

LDS/24/48

Corporate Infrastructure and Regulatory Services Committee

28 November 2024

Materials Laboratory Visit Report – Corporate Infrastructure and Regulatory Services Scrutiny Committee

Report of the Director of Legal and Democratic Services

Please note that the following recommendations are subject to consideration and determination by the Committee before taking effect.

1) Recommendation

That the Committee be asked to share the learning from the visit to the Materials Laboratory ensuring transparency in Scrutiny activities and inform the future Scrutiny work programme.

2) Background

On 12th September Councillor Frank Letch (Chair, Corporate Infrastructure and Regulatory Services Committee), and Councillor Margaret Squires (Committee Member, Corporate Infrastructure and Regulatory Services Committee), undertook a visit to the Materials Laboratory, Rockbeare, along with Louise Rayment, Head of Scrutiny. The visit intended to develop and improve Members understanding of the work of Devon's Materials Laboratory.

The Materials Laboratory plays a crucial role in the construction and maintenance of the highway assets. By conducting rigorous testing and site investigations, the laboratory ensures that materials used meet the stringent specifications required for highway construction. This not only guarantees the safety and durability of the highways but also significantly reduces the potential for future maintenance liabilities. Such assessments are vital for the longevity of the highway assets and for the protection of the authority's investment in its highway asset.

3) Materials Laboratory Site Visit

Members were led on a site visit by Peter Dyer – Materials Laboratory Manager, supported by staff at the Materials Laboratory. The visit to the Materials Laboratory included the following:

- The Council has had a Materials Laboratory since 1952. The lab has been at the current site since 2014.
- At the time of the visit, the team consisted of 7 people. The roles require technical expertise. Staff at the Materials Laboratory maintained operations throughout the

Covid Pandemic, operating a rota system for the office, and with much work taking place outdoors.

- The Materials Laboratory is, on an annual basis, audited for most of its testing and the supporting quality system by the United Kingdom Accreditation Service (UKAS). As an independent body, UKAS ensures and instils confidence that accredited organisations, like Devon's Materials Laboratory, are competent, reliable, and reputable.
- While the laboratory provides services to the Council, its services are also available to other local authorities and private customers at a fee.
- Devon has a network of evolved roads; they have developed over time with the standard of road construction improving significantly over years.
- Members were shown a variety of asphalt core samples taken from the carriageway construction and the equipment used to retrieve these samples. Typically, three layers are expected to be seen in carriageway cores- the surface course, binder course and the base course. Coring has many purposes, including:
 - to see understand the depth of the bound layers, and its material composition,
 - to identify the presence of hazardous materials in the road compositions from former construction methods e.g. tar,
 - the quality of the construction,
 - to advise contractors on the design of a road and the depth to work to.
 - Monitoring the quality of work undertaken by utilities, developers and contractors working on behalf of the authority.
- Tar as a hazardous waste was discussed. The recycling of the tar contaminated material is always considered before costly disposal. The asphalt materials used in road construction are now produced using bitumen but is often mistakenly referred to as tarmac.
- Members were provided with an overview of the ground investigation work the lab undertakes for housing developers. These investigations provide data on the strength of soil to enable the foundation stone thickness to be determined for new road construction, the weaker the soil the thicker the stone foundation required. The lab carries out testing of the foundation to determine whether it has been constructed to provide a suitable bearing capacity for the road construction.
- Having the right foundations ensure the long-term structural integrity of the road and that the authority does not adopt maintenance liabilities.
- Climate change is a challenge for the existing and new road network, the lab provides testing and advice on suitability of sustainable drainage systems.
- Surface Friction Testing: Members were shown equipment which tests the level of slip/skid resistance of surface materials of roads, footways and flooring, including the performance monitoring of new materials.
- Other areas of work:

- Measuring the quality of salt and brine for winter gritting
- Testing concrete samples for new and existing structures.
- The Materials Laboratory team are also able to provide technical advice
- Measure the retro-reflectivity of white lines.
- Slope stability monitoring.
- Borehole investigations.

4) Options / Alternatives

The report is a summary of Scrutiny Members visits to the Materials Laboratory. Scrutiny does not make decisions and this report does not propose any alternatives

5) Consultations / Representations / Technical Data

There are no specific considerations in regard to consultations, representations and technical data in this report.

6) Strategic Plan

The alignment of all Overview and Scrutiny activity with the Strategic Plan is detailed on the Scrutiny work programme. The benefit of developing member knowledge and the 'critical friend' challenge of Scrutiny continues to the Council's commitment to be a trusted, inclusive and innovative Council. It ensures good decision making and that the Council listens and learns.

7) Financial Considerations

There are no specific financial considerations in this report.

8) Legal Considerations

There are no specific legal considerations in this report.

9) Environmental Impact Considerations (Including Climate Change, Sustainability and Socio-economic)

There are no specific environmental impact considerations in this report.

10) Equality Considerations

There are no specific equality considerations in this report.

11) Risk Management Considerations

The activity of Scrutiny Members visits contributes to the mitigations for:

Ineffective Member Scrutiny defined as: 'Due to ineffective scrutiny, the level and quality of service management may drop, leading to financial mismanagement or harm to staff and/or citizens and reputational damage e.g. Grenfell.

Members Effectiveness defined as: 'Inadequate Member effectiveness due to a lack of training, support and knowledge leads to a lack of challenge to corporate officers and/or poor decision making, resulting in a negative effect on the County's citizens (poor value for money, poor service delivery, harm etc).

12) Summary / Conclusions / Reasons for Recommendations

Members wished to express their thanks to the staff at the Materials Laboratory for their continued hard work and time in showing Members the work of the Materials Laboratory. Members reflected on the importance of understanding the work of the Materials Laboratory and that the Committee should continue to consider further visits, in line with the work programme, to broaden Members understanding on complex topics.

Name

Director of Legal and Democratic Services: Maria Price

Electoral Divisions: All.

Cabinet Member for Organisational Development Workforce & Digital Transformation,
Councillor Andrew Saywell

Local Government Act 1972: List of background papers

None.

Contact for enquiries:

Name: Louise Rayment

Telephone: 01392 383000

Address: G31, County Hall, Exeter.