

Warren  
Smith &  
Partners

CONSULTING ENGINEERS

# CIVIL ENGINEERING CAPABILITY STATEMENT

HYDRAULIC

FIRE

CIVIL

SYDNEY WATER ACCREDITED  
WATER SERVICING  
CO-ORDINATOR AND DESIGNER

# COMPANY STRUCTURE AND EXPERTISE



Warren Smith and Partners Pty Limited, Consulting Civil Engineers, Hydraulic and Fire Services Consultants, was incorporated and registered on the 10th August, 1981 and has been involved with over 4,600 projects of all types and scale to date in NSW and throughout Australia.

## Our Firm provides specialist engineering disciplines and delivers the following services:-

- Due diligence, compliance, condition and investigation reporting
  - Budget preparation
  - Technical specification
  - Design and contract documentation
  - Calling of tenders, assessment and recommendation
- Contract administration
  - Project management and site supervision
  - Inspection, testing, commissioning and certification
  - Valuations
  - Insurance and litigation reports and expert witness representation

## Our Key Personnel and Directors have comprehensive industry experience and knowledge.

Our Managers, without exception are all long term employees of the Firm. Our key personnel are:

		Years in Industry	Years with WS+P
Mr Warren Smith	Managing Director	45	36
Mr Andreas Heintze	Director and Chief Operating Officer	39	27
Mr Michael Cahalane	Director - Civil & Water Engineering	19	11
Mr Tom Wise	Director - Hydraulic	9	7
Mr Mark Price	Project Manager - Hydraulic Services	35	33
Mr Grahame Barnes	Project Manager - Hydraulic Services	37	32
Mr Ian Stone	Expertise Leader and Project Manager - Fire Services	38	30

# COMPANY STRUCTURE AND EXPERTISE

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Currently, Warren Smith & Partners consists of the following directly employed staff:



## Our Engineers are qualified Professional Engineers and members of the following organisations:-

- Engineers Australia (Civil Division)
- Water and Wastewater Association
- Stormwater Industry Association

It is obvious to major developers, builders and project development/management companies that Warren Smith and Partners provides excellent service, coupled with the dual requirements of designs to satisfy Government and other Authorities requirements and the Client's desire to have well engineered, functioning systems, in the most cost effective timely manner possible.

We act in the best interests of Clients, priding ourselves as being one of the most progressive, innovative and commercially orientated consulting practices in Australia. We service both new and repeat clients to ensure a sustainable Consulting Engineering Practice with the highest Industry reputation and standards.

We are constantly striving for excellence and our company objectives reflect our continued pursuit toward this aim.

## Our objectives are:-

- To provide excellent cost effective design;
- To provide true professional service to our clients;
- To continually research and develop new design techniques;
- To maintain our position as leaders in our profession.

Our performance since inception has resulted in our continued involvement with leading Property Developers, Institutions, Builders, Property Managers, Architects and other Services Consultants in Australia.

Our willingness to accept full responsibility for our performance, guarantees our Clients the best possible results in terms of time, cost and quality.

It is the Company's Policy to maximise direct employed professional staff to build an in-house resource base with a high level of expertise and depth. This Policy allows us to deliver a coordinated controlled outcome generally not available in our Industry through the common practice of Sub-Consulting.

# COMPANY STRUCTURE AND EXPERTISE

The scope of services that our Company can offer in relation to water authority services is listed below:

Warren Smith and Partners, based in the Sydney Business District for thirty-five (35) years, has been undertaking Design and Construction Quality Control services in relation to Developer works since 1994.

We are currently an accredited consultancy with Sydney Water Corporation for the provision of the following services:-

- Water Servicing Coordination;
- Project Management;
- Tender Management;
- Design and Drafting Services;
- Construction Quality Control and Certification;
- Work As Executed Documentation.

We are accredited for the provision of services in relation to all water and sewer infrastructure on minor and major projects and we also provide all of the above services in relation to Sydney Water stormwater infrastructure. Our current capabilities include:-

W1	Water Reticulation DN 100-375;
W2	Water Supply DN > 375-750;
W3	Steel Pipelines DN > 750-1200;
S1	Sewer Reticulation DN 150-300;
S2	Sewer Standard DN 375-750;
RW	Recycled Water DN 65-375;
SW	Stormwater Trunk Mains

The team is led by Michael Cahalane, our Civil and Water Engineering Director, who has been with the firm for 10 years. Michael has a proven track record in delivering designs for major projects. This includes Kapooka Army Base, Wagga Wagga, between 2008-2012, where Michael headed up the design team that delivered a new wastewater treatment plant, 10 km of effluent pipelines and two reservoirs to service the expansion of the Department of Defence facility.

Michael managed the design team for the delivery of the Barangaroo Headland Park between 2012 to 2015. This included the design of a 1.5 ML seepage and stormwater reuse system for irrigation, 1.0 km of bio-retention swales, City of Sydney stormwater deviations, 900m Sydney Water bored sewer diversion and the decommissioning of the Sydney Water pump station SPS 0014.

More recently Michael has been managing the delivery of the civil design for the University of Canberra Public Hospital. This design includes 600m of public roads and two roundabouts, bulk earthworks, stormwater design including 1,000m<sup>3</sup> of detention basins and environment controls.

Michael has an excellent track record in the successful delivery of these projects on time and within budget.



# KEY PROJECTS



## Northconnex M1-M2 Motorway (2015 – ongoing)

**Client:**

Lend Lease Bouygues Joint Venture

**Project Value:**

\$3bn

**Contact:**

Arthur Vasilaras (LLB Joint Venture)  
Services Manager  
0418 686 452

**Scope of Works:**

- Deviation of water and sewer infrastructure to allow for road augmentation works associated with the new 9km tunnel including new bore under M1 motorway.
- Production of flow isolation and management plans.
- Deviation of stormwater infrastructure, including hydraulic analysis of new pipe system.



## Barangaroo Headland Park (2010 – ongoing)

**Clients:**

Barangaroo Delivery Authority/  
Boulderstone /Lend Lease  
Building

**Project Value:**

\$220m

**Contact:**

Kieron Little (Lend Lease)  
Project Director  
0414 870 675

**Scope of Works:**

- Masterplanning design to deal with the existing pump station located on the site where 8m of fill is to be placed over.
- Decommissioning of the heritage listed sewage pump station SPS0014.



- Deviation of 700m of DN375 pipeline by microtunnelling with bore pit depths of 6.0-7.5m.
- 900m of bio-retention swales capturing stormwater from the parklands.
- A seepage water collection system capturing stormwater which infiltrates through the newly created 18.0m high hill.
- 1.25ML stormwater storage tank, 0.25ML seepage water storage tank and pump room, all located at RL -7.0m below basement carpark.
- Numerous permanent and temporary deviations required for the development works.

# KEY PROJECTS



## University of Canberra Public Hospital (2015 – ongoing)

**Client:**

Brookfield Multiplex

**Project Value:**

\$180m

**Contact:**

Heidi Sowerbutts (Brookfield  
Multiplex)  
Design Manager  
0409 435 812

**Scope of works:**

- Design of 600m of public roads including two roundabouts.
- Design of internal roads, car parking and loading docks.
- Design of bulk earthworks and cut/fill.
- Design of stormwater drainage including 1,000m<sup>3</sup> of detention basins.
- Design of environmental controls and water quality measures.

## Kapooka Army Base ELF Expansion (2008 – 2012)

**Client:**

Department of Defence (DoD)

**Project Value:**

\$220m

**Contact:**

Nathan Szymanski (DoD)  
Project Manager  
0428 963 276

**Scope of works:**

- New base sewage treatment plant for irrigation and toilet flushing reuse.
- 10km of effluent distribution pipelines, including 2km of rising main.
- A 1.0ML effluent reservoir, telemetry and chlorination system.
- All road and stormwater drainage works for the above facilities.

## Calvary Bruce Private Hospital Redevelopment, ACT (2014 - ongoing)

**Client:**

Calvary Private Hospital

**Project Value:**

\$55m

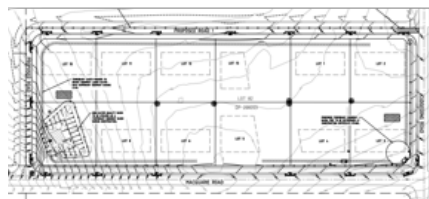
**Contact:**

Mick O'Driscoll (Donald Cant Watts  
Corke)  
Project Manager  
0420 540 211

**Scope of works:**

- Diversion of existing overland flow path through DN900 pipe away from proposed development site.
- Design of site stormwater drainage system incorporating water quality treatment device to meet pollutant reduction loads for ACT Planning and Land Authority.
- Design of pavements for driveway, car parking, service area and loading dock.
- Design of driveways and turning path analysis.

# KEY PROJECTS



## Byron Shire Central Hospital (2013 – Ongoing)

**Client:**

Brookfield Multiplex

**Project Value:**

\$95m

**Contact:**

John Corcoran (Brookfield Multiplex)  
Services Manager  
0414 411 979

**Scope of Works:**

- Design of new Byron Shire Council sewage pumping station including pumping station wet well, valve pits and all associated pumping equipment design.
- 4.5km of associated twin rising main connecting to council treatment plant (DN280 and DN110).

## Rouse Hill Subdivision (2014 – 2015)

**Client:**

Mr. Jonathan O'Brien

**Project Value:**

\$25m

**Contact:**

Jonathan O'Brien (client)  
0404 499 251

**Scope of Works:**

- 12 lot subdivision.
- Design of stormwater treatment systems including 10 rainwater tanks, enviropods and gross pollutant traps.
- Temporary on-site detention tanks and bioretention swales to facilitate the staged construction process.
- Road design of the public network which surrounds the property.
- Connection into existing watermain service to provide frontage for each lot.

## RSL Veterans Retirement Village, Narrabeen (2009 – 2015)

**Client:**

RSL Lifecare

**Project Value:**

\$10m

**Contact:**

Mark Owens (RSL Lifecare)  
Project Manager  
0401 236 618

**Scope of Works:**

- 83 Unit Living Independent Unit Development.
- Design for early works to construction.
- Design of 1500m of roadway, bulk earthworks, stormwater drainage and bioretention swales.

# KEY PROJECTS



## Sydney Opera House Upgrade (2010 – 2012)

**Client:**  
Sydney Opera House (SOH)

**Project Value:**  
\$150m

**Contact:**  
Greg McTaggart (SOH)  
Project Director  
0418 260 684

### Scope of Works:

- Deviation of the Bennelong trunk stormwater system as part of the VAPS project.
- Works included the installation of 2.4m wide by 1.8 deep in-situ box culvert system and new harbour discharge.
- Challenging construction issues with tide and existing services.

## University of Sydney Australian Institute of Nanoscience

**Client:**  
University of Sydney (UoS)

**Project Value:**  
\$40m

**Contact:**  
Seamus O'Connell (UoS)  
Project Director  
0411 126 060

### Scope of Works:

- Deviation of DN900 stormwater trunk main around the new Nanoscience precinct.
- Design of a pressurised stormwater pipe system to ensure no surcharge flows reticulate into depressed site.
- New overflow systems provided to sports oval to prevent downstream flooding.

## Royal North Shore Hospital (2012 –2015)

**Client:**  
Health Infrastructure

**Project Value:**  
\$170m

**Contact:**  
Tim Pike (APP Corporation)  
Project Manager  
0411 750 517

### Scope of Works:

- Deviation of existing DN500 trunk watermain around the property boundary. The works included the installation of DN500 steel pipes 3 metres deep to avoid significant electrical infrastructure.
- Sewer and trade waste drainage.
- Cold, hot and warm water services.
- Non potable water.
- Fire sprinkler and detection service.



# KEY PROJECTS



## Sydney Adventist Hospital (2011 – 2013)

**Client:**  
Sydney Adventist Hospital

**Project Value:**  
\$200m

**Contact:**  
Ioan Morgan (Johnstaff Projects)  
Project Manager  
0433 127 448

### Scope of Works:

- Amplification of existing DN150 watermain to DN200 watermain to provide adequate pressure and supply for the Hospital's future expansion.
- Sewer and trade waste drainage.
- Cold, hot and warm water services.
- Non potable water.
- Fire sprinkler and detection service.
- Syphonic roof drainage and rainwater harvesting.
- Dialysis reverse osmosis treated water.



## Darling Quarter (2009 – 2011)

**Client:**  
Lend Lease

**Project Value:**  
\$500m

**Contact:**  
Rob Van Wanrooy (Lend Lease)  
Project Manager  
0401 148 864

### Scope of Works:

- Deviation of existing trunk stormwater main around the footprint of the new commercial precinct.
- Works included the installation of DN1800 pipes and 1.5m wide by 1.5m deep box culverts in extremely tight corridors.



## Northern Beaches Hospital (2012 – ongoing)

**Client:**  
Health Infrastructure/ Ferroual York

**Project Value:**  
\$600m

**Contact:**  
James Holbrook (Johnstaff Projects)  
Project Manager  
0428 026 417

### Scope of Works:

- Design and project management of 1150 metres of DN300mm sewer reticulation main for the new Hospital development.
- Design and project management of water and sewer adjustments required for road upgrades.

# KEY PROJECTS



## Holroyd to Rookwood Power Infrastructure (2013 – 2014)

**Client:**  
Transgrid/Diona

**Project Value:**  
\$300,000

**Contact:**  
Charlie Haire (Diona)  
Project Manager  
0408 481 134

### Scope of Works:

- Relocation of two (2) DN450 steel sewer lines and scour valve arrangements for DN1800 steel trunk watermain.

## Singleton Army Base Vehicle Wash Station ELF Upgrade (2008 – 2012)

**Client:**  
Department of Defence

**Project Value:**  
\$220m

**Contact:**  
Mati Yogev (Jacobs)  
Project Architect  
(02) 9032 1531

### Scope of Works:

- Design of automated truck wash for Defence vehicles, including Mack MC3.
- Design of effluent reuse system to treat and reuse the wash down water.
- System includes a 1.5Ha with 18mL capacity overflow pond.
- Recycled waste water treatment system incorporating screen filter, depth filter, carbon filter and reverse osmosis system.
- A 216kL recycled water tank to store treated water for reuse in automatic truck wash.

## Castle Hill Subdivision (2011 – Ongoing)

**Clients:**  
Lanox Pty Ltd & KMSJ Pty Ltd

**Value:**  
\$20m

**Contact:**  
Bob Stewart (Complete Infrastructure Services)  
Project Manager  
0414 257 238

### Scope of Works:

- Design of 800m of pavement and roadways.
- Civil design of allotments, including cut/fill analysis and retaining walls.
- Interallotment drainage and water quality.
- Onsite detention provided by a series of in ground tanks located in each lot.
- 1.0m wide swale with rock/rubble lined base to capture overland flow along the eastern boundary.
- Sydney Water sewer extension.

# KEY PROJECTS



## Riverwood North Residential Renewal Project, Riverwood (2010 – 2013)

**Client:**

Cantebury Council, Housing NSW & Payce Communities Pty Ltd Sydney

**Project Value:**

\$40m

**Contact:**

Nik Frank (M Projects)  
Project Manager  
0416 199 981

**Scope of Works:**

- Design of 900m of public roads and drainage.
- Design and Project Management of the construction of 730 metres of DN200mm watermain reticulation for 8 super lots.
- Design and Project Management of the construction of 534 metres of DN225mm sewer reticulation main for 8 super lots.



## Barangaroo Masterplan (2010-Ongoing)

**Client:**

Barangaroo Delivery Authority (BDA)

**Contact:**

Peter Funder (BDA)  
Project Director  
0437 689 915

**Scope of Works:**

- Design of upgrade road works to Hickson Road.
- Sydney Water sewer and water masterplanning to address the additional loading resulting from Barangaroo South, Central, Crown Casino and Barangaroo Point.
- Advice on the construction of new buildings in Central adjacent to and over the existing sewerage pump station SPS1129.



## University of Sydney (UoS) Masterplan (2013-Ongoing)

**Client:**

The University of Sydney

**Project Value:**

\$20m

**Contact:**

Martin Ayers (UoS)  
Services Manager  
0401 719 579

**Scope of Works:**

- Provision of construction documentation for the campus infrastructure upgrade of stormwater, water, gas and sewer.
- Assessment of the capacity of the existing sewer and watermain infrastructure within and surrounding the campus.
- Estimation of the additional loading resulting from the \$1.4bn 2020 Campus Improvement Plan which proposes an additional 260,000m<sup>2</sup> of GFA.
- Identification of upgrade and amplification requirements which may need to be carried out due to the proposed developments.
- Provision of sewer and water infrastructure upgrade plans for proposed staged developments.

# Warren Smith & Partners

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