HCS

Digital Engineering, Utility and Concrete Structure Investigation Specialists

CAPABILITY STATEMENT 2019

We are dedicated to the continuous improvement of construction through the provision of exceptional services to our clients.

Managing Director| Darron Hughes

CORE SERVICES

SEEING THE BIG PICTURE

SURVEY
| Digital Engineering
Engineering Surveying

UTILITIES
|Underground Service Detection and Location
Ground Penetrating Radar

STRUCTURES
|Concrete Scanning

TENDERING AND ESTIMATING
|Volume Calculations, Construction Staging and alternative designs

UAV
| Volumes and georeferenced Orthorectified images

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We have extensive experience on building, road and rail construction projects

Canberra Metro Light Rail - $950 Mil

Discipline: Rail

HCS was engaged by the CPB / John Holland Canberra Metro Alliance to provide Engineering Survey services for the 12-kilometre long project running from Hibberson Street in Gungahlin, to Alinga and Rudd Streets in the City Centre. Our role on the project encompassed precision Setout of the rail to tolerances of +/- 3mm, civil Setout for structures and earthworks, as well as mapping of underground services.

Our Role: Precision rail Setout to exacting tolerances, Setout of civil works and underground service mapping

Tullamarine Freeway - $230 Mil

Discipline: Engineering

HCS was engaged by Lendlease Engineering to provide Design review and Engineering Survey Service to the project. Preliminary involvement consisted of calculation and design review of all bridge structures on the project – with critical detail issues being found and over 300 RFIs issued for constructability. As part of the English Street bridge construction, HCS was also required to calculate the setting of joined girders at an off-site location to be transported and placed relative to an irregular bridge abutment design.

Our Role: Design Review and Survey Setout

Chandler Highway - $110 Mil

Discipline: Engineering

HCS was engaged by Seymour Whyte to provide Digital Engineering services to the project. As part of early works, modification of the proposed bridge design was made by us to expedite the construction program by reviewing conflicts between services and structures. This produced a significant acceleration in the program, whilst having a minimum impact on the design of the project. Our team was also required to modify design components of the road design to ensure adherence to constructability guidelines. Throughout the projects HCS also provided Survey Setout of all structural and civil works.

Our Role: Design assessment and redesign of structures and roads,

Cato Street Car Park Redevelopment - $100 Mil

Discipline: Building

Construction of two levels of subterranean car parks providing over 500 new parking spaces. The area will be transformed into a new public space and park with 9 distinct zones designed to support day to day activities as well as curated events.

Our Role: Survey Setout

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: Sapphire to Woolgoolga upgrade to the south and Halfway Creek upgrade to the north. The project involved the construction of a length of approximately 14.7 kilometres of roadway to median separated dual carriageway standard.

Our Role: Survey Setout, UAV Aerial Imaging and Volumetric calculations.

UTILITIES | UNDERGROUND DETECTION AND LOCATION

We understand the critical importance of accurate and current service information

OSARS – Western Melbourne Package Project - $1.8 Bil

Discipline: Engineering

HSC was engaged by WBHO to locate underground services over the 11km design area of the Palmers Road Project. This involved all aspects of investigation from preliminary DBYD investigation, through to physical detection of all services in the construction corridor and mapping of each service and its attributes for export into the design of the proposed road.

Our Role: Locating and Mapping of existing services

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Our Role: Mapping of existing and installed services

Tullamarine Freeway - $230 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: Mapping of existing and installed services

Chandler Highway - $110 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. The upgrade improved traffic flow and created a more reliable and safer journey for the community. 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, and improvements to cycle and pedestrian paths.

Our Role: Mapping of existing and installed services

We employ the most experienced concrete scanning technicians in Australia

Melbourne Airport

Request for concrete scanning of departure gates for installation of automated turnstiles. It was critical to the project that reinforcement and electrical conduits within the existing concrete were not disturbed during construction, as the consequences to airport operations and structural integrity of the works would be significant.

Brisbane Airport

Carried out adjacent to the main control tower. Scans were conducted to avoid existing structural reinforcement and possible in-situ services to allow the penetration of the concrete for a new bolted assembly. The area scanned comprised 50 square metres with full ground marking of located subterranean bar arrangements.