



Annual Review **2021/22**



Mick's Message

It is easy when you work so intensively in a business on a day-to-day basis to forget the changes and the progress that have been achieved over a twelve-month period. This publication, the first LMD Annual Review, seeks to remedy this. It has been created for all of our stakeholders: employees, clients, suppliers and more. I hope you enjoy it.

Like many businesses, LMD had to adapt and flex to accommodate the constraints imposed by the COVID-19 pandemic. I would like to place on record my sincere thanks to all the team at LMD for their hard work and commitment which enabled us, firstly, to survive and then to thrive. I would like to extend this gratitude to all our families too; their support has been outstanding.

Our strategy through the pandemic was to continue to invest in plant, people and systems. Our fleet has grown from 20 to 32 and our goal is to add a further 8 vacuum excavators by the start of 2023. Not only do we have one of the largest fleets in the UK, but it remains the most flexible and adaptable.

Our workforce has grown by 41% over last year and we have made a substantial commitment to training. Josh Booth has joined us as our first mechanical engineering apprentice which takes me right back to my early days as a trainee. I hope Josh enjoys his time in construction as much as I have.

There is little doubt that the construction sector, from housing through to highways, has recognised the safety and operational benefits of vacuum excavation. The challenge is for us all as operators to meet the increased demand whilst continuously focussing on safety. This review highlights the health and safety steps in place across LMD's operations.

Finally, I am proud to announce LMD's collaboration with the Lighthouse Club Construction Industry Charity. In particular we are supporting Lighthouse's 'Help Inside the Hard Hat' initiative which addresses issues such as stress, anxiety and depression within the construction workforce.

I would like to take this opportunity to wish everyone associated with LMD a happy, healthy and successful next twelve months.

Mick



LMD working on the electrification of Denmark's railway network

Per Aarsleff A/S is working with Siemens to electrify 1,300km of the Danish state railway network. A key element of this project is the electrification of the Aarhus to Fredericia section which is 108km in length and runs down the eastern side of the Jutland peninsula.

The electrification programme requires the installation of 9m high masts to support the electrical catenary cables. The height of the masts means that 33 bridges will require significant structural change or rebuilding. The masts are located at between 15m to 60m centres depending on topography and track layout.

In November, Aarsleff contracted LMD to undertake the excavations required for the erection of the masts. LMD's large tracked excavator was shipped across to Denmark and craned on to a flatbed wagon.

The excavator, expertly controlled by its operator, Nigel, has completed up to 50 excavations during each night closure. It has been so successful that it completed its programme of works well ahead of schedule and has now returned to the UK.

As night temperatures tend to fall below zero in Jutland during December and January, there was a danger that the excavated ballast and soil could clump and freeze in the hose. Consequently, the tracked excavator was fitted with agitators. Agitators are located on the outside of the hose and are powered by compressed air. As the name suggests, the agitator continuously causes the hose to vibrate minimising the risk of a blockage. There are typically three agitators in a set and these are located in areas where the risk of 'clumping' is highest, for example at bends.

The agitators were so successful that all new LMD vacuum excavators will be supplied already prepped to accommodate agitators when needed.

Mick Dysart is LMD's Managing Director:

'Agitators are not just used in freezing conditions, they are useful in a wide range of applications including the excavation of clay and wet sand. The new excavators will come with an agitator function pre-wired into the 'brain' of the vehicle. The excavator will also require a more powerful compressor in order to deliver the required CFM for the agitator to be effective. Our first agitator-ready vacuum excavator for use on projects in the UK will be with us shortly.'



LMD Engineering Team





Making Motorways Safe

LMD has worked on motorway projects across the UK.

LMD has recently been working for one of the country's leading motorway technology contractors to install LED lighting and illuminated signage.

Left-tip vacuum excavators are often favoured for motorway work. When required, they are able to tip their spoil over the barrier at the edge of the carriageway thereby ensuring the road surface remains clear of debris. The spoil is collected by a separate team ensuring the vacuum excavators are able to optimise productivity.



LMD's new livery to support the Lighthouse Club



LMD has joined forces with the Lighthouse Club charity. One of LMD's vacuum excavators will carry a special Lighthouse Club livery throughout 2022. The aim is to promote the emotional, physical and financial wellbeing support provided by the charity to ill and injured construction workers and their families.

Mick Dysart is LMD Vacuum Excavation's Managing Director:

'The construction industry is far safer and less macho than when I started work over thirty years ago. However, we still have a poor health and safety record compared to many other sectors. I was shocked to learn, for example, that each year we lose 2.4 million working days through injury or illness, and that every single working day two workers in our sector take their own lives. We have to do something.'

At LMD we take health, safety and wellbeing very seriously. All our vacuum excavators are FORS Gold-specified, and our drivers work to EU drivers' hours regulations to avoid burn out. New trainees are not allowed to work unsupervised until they have completed our three month in-house induction programme leading to CPCS accreditation and new HGV drivers undertake a driving assessment by our own assessor. Two members of the LMD team are Mental Health First Aid qualified.

By its very nature, however, construction is primarily a 'team game' with multiple interfaces and complexity. That is why it is critical that there is a 'whole industry' approach to construction safety and wellbeing. That is where the Lighthouse Club comes in, particularly with its focus on mental health awareness and training. I am proud to have the opportunity to support the work being undertaken by the Lighthouse Club including their 'Help Inside the Hard Hat' campaign. It's an incredibly worthwhile cause and it's also at the heart of what we aspire to as an organisation.'



Gas connections and mains replacement productivity nearly doubled by new approach to planning and excavations

LMD has been working in partnership with specialist contractor, Utility Solutions Provider (USP), Trinity, Cadent and Cadent's local delivery partners to ensure gas mains replacement targets are successfully met.

The initial impetus for the initiative came from Jonathan Smith, Head of Programme and Engineering at Trinity. Jonathan had worked with vacuum excavators on earlier projects and understood their potential impact on productivity.

Although the approach adopted is radical and innovative, the question it addresses is very simple: Can we create a work methodology that ensures skilled gas teams are able to focus their time on gas mains replacement work rather than ancillary activities such as digging out their own pushes? The vision is to mobilise a two-man dig team (USP) and a two-man vacuum excavator team (LMD) to site ahead of the gas connections and mains replacement teams. The vacuum excavator is used to excavate trial holes and locate the main. The USP team drills the main and inserts a camera. The camera is used to pinpoint and mark up the location of services, back feeds and valves within an accuracy of 50mm. This eliminates the cost of missed digs and associated reinstatement.

Once the services are located and marked up, the USP team uses floor saws to cut through the road or pavement surface. The size of the excavation is tightly controlled (to minimise reinstatement costs). Having broken up the top layer, USP hands over to the LMD team which completes the excavation to the level of the service connection using the vacuum excavator. The use of the vacuum excavator ensures that the volume of excavated material is minimised, and all existing services are exposed without the risk of, for example, a cable strike or mains burst. Site safety and compliance is paramount. Whilst LMD exposes the service connections, the USP team switches to locating mains pits to facilitate the replacement of iron gas mains with polyethylene pipes. Replacement is typically undertaken using dead or live insertion techniques.

Carl Edwards leads USP's operations:

'The new approach has proved to be very successful. Overall gas connections and mains replacement activity has increased by around 50% on normal levels. Once the processes and procedures had been trialled and formalised, we found that the USP dig team and LMD vac ex team were moving so fast that the gas replacement team was sometimes struggling to keep up.'

'Co-ordination was facilitated by the creation of a dedicated WhatsApp group. The initial plan was to have two vacuum excavator and two dig teams but this soon increased to four and, at its peak, reached nine rigs.'

'The success of the approach has already led to interest from other gas networks.'

Mick Dysart is LMD's Managing Director:

'The close working partnership with USP was central to our success; it's really all about communication and planning. What looks simple on paper is often more complex when the reality of life on site is added to the mix.'

'The use of vacuum excavators brings efficiency, productivity and safety. We're looking forward to working on further phases of work in the months to come.'

UK | Utility Solution
Provider Ltd



Meet (some of) the Team



Mick – Managing Director

I started LMD way back in the mists of time and my role in the past could have been described as a 'lot of everything' although, as we have grown and brought in experienced specialists, I now focus on running the business.

I have a soft spot for buses, having worked as a fitter on them for many years. My other passions are Chesterfield FC, King Charles Cavalier Spaniels and Kylie Minogue!

Dan – Training Supervisor

I've worked for LMD for three years. I am involved with inductions, training new starters and familiarisation training as new vacuum excavators enter the LMD fleet.

When I was younger I was a swimmer, but my daughter is in to horse riding and my son is a motocross enthusiast.



Sam – Operations Supervisor

I work alongside Sean on the operations side of the business. Starting out, my first job was as a window fabricator.

Outside work I follow Manchester United. I have a daughter and a Cavachon, which is a cross between a Cavalier King Charles Spaniel and a Bichon Frise.



Linda – Receptionist and Admin

I have recently joined LMD and work in reception and admin. I liaise with customers, book in jobs, greet visitors and answer the phone.

I enjoy motor homing. Linda's 'celebrity crush' is David Beckham. (When asked if she had any pets, Linda said: 'Just my husband!')



Beth – HR Advisor

I joined LMD a year ago after completing my Masters degree in Business Management at the University of Lincoln. LMD is growing rapidly and we need to recruit, train and retain quality team members across all areas of our operations.

I have a Cocker Spaniel, enjoy dancing and my celebrity crush is Richard Madden!





John – Yard Supervisor

I started out as a mechanical engineer and was Mick's first recruit, when he set up LMD back in 2015. I joined tRIIO on gas distribution contracts and then rejoined LMD two years ago. I am in at 6am every morning to check the vacuum excavators are ready to roll and ensure the effective operation of all yard activities.

I'm a motor racing enthusiast.

John's celebrity crush is Amanda Holden.



Clive – Training Supervisor

I was one of Mick's first LMD recruits and have worked with him at different companies for over fifteen years. I make site visits and one of my key tasks is to undertake site audits to maintain service quality.

I love gardening and have a pug as a pet.



Ian – Health and Safety Manager

I look after all aspects of health and safety which is LMD's top priority and covered extensively in this review. I started out my working life as a brewery yardman.

Outside work I support the England rugby union team and relax by gardening.

Ian's celebrity crush is Isabella Rossellini because, 'she is the spitting image of my wife'.



Michelle – Accounts Manager

I have just joined LMD as Accounts Manager. I am responsible for invoicing, liaising with customers and credit control.

I have four cats and five chickens and love playing the piano and the drums (although not at the same time!). My celebrity crush is George Michael.



Jason – Workshop Manager

I have worked at LMD for three years but have known Mick since we studied motor vehicle engineering together at Chesterfield College. My task is to ensure the workshop team has all the vacuum excavators in prime condition and ready for work.

My first job was as a farm hand.

In my spare time I walk my Springer Spaniel, support Chesterfield and my celebrity crush is Amanda Holden.



Sean – Plant and Transport Manager

I am responsible for the day-to-day running of the business. I create time and space for Mick to focus on strategy and financial performance.

Like many kids, my first job was delivering papers. I don't have time for hobbies as my kids keep me busy. My celebrity crush is Holly Willoughby.



Safety: the absolute top priority

LMD puts safety as its top priority above all others. Everyone deserves to return home safe and in good health at the end of their working day.

Making safety the top priority brings with it upfront costs and a degree of operational constraint. It is LMD's belief, however, that these costs and constraints are outweighed by the commitment of the team, efficiencies over time and, of course, managerial peace of mind.

Ian Buchanan is LMD Vacuum Excavation's dedicated Health and Safety Manager. In this article, Ian outlines the current health and safety measures in place at LMD and further plans for 2022. Safety is a journey not a destination.



Firstly, it is important to remember the areas in which LMD Vacuum Excavation's teams work. Locations can include nuclear power stations, electricity substations, railways, silos, sewage treatment works, dockyards, highways, housing developments and more. The work may be at height, such as removing aggregate from a flat roof, or at night, such as upgrading the UK's smart motorways. In other words, there is a prima facie requirement for robust and comprehensive safety systems to be in place.

Training

For me, safety starts with training; both in the classroom and on the tools. At LMD we run a three-month induction programme. The programme ends with an external assessment to achieve CPCS accreditation. Nobody is allowed to work on their own until they have CPCS accreditation.

We also run additional training programmes, including external training, for those working on, for example, the railways or petrol forecourts. This training leads to the SPA (Safety Pass Alliance) Passport for working in areas with a Zone 0 vapours classification. This means a hazardous area in which a flammable atmosphere is continually present.

Regular training to upskill existing LMD team members is reinforced with monthly toolbox talks. A lot of the focus is on reporting and investigating near misses and changing work procedures in line with the findings.

Health and Wellbeing

Both Sam Dockwray (Operations Supervisor) and myself are Mental Health First Aid trained. I found the training fascinating and illuminating. It certainly doesn't qualify you to become a counsellor or a psychologist, but it does help you with early identification of potential mental wellbeing issues such as anxiety. It provides you with the skills to empathise, allowing people to sit down and unload, and to give colleagues the help and guidance they need to find further assistance.

The fundamental benefit of Mental Health First Aid training is that it switches support from a passive 'after the event' to a proactive 'nip it in the bud' approach. This is so much more beneficial for the individual concerned and, in turn, for the company.

I am well aware, however, that this is not a silver bullet in its own right. It is just one part of an ongoing awareness and acceptance of mental health issues across society in general.

In a more direct physical health intervention, all LMD operatives working on site undergo annual safety-critical medicals delivered through a third-party provider.

PPE

LMD operates a PPE laundry system for team members. Each operative is allocated three sets of LMD-branded flame-retardant, anti-static work overalls: one being used, one in laundry and one spare.

Each week, dirty overalls are collected and cleaned by Sheffield-based Abbey Glen.

Clean PPE reinforces pride in a job well done. LMD also wants to be seen as a cut above the competition and clean PPE is just one action to help us achieve this. I have found that clients really appreciate the approach as well; it reflects well on them.



Systems and Procedures: ISO 45001

One of my key health and safety objectives for 2022 is to achieve ISO 45001 accreditation which has recently replaced BS OHSAS 1800; LMD already holds ISO 9001:2015 accreditation.

LMD is already audited for several third-party safe working accreditations including Constructionline Gold, SMAS Worksafe and Achilles UVDB for which we received 100% in our last audit in November 2021.

ISO 45001 is important in that it shows our commitment to continuous improvement in health and safety matters, and in its international profile. As LMD extends its activities in international markets it is important that our health and safety systems and procedures are recognised as 'best in class'.





FORS accreditation

LMD already holds FORS (Fleet Operator Recognition Scheme) Bronze accreditation. In 2022, our aim is to achieve FORS Silver accreditation and maybe even FORS Gold. All new additions to the LMD fleet are already specified to the FORS Gold standard. This standard covers all aspects of vehicle, operator and third-party safety including hi-vis steps, blind spot vision aids, audible warning systems, in-cab display systems, high-spec mirrors and cameras and data recording. LMD already has the largest UK fleet of vacuum excavators equipped with Direct Vision cabs (see below).

FORS Silver accreditation stipulates mandatory training for drivers which includes spending time on a bike to appreciate how it feels to navigate busy roads as a cyclist.

All drivers joining LMD already undergo a challenging third-party driving assessment.



Direct Vision

Vision Zero is the Mayor of London's groundbreaking initiative to eliminate all deaths and serious injuries on London's transport network by 2041.

One of the core components of Vision Zero is the Transport for London (TfL) Direct Vision Standard (DVS) for heavy goods vehicles (HGV) exceeding 12 tonne GWW. The Direct Vision Standard objectively measures how much an HGV driver can see directly through their cab windows.

The Direct Vision Standard has six ratings from zero stars through to five stars. To start with, all HGVs operating within Greater London will need a minimum one star rating. In 2024, this will increase to a minimum of three stars.

Vehicle servicing and maintenance

All LMD vacuum excavators undergo regular six-weekly PMI (Preventative Maintenance Inspection) checks. All remedial works are logged on LMD's workshop management programme. The PMI are complemented by daily driver vehicle safety checks.

In my time with LMD, it has made a significant investment in its workshop team, the workshop itself, and the diagnostic equipment available to its fitters. This all feeds in to ensuring the safe operation of the LMD fleet.

When they return to base, all LMD vacuum excavators are washed and inspected. Clean vehicles may not, in themselves, be any safer than dirty ones, but the sense of pride and ownership felt by the driver provides a psychological boost which I am sure improves their approach to safety.



EU driving hours

To protect the wellbeing of its team members on site, LMD is committed to continuing to work to EU drivers' hours rules which are more restrictive than the domestic GB equivalent.

I believe operating EU drivers' hours gives our operators a better and safer quality of life, and is a bonus for clients as it provides for safer operations on their sites.

'The factors I have noted in this article represent just some of the steps we take at LMD to ensure the health, safety and wellbeing of our teams. I am continuously looking for ways in which we can further improve and look forward to reporting on these in next year's review.'

Ian Buchanan, LMD Health & Safety Manager



**TRANSPORT
FOR LONDON**
EVERY JOURNEY MATTERS

LMD has established the UK's largest fleet of vacuum excavators that incorporate Mercedes Benz's Eonic DirectVision cab as well as additional safety features. LMD's Eonic fleet already has the maximum five-star rating.

The Eonic cab provides a low seating position for the driver. Combined with the full-height glazed door on the passenger side, this provides the driver with direct eye-contact with cyclists, pedestrians and motorists. The full-height glazed door – from wheel to cab top – concertinas to ensure safe opening and the avoidance of potential accidents. Safety is also enhanced by a mirror system that extends the driver's field of vision to include the vacuum excavator's operating area and blind spots.



Rediscovering the lost City of Atlantis

Atlantis started life as a fictional island in works by the Greek philosopher, Plato. It also lends its name to the Atlantis Adventure Golf attraction in Skegness which opened its fairways to visitors in 2019.

Skegness has long been a family holiday resort and its claims to fame include being the location for the first Butlins in 1936 and the first crazy golf course in England in 1926. Skegness is blessed with a fabulous long, flat and sandy beach and Atlantis Adventure Golf sits just the other side of the beachfront promenade. Due to its location, Atlantis Adventure Golf is open to sand being blown inshore by the prevailing winds. Such was the severity of winds in 2020 and 2021 that Atlantis was literally 'lost' beneath a thick blanket of sand which was up to 6' deep in parts.

LMD was called to site and tasked with removing the excess sand so Atlantis could open its doors to visitors for the 2021 summer season. Atlantis wasn't designed with access for a vacuum excavator in mind so the unit had to sit alongside the attraction with hose extensions enabling Liam, the operator, to navigate dolphins, clam shells, shipwrecks and a submarine. In total, over three days, almost 600 tonnes of sand was removed before Atlantis revealed itself again.



You can experience the Atlantis Adventure Golf course online at <https://www.youtube.com/watch?v=wFTVsMfC4Ec>



A day in the life of a vac ex driver



The first thing an LMD vacuum excavator Driver does in the morning is inserts their Tachograph Card into the Tachograph unit.

A Tachograph stores all the relevant driver data required by law.



After inserting the Tacho Card, the vac ex Driver does a 'walk round'.

This requires the Driver to walk round the vac ex to check it and make sure external features – such as lights, cameras and sensors – are working.



Drive to the site!



After parking up, the Driver signs into the site and completes any site inductions.



Once the inductions are completed, the Driver undertakes additional safety checks to ensure the vac ex is running smoothly and safely.



The Driver talks to the Site Manager about the work to be completed. This information is critical to the Driver being able to complete the job to the customer's satisfaction.



The Driver sets to work and undertakes the required excavation.



On this project, the Driver has excavated a trench for the customer so they can extend the pavement and add a crossing.



After completing the trench, the Driver speaks to the Site Manager and they agree the works for the rest of the day.



When the skip is full, or once the job has been completed, the excavated material is discharged at the designated location on site.



The Driver ensures all site paperwork is completed and signed by the Site Manager.



The Driver returns to the LMD yard. They make sure the fuel tank is topped up and the vacuum excavator is cleaned inside and out, ready for the next day.

Charity

LMD supports many national and local charities. There is a separate article in this newsletter regarding the work we do for the Construction Industry's lighthouse charity.

Throughout Covid, LMD released one of its Sprinter vans and a driver to assist with food and essential equipment deliveries. For example, LMD delivered food to Chesterfield's most vulnerable residents. The food was prepared in Gussie's Kitchen, a facility run by Chesterfield Borough Council.

We received a lovely 'thank you' note from Chesterfield Foodbank for the 232 kilos donated by the LMD team for their Christmas appeal.

At Easter, the LMD team collected almost 100 Easter eggs which were donated to the Foodbank. We look forward to working with them again in the future.

LMD Wordsearch

How much do you know about vacuum excavators and LMD? Hidden within the Wordsearch are over twenty terms relating to vacuum excavation, manufacturers and more. How many can you find?

E	K	U	C	X	P	S	Q	M	H	L	E	X	T	P
S	P	T	D	P	C	A	V	I	M	R	C	B	S	E
Y	X	I	M	T	S	W	G	D	L	I	N	R	N	V
A	W	L	P	X	C	H	H	A	C	G	A	O	A	I
W	D	I	Q	N	T	L	C	F	E	H	L	T	F	R
H	J	T	S	I	O	L	A	P	Q	T	R	A	E	D
G	F	I	P	P	V	I	E	Y	D	T	I	R	L	L
I	Z	E	S	J	G	A	S	F	S	I	A	E	P	E
H	C	S	G	E	B	E	C	N	T	P	W	P	I	E
M	R	A	R	E	W	O	P	U	E	T	A	O	R	H
Q	E	T	O	M	E	R	V	G	U	T	I	D	T	W
N	O	I	T	A	V	A	C	X	E	M	X	P	E	X
N	O	I	T	C	U	R	T	S	N	O	C	E	T	I
M	E	R	C	E	D	E	S	E	C	O	N	I	C	S
C	I	S	U	C	T	I	O	N	D	R	I	V	E	R

Airlance	IVAC	Right Tip
Clayspade	Left tip	RSP
Construction	LMD	Six Wheel Drive
Driver	Mercedes Econic	Suction
Excavation	MTS	Triple Fan
Extension Pipe	Operator	Utilities
High Tip	Power Arm	Vacuum
Highways	Remote	

How did you get on?
You can check your answers against the completed grid by going to:

www.lmdvacuumexcavation.co.uk/wordsearch



Dear Team,

We wanted to say a massive thank you to everyone at L.M.D Vacuum Excavation for your very kind donations over the festive period.

Your generous donations have enabled us to keep supporting local people in crisis. In 2021 we supplied food to 6636 people, with 1660 of those sadly being children. Demand for the Foodbank continues to grow year on year as more people are struggling to afford the essentials, meaning that your donations are helping now more than ever, and we really appreciate your support!

Your donations weighed an amazing 232 kilos which provided 242 meals!

If you are able to continue to support us in 2022 that would be greatly appreciated.

Again, a massive thank you for your donation and continued support, it makes a massive difference to people's lives!!

Kind Regards

Patrick Evans
Project Coordinator



LMD Vacuum Excavation Ltd
Impact House
Ireland Close
Staveley
Derbyshire S43 3PE

www.lmdvacuumexcavation.co.uk