

# SIYTE for Geotechnical Monitoring

SIYTE unifies data from any camera, sensor or existing monitoring system, including Senceive, LB Foster and other third-party feeds, into a real-time intelligence layer for earthworks and geotechnical assets, delivered in a flexible user-friendly web and mobile interface.



## FROM INTELLIGENCE TO ACTION

### 01 DATA UNIFICATION

Integrate sensing systems from any vendor, IoT sensors, CCTV analytics & weather data into one dashboard & system

SENSING • CCTV • WEATHER

### 02 WHOLE SYSTEM VIEW

Remotely accessible web and mobile dashboard to access and analyse all systems data and alerts in one place

WHOLE SYSTEM USER INTERFACE (UI)

### 03 WHOLE SYSTEM AI ANALYSIS

Utilise SIYTE AI via web or mobile to understand trends, predict events and enable risk-based maintenance

WHOLE SYSTEM AI ANALYSIS

## 8 Weeks ONBOARDING EXAMPLE

SIYTE can be deployed very quickly with full monitoring achievable within weeks

## 100m+ UNLIMITED SCALABILITY

SIYTE has cloud administration and scalability, analysing 100 million data points every day.

# SIYTE for Geotechnical Monitoring

SIYTE helps operators move from reactive to proactive earthworks management whilst maintaining full flexibility of vendors. SIYTE will integrate with any vendor ensuring existing systems can continue to be used when new vendors are onboarded.

## 01 IoT Sensing

SIYTE can integrate into existing geotechnical sensing systems such as Senceive, Findlay Irvine and others

**SENSING SYSTEM INTEGRATION**

## 02 CCTV Analytics

Existing and new CCTV cameras can be integrated for both context and analytics, e.g. to detect landslips, ground profile changes and surface water.

**CAMERA • ANALYTICS**

## 03 Weather Stations and Public Data

SIYTE can integrate with local weather stations, MetOffice data and public data from third party sensors e.g. Environment Agency

**WEATHER STATIONS • PUBLIC DATA**

## 04 IoT Sensing & LoRaWAN

SIYTE engineers advise on IoT sensing and LoRaWAN services for deployment of IoT sensors for a range of trackside applications

**IOT SENSING • LORAWAN**

## Re-use, Control and assurance



### END TO END ENGINEERING ASSURANCE

SIYTE Engineers advise on everything from cameras to integrations, ensuring smooth delivery.



### INVESTMENT PROTECTION

SIYTE integrates with any existing CCTV, sensor or other system.



### SECURE

All data is encrypted in transit and at rest. Role-based permissions for all aspects of system access.



### GDPR COMPLIANT

Personal information (faces) removed from all images. Data retention enforcement.



### CERTIFIED

ISO 9001 / 14001  
27001 / 42001

## Whole Systems Interface

**SIYTE** Solutions Catalogue  
Senceive Earthworks alerting

**Dashboard Overview**  
The below map indicates the eleven locations where Senceive have deployed tilt and vibration sensors along the Western route. The notification panel indicates when an Earthworks Alert has been received from Senceive and an alert has been generated by this SIYTE service to the appropriate Operator.

**Notifications**  
Alderton Tunnel Senceive Earthworks Alert has been L...  
Alderton Tunnel Senceive Earthworks Alert has been L...  
Alderton Tunnel Senceive Earthworks Alert has been L...  
Alderton Tunnel Senceive Earthworks Alert has been L...  
Alderton Tunnel Senceive Earthworks Alert has been L...

SIYTE presents a 'whole system' dashboard for real-time and historical data & alert analysis.

SIYTE AI provides a conversational interface to identify anomalies and predict failures using natural language

START WITH A 20 MINUTE DISCOVERY SESSION

## See SIYTE in action

See how SIYTE utilises CCTV Analytics and IoT Sensing to deliver insights and understanding of your physical world.



**BOOK A DISCOVERY SESSION**



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