunnelling to deliver the two new sewer routes ahead of programme.
- 2.6. One of the key interface challenges previously described to Members, that of the overlapping use of space between Barhale and Taylor Woodrow, has been responded to with a new agreement reached with Barhale. This builds on a revised working plan they have presented and incentivises them to complete their works and demobilise from site in line with the 1 September milestone date. This avoids the likelihood of a delay to Taylor Woodrow completing their subsequent works.
- 2.7. The COVID-19 mitigation strategy remains in place. With the increase in workers on site, antigen testing capacity has increased. In addition, following completion of the trial for the initial proximity control system, the NLHPP team have agreed to continue this into the future. No new cases have been identified in the workforce in the last period and work has therefore been uninterrupted by the need for sections of the workforce to isolate. The Project will continue to monitor the need for such precautions through the weekly COVID-19 Taskforce meetings.
- 2.8. The ERF evaluation and dialogue period are now starting. The process has been thoroughly planned, with resource resilience and staff wellbeing a primary focus to ensure that the team are able to manage the extensive workload against the required timescales. The process will also contribute to the team's understanding of the ERF construction and delivery risks and in turn this will guide NLHPP activities in the coming months. Members will be kept informed on progress through programme update reports, within the limitations of public procurement rules.
- 2.9. Engagement with the local community and the promotion of social value has continued to be a key focus for successful programme delivery. Taylor Woodrow held a "Meet the Buyers" event aimed at increasing awareness for local businesses of upcoming procurements and sub-contracts. During the reporting period, the Taylor Woodrow and the NLWA, together with LEL and Grimshaw Architects, held a week-long careers webinar event with Haringey Sixth Form College to mark National Careers week. The focus was on emphasising opportunities in the construction and engineering sector. New apprentice intakes for NLHPP organisations have been confirmed for April, July and September. The number of apprenticeships created currently stands at 15.
- 2.10. At the most recent project "All Hands Event" held online in March, the latest winner of the "Val-You" project innovation prize was announced. The winner was selected from the pool of innovative ideas and solutions submitted by members of the NLHPP project team to the Continuous Improvement and Innovation group

during the past quarter, with the previous award being presented in late 2020. The winning idea was the wearable proximity tracker system as a truly innovative solution as a line of defence against COVID-19 – influencing workforce behaviour and providing valuable data which enables the project to understand areas where we might be putting the workforce at risk.

- 2.11. The project continues to seek added value in delivery. Very recent practical examples widely reported in the trade press include;
  - 2.11.1. Barhale carrying out a pioneering operation involving two simultaneous pipe jacks from a single shaft to shorten the tunnelling programme;
  - 2.11.2. Taylor Woodrow's innovative approach to the groundworks bringing considerable environmental benefits, through the elimination of reinforcement cages normally required in CFA piling and the use of Controlled Modulus Columns (CMC's) leading to a reduction in the soil arisings and the associated transport and disposal costs.
  - 2.11.3. Taylor Woodrow have also adopted a cut-off wall solution to construct the foundations, leading to a 30% reduction in the embodied carbon when compared to the alternative of a traditional sheet piled wall.
- 2.12. Significant activity has taken place during the reporting period in relation to a wide range of positive stakeholder communications which is described more fully in Section 7 of this report. A notable area of activity has involved the response to the airing of a television documentary on energy from waste facilities, making general negative observations on the use of energy from waste across the UK which do not apply to the current or future Edmonton facilities. The Authority's response was laid out in a six-point response on the NLHPP website and shared widely with North London Members of Parliament, Council Leaders, colleagues from each of the Constituent Boroughs, and representatives in the community.

### **Current Key Activities**

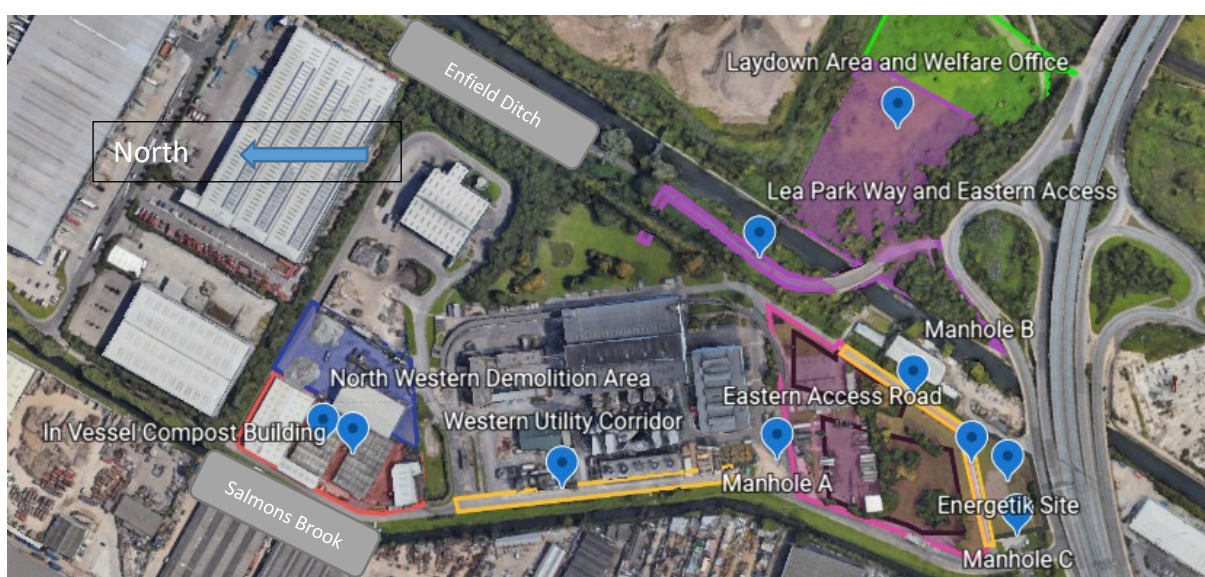
- 2.13. There remains a number of construction co-ordination challenges to be overcome to deliver future works in accordance with the programme, and these continue to receive a high degree of attention. Key focus areas include:
  - 2.13.1. Energetik Energy Centre works – The geographical and schedule overlap between Energetik works and the NLHPP activities within the EcoPark continues to be an area of significant attention. In recent days, a broad agreement for working coordination has been reached, and both parties are now incorporating this into delivery plans and schedules. The NLHPP team await the return of these to review and ensure that this fully mitigates the risk.

- 2.13.2. Switchgear replacement in the EfW – A key interface with LEL is the delivery and installation of a new switchgear which will allow power supply from the existing EfW to the new RRF building. This is critical for safe and successful commissioning of the new asset. The timing of the manufacture and install of the new switchgear and co-ordination with the construction programme is a key risk which is being addressed by LEL in consultation with the EcoPark South project team.
- 2.13.3. Utility installation – There is a need to install services and utilities in the western road corridor within the EcoPark to connect the southern and northern parts of the site. As a key arterial route within the site, the team are exploring opportunities to take possession of the road without disrupting the operational traffic. Coordination with LEL is ongoing to fully schedule these aspects of the work.

### **3. PROJECT DELIVERY SUMMARY**

- 3.1. The delivery of the project has successfully ramped up on site in the EcoPark with construction taking place across the entire area to the south of the operating Energy from Waste (EfW) facility and demolition taking place over nearly half the area to the north. This has transformed the EcoPark's current landscape to one where major construction and waste management operations are successfully operating side by side.
- 3.2. Examples of the current scale of construction taking place include:
  - 3.2.1. A doubling of the construction workforce on site from approximately 70 at end of 2020 to approximately 140 currently.
  - 3.2.2. Approximately 20,000 cubic metres of material have been excavated for the Resource Recovery Facility (RRF).
  - 3.2.3. 66 CFA piles have been installed for the RRF.
  - 3.2.4. The IVC building has been demolished.
  - 3.2.5. 320m of deep tunnel boring for the sewer diversion has completed.
- 3.3. In the southern construction area, the team have resolved how the sewer diversion shaft work sites will be handed back earlier to facilitate construction progress of the RRF in September.
- 3.4. Also, in the southern construction area the team have resolved how the Energetik's contractor can build the District Heating Energy Centre alongside Taylor Woodrow building the RRF over the next 18 months.

- 3.5. Both examples above have been achieved through constructive dialogue with Barhale, Taylor Woodrow, Energetik, Vital Energy (the contractor working on behalf of Energetik) and LEL. Flexibility and openness to ideas by all has resolved the issues with changes to working methods and sequences.
- 3.6. The project team is working closely with LEL on two key interface matters:
- 3.6.1. The supply of high voltage power directly from the EfW, to support RRF commissioning in 2022, and
  - 3.6.2. Opportunity to take possession of the EcoPark's western road to enable utilities infrastructure to be installed during 2022.
- 3.7. The step up in construction activity is supported by the completion of the Laydown Area and Welfare Office block adjacent to the EcoPark. It is being used primarily by Taylor Woodrow who have the largest number of people on site, but also shared with project team staff and parking for LEL and other contractors.
- 3.8. The changes to traffic and pedestrian routes that were made in January are working well and as planned. Some adjustments have been made to construction traffic routes in the EcoPark in the light of experience to improve efficiency and safety. These improvements were identified through the effective collaboration between all parties on site.
- 3.9. The detailed step-by-step planning of changes to traffic routes in the EcoPark to enable construction to progress has turned its attention to the next major change planned for September 2021 when the permanent road access from Lea Park Way into the EcoPark will be constructed.
- 3.10. The aerial view of the EcoPark shown below has been marked up with features referenced in this Section.



- 3.11. A current “Health Check” summary of project performance is included at Appendix A, together with a milestone summary report current at the end of the February reporting period. The following paragraphs provide a project-by-project summary of progress on site.

#### **Laydown Area and Eastern Access (Project E1a2)**

- 3.12. Construction of the refurbished Lee Park Way which forms the eastern access road has been substantially completed at the end of February and is in use to link the Laydown Area and Welfare to the construction sites in the EcoPark. A road safety audit is being carried as the final step before the road is reopened to the public pedestrians and cyclists. The photograph below shows new constructed Lee Park Way including the cycle path and pedestrian walkway.



- 3.13. The Laydown Area and Welfare offices have been fully taken over by the Authority from Buckingham and have been put now under the control of Taylor Woodrow as part of the EcoPark South Construction contract.

#### **Sewer Diversion Enabling Works (Project E2b)**

- 3.14. Following the completion of the work clearing services in preparation for sewer diversion, the project is being closed and final account is being settled with the contractor Galldris.

#### **Sewer Diversion Main Works (Project E2c)**

- 3.15. The tunnel boring machines have completed both their tunnel drives from shaft A towards shafts B and C.



- 3.16. The photograph below shows one of the tunnel boring machines on site prior to being lifted into position.



- 3.17. The photograph below shows the tunnel boring in operation in shaft A. The new sewer lining pipes for both legs of the sewer can be seen as they are being driven into position.





### **EcoPark South (Project E3a)**

- 3.18. Taylor Woodrow has made substantial progress with the excavation of soil and previous transport yard to lower the ground for the RRF. At the middle of March approximately 20,000 cubic metres of material had been excavated.
- 3.19. In preparation for foundation piling the heavy equipment has arrived on site to drill and form the piles. Piling started on 22 March 2021.
- 3.20. The photograph below shows the piling rig on site ready to auger the piles.



- 3.21. The construction of EcoPark House has started with the demolition of the Sea Cadet facilities situated on the western bank of the River Lee Navigation as can be seen in the above photograph.

### **Northern Area Clearance (Project E3b)**

- 3.22. The demolition of the redundant facilities in the western side of the future ERF footprint has continued with demolition of the In-Vessel Compost building.
- 3.23. The photograph below shows the redundant In Vessel Composting being demolished.



- 3.24. The design and construction of the temporary Bulky Waste and Fuel Preparation facility is being procured to be available to take over from the current facility in late 2021. Providing this facility for LEL to operate enables the ERF construction to start on time in October 2022 on the footprint of the current Bulky Waste and Fuel Preparation plant.

### **Utility Corridor & Main Distribution Network Operator (DNO) connections (Project E4)**

- 3.25. Cadent are working with the team to evaluate the best route option for the future incoming gas supply main considering the wayleave agreements that they would need. Savills are continuing to assist with the negotiation of wayleaves.
- 3.26. The detailed layout and design of the future utility infrastructure that runs along the western access road of the EcoPark is being optimised. This is to enable the installation work to be done whilst traffic flow is maintained, and existing utilities are protected. The high density of utilities between those that currently exist and future ones, makes optimising the design challenging and is resolved by looking at layout options and periods where traffic is needs are expected to be light.

### **Energy Recovery Facility (ERF) (Project E7)**

- 3.27. The evaluation and competitive dialogue stages has now started. The programme remains on track to make a recommendation for the award of contract in December.
- 3.28. Preparations for the evaluation of tenders by the team has included evaluator training is being given to all involved. In recognition of the critical time scales set for evaluation, dialogue and award, preparations have included making provision for resilience in capacity of evaluator resources. The evaluation team is fully resourced at all levels including resilience to either planned absence such as leave or unplanned absences.

### **Energy from Waste (EfW) demolition & decommissioning (Project E8) and Southern Access Widening (Project E9)**

- 3.29. On the basis that this work follows the completion of the ERF after 2028, there has been no further work on these projects in the period.

## **4. HEALTH, SAFETY & WELLBEING**

- 4.1. This summary considers an overview of the Health, Safety and Wellbeing (HSW) outcomes from the February 2021 and March 2021 periods, and up to the time of writing.

### **Health, Safety & Wellbeing Performance**

- 4.2. The month of February 2021 has been busy with several additional construction activities commencing and several changes laid to site logistics and pedestrian management. New site access via West Laydown area opened to both site traffic and pedestrian access followed by closure of the Western footpath and road access to site traffic, which forms part of EcoPark South project for the commencement of excavations and earthworks removal. Southern entrance restrictions with a one-way system access route exiting via Northern Access route are already in place in order to avoid site traffic related incidents, and to ensure constant flow of LEL operations and site construction traffic. As numbers and activity at site level increase, this brings further challenges to HSW. The HSW team has been strengthened by the provision of a further dedicated resource to support the ongoing monitoring of compliance, development activities and day to day HSW management and input to the programme.
- 4.3. Zero serious or loss time incidents have been reported, with no near misses or reportable incidents.
- 4.4. COVID-19 management provisions continue in line with best practice. Since the antigen testing initiative was commenced on 11 January 2021, a total number of

957 workers have been tested on NLHPP. Approximately 115 workers are now being tested each week. All workers have received a negative result since the beginning of February. The proximity control system trial also continues providing a further line of defence, with continual improvements being worked through with the supplier and the NLHPP team. The trial period completes at the end of March 2021 and proposals for extending the use of the product are being finalised. These COVID-19 provisions have performed well in ensuring not only the safety & health of our workforce, but ensuring the productivity of construction activities is maintained, to date limiting positive COVID-19 cases to 4 across the programme since the turn of the year. The programme proposes to continue with these important initiatives in these uncertain times, until there is clarity on extended government and construction industry guidance as the COVID-19 roadmap progresses.

- 4.5. Independent site audits undertaken by the HSW Site Health & Safety Assurance Manager have yielded good levels of compliance across 5 sites and 15 audits in the period. The lowest compliance level reported at 89% was in the initial site establishment period of the Northern Area Clearance project and was quickly improved upon with actions resolved and a 100% compliance score the following week.
- 4.6. A sitewide “Know Your Route” safety stand down took place on 24 February where all contractors discussed aspects of site traffic management issues, new road changes including pedestrian safety to and from work area and LEL restricted areas and LEL operations. The stand down has given an opportunity to the site workforce to raise, discuss and address any concerns they might have in relation to their work area and reinforcing the message of hazard and near miss observations on site.
- 4.7. In the second week of March, asbestos was found present during preparations for the Sea Cadet building demolition, in the eaves of the structure, that was not identified pre-contract. The building was immediately secured, and all preparations ceased pending the conclusions of investigations and further survey work to confirm the extent of asbestos presence in the structure.

#### **Health, Safety & Wellbeing Management**

- 4.8. In addition to day to day health and safety management, development work continues in health, safety & wellbeing improvement. There is ongoing development of the NLHPP Wellbeing 4 Life strategy including establishing a 12-month plan and communication programme for 2021. A key focus of this development work is to enhance wellbeing and mental health awareness, promote it, and work with the programme partners.
- 4.9. The immediate output from this plan addresses Mental Health with a Spring 2021 campaign. A Mental Health pathway has been developed including a NLHPP Mental

Health Charter; training; support; and mental health first aid arrangements to be established across the programme. In these difficult times this is a key initiative to ensure the health and wellbeing of all.

- 4.10. An improved HSW statistics reporting module was introduced in December and there is now evidence of an improved level of reporting from the contractors. Safety Observation Reporting (SOR) has improved with evidence of a reduction in minor incidents across the programme. The objective of the SOR process is that a good number of observations are reported in order that the trends can be analysed; initiatives introduced to focus in areas identified as requiring attention; which correlates with fewer actual health and safety incidents. This is now being reflected in the statistics produced over the period showing continual improvements across the programme. The trending of the SOR's to date, as indicated in the HSW dashboard, indicates concentrations in areas associated with worker welfare rather than unsafe acts, which will inform upcoming HSW initiatives and campaigns in the pursuit of continual improvements.

## **5. RISK SUMMARY**

- 5.1. Following the issue of the Notice to Proceed on EcoPark South, early mitigation work conducted on traffic and logistics management, and modelling has enabled a smooth mobilisation and a significant scale-up of work activity from Taylor Woodrow. An agreement to incentivise early completion of the Sewer Diversion Works has been agreed with Barhale which should enable timely handover to Taylor Woodrow and maintain their schedule and programme of work for EcoPark South. This will reduce the risk of this interface causing delays to the programme's critical path.
- 5.2. One of the major activities is focussed on the detailed scheduling of construction work, particularly looking at opportunities to coincide NLHPP works with LEL's planned maintenance. This will enable the NLHPP team to take possession of parts of the EcoPark road network, during reduced traffic periods). Activity is also being conducted on the sequencing of Barhale, Taylor Woodrow and Energetik design and programmes of works on the /Lee Valley Heat Network facility to create a co-ordinated plan that will allow all parties to have safe access to their respective site areas and deliver their works without impacting others.
- 5.3. Due to successful mitigations the team has been able to close a number of risks without impact for projects having completed (the Northern Access Construction and Laydown Area and Eastern Access areas).
- 5.4. The following risks continue to be key "high-impact" risks, i.e. having significant schedule and/or cost impact:



- 5.4.1. The risk that programme interfaces with LEL operations may significantly impact construction beyond known constraints remains; robust reviews of LEL proposals have been established, and mitigations to investigate back-up of supply during crucial switch-over periods and programmes to investigate services are being conducted.
- 5.4.2. The challenge in maintaining high quality federated models of utilities and service information to support co-ordination of design and site works remains. Information continues to be accumulated through surveys, trial pits, the Geographic Information System, with regular engagement with contractors to share utility information on a consistent basis and to update the utility model.
- 5.4.3. Considerations associated with the design and routing of the incoming gas supply main onsite. Cadent are working with the team to evaluate the best route option and the wayleave agreements needed. Savills are continuing to assist with the negotiation of wayleaves with landowners.
- 5.4.4. Assessment and evaluation of tender returns for the Energy Recovery Facility (ERF) initial solution will give greater understanding of areas of risk and further focus on planning and evaluation of potential mitigations.
- 5.5. Migration of the risk register to a central datahub as part of the digital common environment will enable greater engagement across the project team with its risk profile and management of threats and opportunities. Briefings have been held with project and management teams and risk data is now available in the tool.

## **6. SOCIAL VALUE**

- 6.1. The focus on local employment and businesses in the project continues. To build on the achievement of local labour and local spend to date, Taylor Woodrow are currently working with London Boroughs of Enfield and Haringey to ensure that job opportunities on the EcoPark South contract are known to the local community. The approach will also be rolled out to London Borough of Waltham Forest. In addition, Taylor Woodrow have hosted a Meet the Buyer Event in March 2021 to engage with local suppliers and companies on the upcoming contracts which they will be tendering for. As at the end of February, 28% of those employed on site are from the local area, against the project target of 25%, and spend within local businesses was 18% at against the project target of 10%.
- 6.2. In collaboration with Taylor Woodrow, officers ran a number of sessions over five days with students at Haringey Sixth Form College as part of National Careers Week. The aim of the sessions was to encourage students to think about a career in construction and engineering and raise their awareness for the pathways into these types of careers, as well as learning more about the NLHPP. A press release

outlining the delivery of these sessions is available here:

<http://www.northlondonheatandpower.london/news/engagement-with-north-london-s-future-workforce-as-part-of-national-careers-week-2021/>. This will be offered to local schools as one element of engagement with school students going forward. Presentations aimed at younger pupils are being prepared and discussed with the science teachers in the local area, with a view to starting engagement with the key stage 3 group as soon as practicable.

- 6.3. Galldris have appointed a new engineering apprentice who will start in April. Other apprenticeships will start in July and September on the EcoPark South Construction contract.

## **7. COMMUNICATION**

- 7.1. A core focus in the communications team for March involved the management of information about the North London Heat and Power Project (NLHPP) with the airing of a documentary on energy from waste facilities. The documentary used broad claims to imply a blanket position on energy from waste across the UK. Many of the claims did not apply to the Edmonton Energy from Waste facility or future Edmonton Energy Recovery Facility and were laid out in a six-point response on the NLHPP website. This was shared widely with north London Members of Parliament, Council Leaders, colleagues from each of the Constituent Boroughs, and representatives in the community. A copy of the response is available here: <http://www.northlondonheatandpower.london/news/statement-in-response-to-channel-4-dispatches-programme/>
- 7.2. A social media campaign was issued to align with the positive messages about the project through videos of the NLWA Managing Director, Martin Capstick, at Edmonton EcoPark talking about the key benefits of the project as it is delivered. This activity was coupled with messages from North London Waste Authority's social accounts which promoted recycling and contamination themes to encourage behaviour change from residents to reduce residual waste. Other social media activity has included the continued campaign for 'Building Benefits' with a large focus on engagement with local schools across March. This was further boosted with information about National Careers Week and how local people can get involved on the project to kickstart their careers.
- 7.3. Communications have supported increased awareness of the project across a number of external presentations delivered by key members of the project during March.
  - 7.3.1. The Programme Director, David Cullen, delivered a presentation on the project to an international Energy from Waste Conference describing progress to date and the approach to developing a complex programme and the challenges faced. He also contributed the Client's perspective to a

panel discussion at the conference about Engineering, Procurement and Construction (EPC) contracting for energy from waste plants.

- 7.3.2. Key members from advisor organisations and LondonEnergy presented a webinar on the NLHPP approach to programme management for NLHPP for the Association of Project Management, sharing key lessons learnt thus far.
- 7.3.3. Ursula Taylor, the NLHPP Lead for Stakeholder Engagement and Communications, joined the Waltham Forest Jobs Summit to talk about job creation, onsite skills training and apprenticeships on behalf of both NLWA and LondonEnergy.
- 7.4. Responses continue to be provided to enquiries about the project by the communications team. Key themes across march have included general questions about energy from waste, questions about air quality in the local community and queries regarding climate impacts. Relevant themes where new queries are raised are maintained on the Scheme of Publication on the NLWA website here: <https://www.nlwa.gov.uk/ourauthority/scheme-of-publications>
- 7.5. New billboard artwork was installed in March outside the entrance to LondonEnergy to promote the start of construction on the Reuse and Recycling Centre (RRC). The billboard is part of a wider signage plan for the EcoPark to communicate about the benefits of NLHPP. The plan includes graphics on construction hoarding surrounding the EcoPark House site, and a large standalone dibond sign about the Energy Recovery Facility, both visible from the public towpath in Lee Valley Regional Park. Additional banners about social value benefits and Safety First will be displayed at construction sites within the EcoPark.





## **8. FINANCING**

- 8.1. During February and early March, borough Finance Directors were consulted regarding the next tranche of project financing. Following this, the Authority has borrowed a further £140 million from the Public Works Loan Board for a period of thirty-one and a half years at an interest rate of 2.11%. This funding is intended for the remaining works on approved projects within the programme.

## **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 Finance Adviser has been consulted in the preparation of this report and comments have been incorporated.

### **Contact officer:**

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## **APPENDIX A      PROGRAMME SUMMARY**





Contents	#
Project Health Check	3
Project Health Check - Key	4
Schedule Dashboard	5
Health, Safety and Wellbeing Dashboard	6

## Note:

- 1. Project Health Check is current at mid-March**
- 2. Schedule and Health, Safety & Wellbeing (HSW) Dashboard current at end of February reporting period**




# Project Health Check (at mid-March)




Project	Cost		Schedule		Risk		HSW		NLHPP Impact	
	In-period	Period Trend	In-period	Period Trend	In-period	Period Trend	In-period	Period Trend	In-period	Period Trend
Laydown Area (East) - E1a1	n/a		n/a		n/a		n/a		Completed	
Laydown Area (West) & Eastern Access - E1a2	● →		● ↑		● →		● →		● →	
Northern Access - E1b	n/a		n/a		n/a		n/a		Completed	
Transport Yard - E2a	n/a		n/a		n/a		n/a		Completed	
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	n/a		n/a		n/a		n/a		n/a	
Southern Access Widening - E9	n/a		n/a		n/a		n/a		n/a	

See next slide for key to RAG status



# Project Health Check – Key

Key	Cost	Schedule	Risk	HSW	NLHPP Impact
	Is on or below the Overall Project Cost Baseline	When the project completion date is on time or early	No unknown risks and low uncertainty within the risk environment	No recorded incidents, accidents or near misses. Any issues are outside the Project's control.  Senior leadership engagement, Positive Behaviours and Safety Observations noted and recorded.	If there is no adverse impact on the ability if the NLHPP to deliver on time and within its budget.
	Increase in known costs or risk of exceeding the Overall Project Cost Baseline	One of more project milestone is late by more than a day	Newly identified risks with some impact to the risk environment in the period	Rise in recorded accidents, lost time or otherwise, or occupational diseases. Normal scheduled HS&W advisor site visits and weekly	If the project has the potential to adversely impact the ability of the NLHPP to deliver on time and within its budget.
	Unexpected costs arisen likely to cause the Overall Project Cost Baseline to be exceeded	A project critical path milestone is late	High uncertainty within the risk environment identified by their qualitative RAG impact rating (cost, time, reputation)	Any RIDDOR incident or consistent failures to comply with CLC Site Operating Procedures version 4	If the performance of the project is going to impact the NLHPP bringing ERF into service on time or capital cost being exceeded.

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



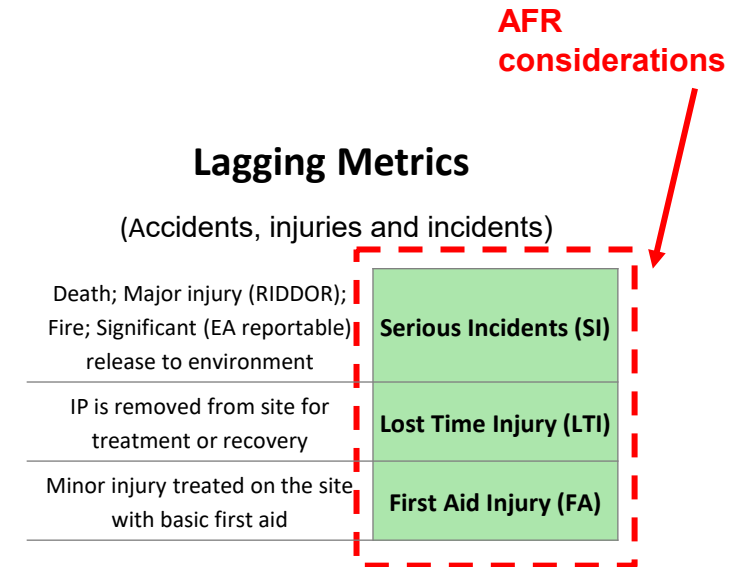
# Schedule Dashboard (at end of February)



Milestone (Critical)	Baseline Date	Forecast Date	Deviation to Baseline Programme (weeks)	Recovery Plan
Complete works to Hawley Road site (Temp long term LEL Transport Yard)	25-Sep-20	09-Nov-20	Complete	Complete
Complete Laydown Area	11-Nov-20	01-Mar-21	-14	Post period note: Eastern Access open 01-Mar-21
Sewer Diversion Enabling works - Galldris Remove Hoarding form works area for MH A	23-Sep-20	05-Oct-20	Complete	Complete
Complete Sewer Diversion Enabling Works	25-Feb-21	06-Jan-21	Complete	Complete
Start Sewer Diversion Main Works on site	23-Sep-20	02-Oct-20	Complete	Complete
Start Eco Park South Works on site (with some restrictions)	26-Jan-21	26-Jan-21	Complete	Complete
Complete Sewer Diversion main works	28-Oct-21	12-Oct-21	2	Forecast improved in period (1w) mitigation plans in train to recover completion to 01-Sep-21 pending PD approval.
Operational Commencement of RRF	26-Oct-22	02-Dec-22	-5	SDMW MHB interface forecast delayed pending SDMW approval. Resolution of LVHN interface in the Southern Road pending resolution (+8w)
NAC - Northern Area Eastern Section is cleared and available to the ERF Contractor (IF E7-5)	30-Sep-22	30-Sep-22	0	
NAC - Northern Area Western Section is cleared and available to the ERF Contractor (IF E7-6)	15-May-20	15-May-20	0	
ERF - First Fire on Waste	19-Dec-25	28-Jan-26	-6	This is a consequential delay
ERF - Commissioning - Take Over (O&M engaged in operations)	31-Mar-26	08-May-26	-6	This is a consequential delay
EfW - Laydown Area Re-Instatement	10-Jul-30	16-Aug-30	-5	This is a consequential delay
Southern Access Road - Works Complete	15-May-31	23-Jun-31	-5	This is a consequential delay



Terminology	Definition	Further Explanation
Leading Metrics	Actions that help to prevent accidents, injuries and incidents	The Health & Safety Executive's (HSE) and others' research has shown that increasing awareness and noting of both good and bad health, safety and wellbeing issues by <u>any and all of</u> the workforce (leading indicators) has shown a significant effect on the reduction in lost time accidents and other untoward events (lagging indicators).
Lagging Metrics	Accidents, injuries and incidents	
Accident Frequency Rate (AFR)	$\frac{[(\text{Number of injuries in the period})/(\text{Total hours worked during the period})] \times 1,000,000}{\text{i.e. the number of injuries per million hours worked.}}$	The AFR takes into account the first 3 lagging metrics: Serious Incident (SI), Lost Time Injury (LTI) and First Aid Injury (FA), as highlighted in an exert from the Lagging Metrics table.



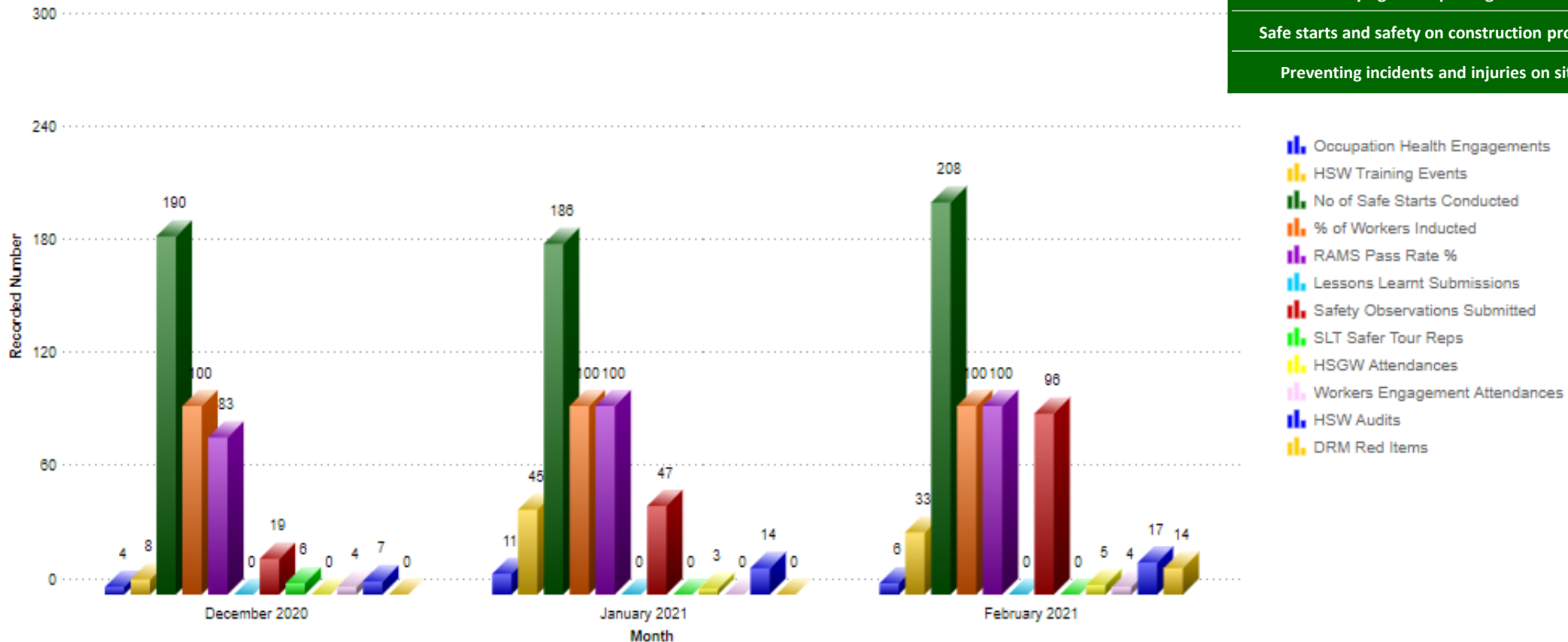


# Health, Safety & Wellbeing (HSW) Dashboard

## (Summary of Leading Performance Metrics)



NLHPP HSW Leading KPI Trend

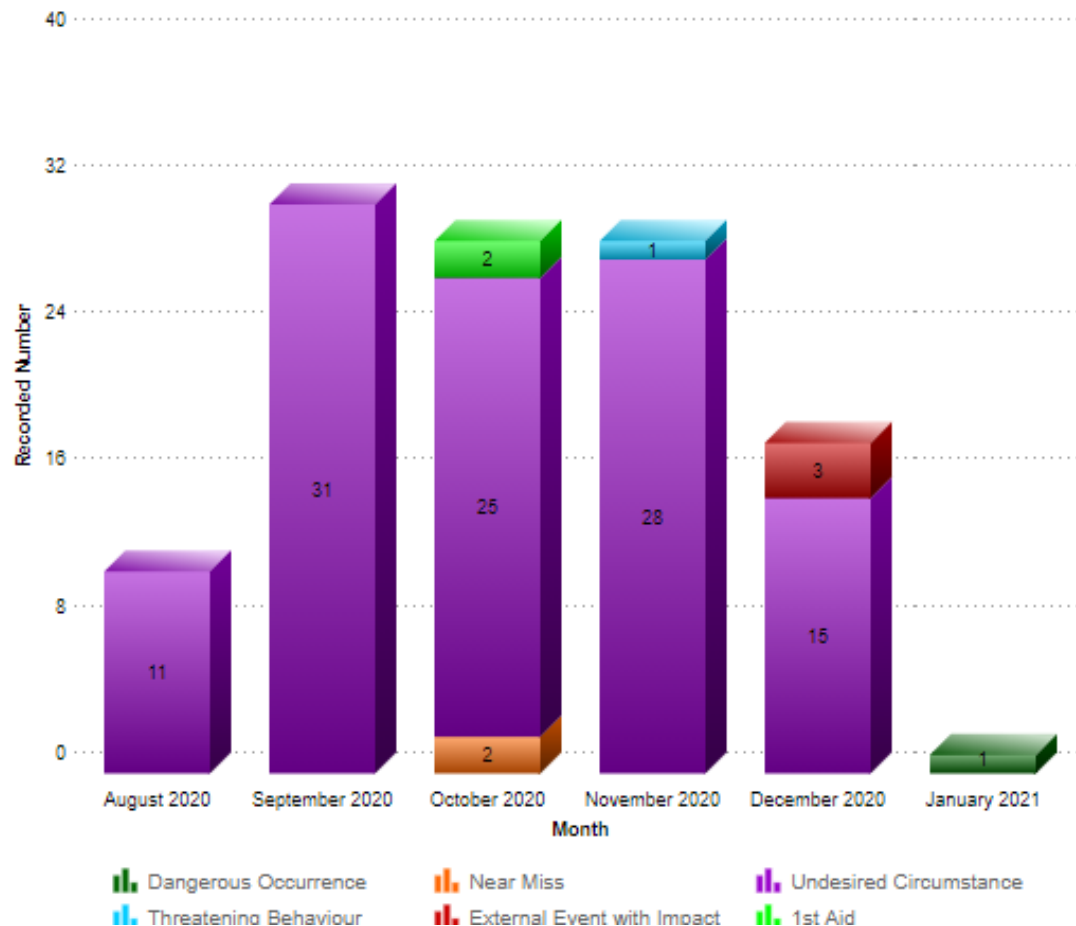


HSW Snapshots Issued	Date Issued
Vehicle safety & traffic management	5th February 2021
Identifying and reporting hazards.	12th February 2021
Safe starts and safety on construction projects	19th February 2021
Preventing incidents and injuries on site.	26th February 2021

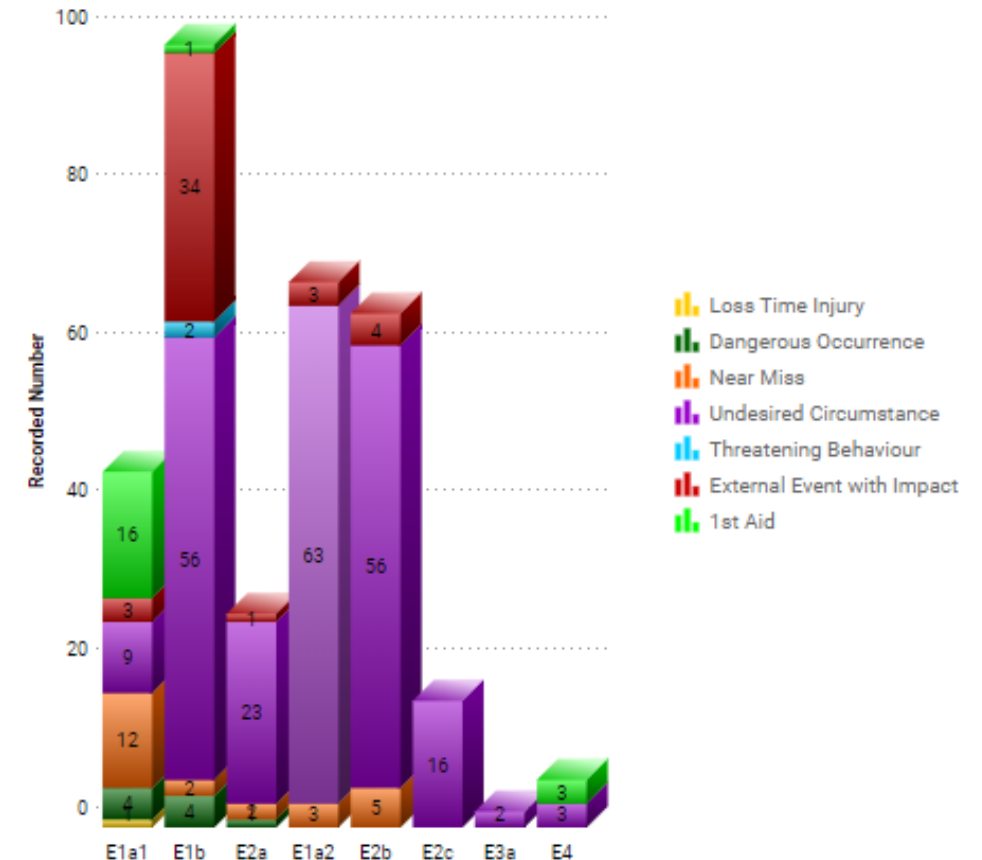
# Health, Safety & Wellbeing (HSW) Dashboard

## (Summary of Lagging Performance Metrics)

**NLHPP HSW Lagging KPI Trend**



**NLHPP Cumulative Lagging KPIs**



## Accident Frequency Rate (AFR\*\*\*)

NLHPP

Construction Industry

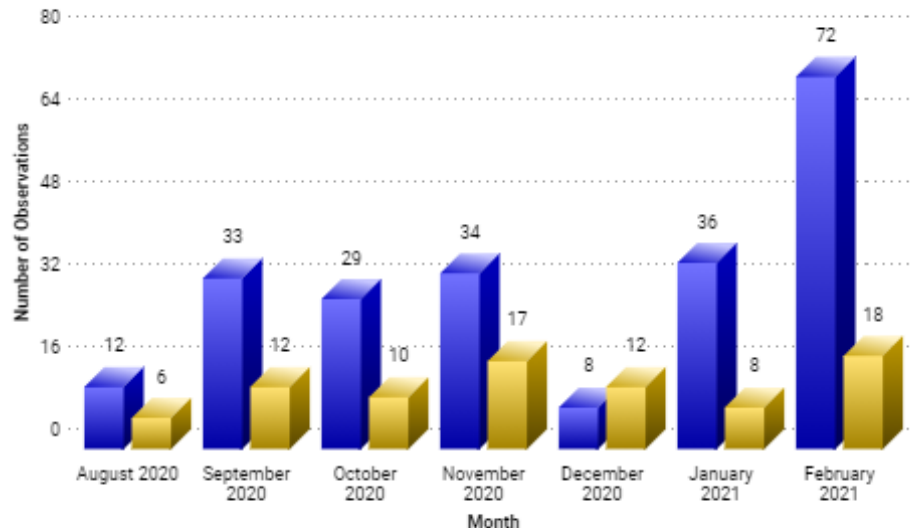
AFR for Reporting Period

0.00

1.33

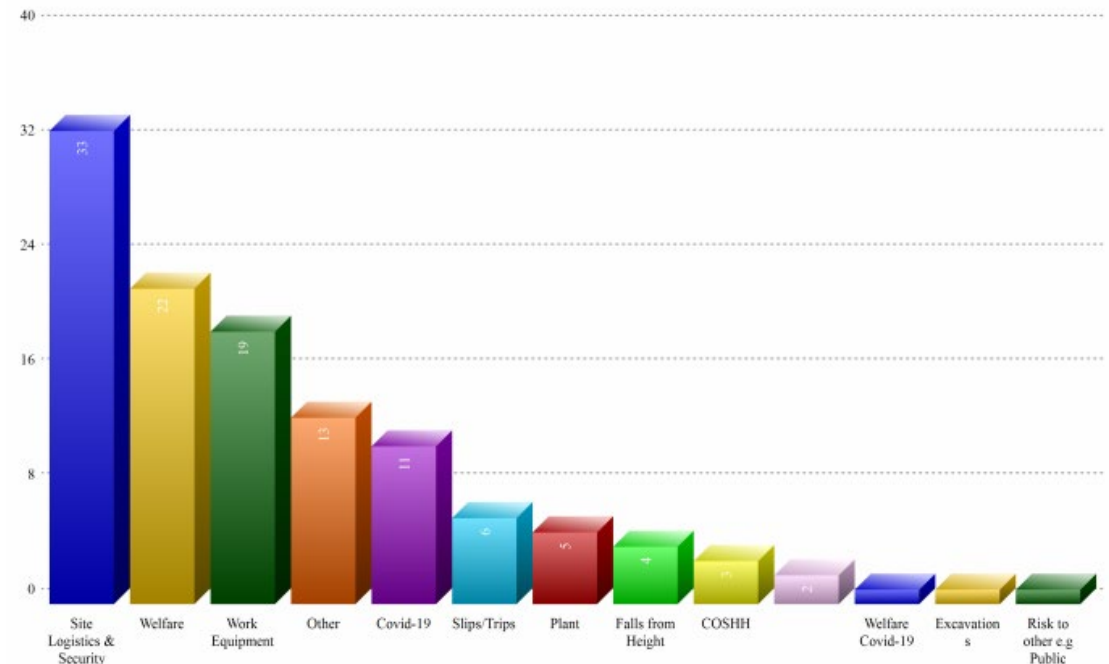
\*\*\* The Accident Frequency rate enables comparison of accident rates against hours worked rather than the number of accidents. The calculation is (number of accidents) / (number of hours worked on site) x 100 000. Thus, a project with 1 million hours worked and 3 LTIs would have an AFR of 0.3. The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

## NLHPP HSW Observation Trend



Health and Safety Observation Positive Behaviour

## H&S Observation Hazard Area Trend





# Health, Safety & Wellbeing (HSW) Dashboard

## (Project Compliance Audit Results)



Site Inspection Summary		
Site	Summary Report	Inspection Compliance Scores
<b>E1A2 - Laydown West</b>	Site compliance score 93.5%. Site activities comprise groundworks, road surfacing, portacabin fit out. Site is approaching completion. Site is operating safely. Site Supervisor demonstrates good approach to health and safety. Plant and pedestrians segregated. Good site access. Good welfare arrangements in place. COVID-19 arrangements working well and include full-time cleaner and dedicated marshal. Operatives following RAMS and wearing correct PPE.	11th February —94.73% 16th February —94.03% 26th February —91.72%
<b>E3A—Eco-Park South</b>	Site compliance score 96.9%. Site activities include construction of manhole shafts A to C. All sites are operating safely. Site Management demonstrates good approach to health and safety. Site segregated from LEL operations. Good traffic management procedures implemented. Good practice/initiatives implemented. Adequate welfare arrangements in place. COVID-19 arrangements working well. Operatives following RAMS and wearing correct PPE.	11th February —94.51% 17th February —97.33% 24th February —99.15%
<b>E2B - Sewer Diversion Enabling works</b>	Site compliance score 96.3%. Site activities comprise groundworks and installation new weighbridge. Site is operating safely. Site Management demonstrates good approach to health and safety. Site segregated from LEL operations. Good dust suppression on site. Good practice/initiatives implemented. Adequate welfare arrangements in place. COVID-19 arrangements working well. Operatives following RAMS and wearing correct PPE.	11th February —94.39% 17th February —94.51% 26th February —100.0%
<b>E2C—Sewer Diversion Main Works</b>	Site compliance score 98.6%. Site activities include construction of manhole shafts A to C. All sites are operating safely. Site Management demonstrates good approach to health and safety. Site segregated from LEL operations. Good traffic management procedures implemented. Good practice/initiatives implemented. Adequate welfare arrangements in place. COVID-19 arrangements working well. Operatives following RAMS and wearing correct PPE.	11th February —96.51% 17th February —100.0% 24th February —99.32%
<b>E3b—Northern Area Clearance</b>	Site compliance score 94.5%. Site is in process of set up for commencement of demolition works w/c 01/03/21. Adequate induction/welfare/COVID-19 arrangements in place.	17th February —89.02% 26th February —100.0%