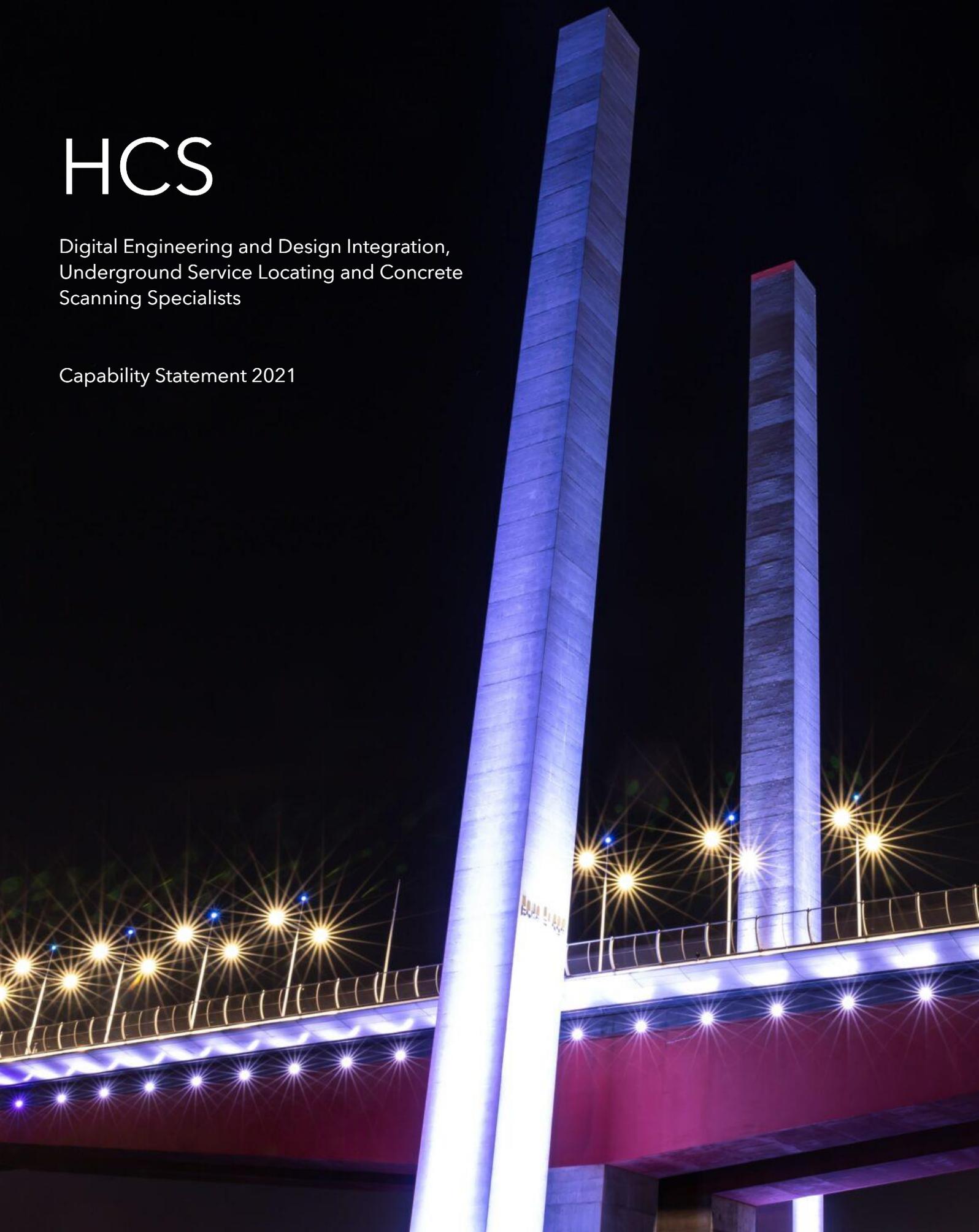


HCS

Digital Engineering and Design Integration,
Underground Service Locating and Concrete
Scanning Specialists

Capability Statement 2021





CORE EXPERTISE

INFRASTRUCTURE

- | Digital Engineering
- | Infrastructure Design Integration
- | Digital Twin Production
- | Utility Investigation
- | Survey Management

ESSENTIAL SERVICES

- | Underground Service Locating
- | Digitisation and Mapping
- | Bore Design

STRUCTURAL INVESTIGATION

- | Internal Structural Arrangements
- | Verification for Load Design
- | Condition Reporting



HCS

Capability Statement 2021

| INFRASTRUCTURE

DIGITAL ENGINEERING, DATA AND ASSET MANAGEMENT

As a business we provide solutions for major infrastructure digital implementations, management of metadata and review of design integrations. Our services extend into initial investigations of essential services infrastructure and digital twin development.

| Western Roads Upgrade - \$1.86 Bil

Discipline: Roads

Includes 8 major roads to be upgraded in the western suburbs of Melbourne. Also involves repair and resurfacing of 37 roads and strengthening of seven structures, mostly bridges.

Our Role: Digital Engineering Management, Survey Management, Expert advice for Adjudications

| Canberra Metro Light Rail - \$950 Mil

Discipline: Rail

The 12-kilometre line runs from Hibberson Street in Gungahlin, to Alinga and Rudd Streets in the City Centre. It is a double track for its full length. There will be 13 stops, with the main bus interchanges located at Gungahlin Place, Dickson Interchange and Alinga Street.

Our Role: Data review of existing and implemented services, precision Rail Setout and reporting

| Pacific Highway W2HC - \$250 Mil

Discipline: Engineering

The project upgraded Section 2 of HW10 Pacific Highway, situated between two other upgraded sections of the Pacific Highway. The project involved the construction of a length of approximately 14.7 kilometres of roadway to median separated dual carriageway standard.

Our Role: Engineering Survey for Earthworks, Bridge and Pavement, UAV Aerial Imaging

| Tullamarine Freeway - \$250 Mil

Discipline: Engineering

The upgrade of the 8km section from Melbourne Airport to Bulla Road included new traffic lanes, and improvements to key interchanges including Mickleham Road, Gladstone Park and English Street, Essendon Fields.

Our Role: Engineering Survey for Earthworks, Bridges and Pavements

| Chandler Highway - \$70 Mil

Discipline: Engineering

This design and construct contract involved the upgrade of the existing Chandler Highway between Alphington and Kew, and a new bridge over the Yarra River. Key features of the project included the upgrade of the intersection at Heidelberg Road, six new lanes for the highway, a new bridge to the west of the existing Chandler Highway bridge.

Our Role: Survey Management, Engineering Survey for Earthworks, Bridge and Pavements

| ESSENTIAL SERVICES

UNDERGROUND SERVICE LOCATING AND MAPPING

Locating Essential services that are vital to the economy and represent a significant risk to infrastructure projects forms a major part of our business. We serve our clients from pre-works investigation, through to digital transformation, metadata management and digital twin creation.

| Western Roads Upgrade - \$1.86 Bil

Discipline: Roads

Includes 8 major roads to be upgraded in the western suburbs of Melbourne. Also involves repair and resurfacing of 37 roads and strengthening of seven structures, mostly bridges.

Our Role: Underground Service Locating and Mapping, Structure investigation and quality assurance

Pound Rd West - \$110Mil

Discipline: Roads

As part of the upgrade, a bridge will be built over the Cranbourne rail line to connect Pound Road West and Remington Drive while the Frankston-Dandenong Road Bridge over the Cranbourne and Pakenham rail lines will be strengthened and refurbished. Shared walking and cycling paths and safety barriers along the road are other key features of the project.

Our Role: Underground Service Locating and Mapping

Port of Melbourne Upgrade - \$125 Mil

Discipline: Rail

The Port of Melbourne has announced a rail solution to meet the needs of a growing port, and to reduce truck movements in Melbourne's inner western suburbs. The Port Rail Transformation Project (PRTP) will see more containers moved by rail more efficiently, by-passing roads in inner Melbourne. The project will increase rail terminal capacity and improve rail terminal operations. Our Role: Mapping of existing and installed services

Our Role: Underground Service Locating and Mapping

Fitzsimons Lane - \$130 Mil

Discipline: Engineering

Upgrading these intersections will improve traffic flow and access to jobs, schools, shops and parks for the 60,000 people who drive through the area every day. It'll also enhance walking and cycling connections for the local community. The project includes new traffic lights at Main Road and Leane Drive intersection, traffic lights to replace roundabouts at the Fitzsimons Lane and Main Road.

Role: Underground Service Locating

STRUCTURAL INVESTIGATION

Arrangement, Load and Condition Reporting

The condition and location of structural elements and additional services within concrete structures represent significant risks to projects. Our state-of-the-art technologies and professional technicians provide your project with a greater understanding of risks to be avoided.

Western Roads Upgrade - \$1.86 Bil

Discipline: Roads

Includes 8 major roads to be upgraded in the western suburbs of Melbourne. Also involves repair and resurfacing of 37 roads and strengthening of seven structures, mostly bridges.

Our Role: Structural investigation of concrete to permit complying augmentation of additional structural elements. Quality assurance checks on Structural elements for compliance with project audits.

Melbourne Airport

Discipline: Structures

The International terminal upgrade involved the augmentation and addition of internal structures for increased security and pedestrian traffic flow. Structures to be added included departure gates with the installation of automated turnstiles.

Our Role: Determination of reinforcement and electrical conduits within the existing concrete to ensure safe insertion of additional structural elements.

Brisbane Airport

Discipline: Structures

New Buildings were required to be added adjacent to the Flight control Tower as part of the Brisbane Airport upgrade.

Our Role: Determination of existing structural reinforcement and possible in-situ services to allow the penetration of the concrete for a new bolted assembly.