

# **H&I Consulting Engineers**

# Soil, survey, and engineering services for builders of tomorrow



# **COMPANY PROFILE**

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H&I Consulting Engineers Residential and Commercial Construction

### A BRIEF HISTORY OF THE COMPANY

H&I was officially registered on August 22, 1990, and has been servicing the industry for over 30 years. From its humble beginnings, it has consistently grown and is now recognized as one of the industry leaders. We work closely with volume builders, custom home builders, commercial builders, architects, and councils, allowing us to be well-versed in their requirements. Our policy is to provide our clients with a "dream team" that can meet their specific needs. Our company operates from our offices in North Melbourne and is staffed by experienced and competent professionals who strive to provide high-level customer service-based solutions to our clients.





Become the supplier of choice in the provision of Soil Testing, Surveying, Civil & Structural engineering services.



Deliver fully compliant, INNOVATIVE, technically sound & COST-EFFECTIVE engineering designs within promised time frames.



#### EXPERIENCE

H&I has been in business since 1990. We have grown into a multidisciplinary engineering consultancy catering to the needs of the local building industry. Our core business services are structural and foundation design, soil testing, site classification, re-establishment and site feature surveys, drainage, and stormwater design. For several years now, these services remain the main core of our business.

#### DELIVERY AND QUALITY COMMITMENT

#### PRACTICAL

Since 1990, we've helped clients across various sectors achieve project success through our comprehensive engineering services. Our experienced team prioritises practical and cost-effective solutions, ensuring your designs meet both your budget and performance needs. You can rely on our commitment to sound engineering practices to deliver reliable and sustainable outcomes.

At H&I, once a job is booked, a project manager is assigned and a project schedule will be discussed and mutually agreed with the client. The client is always briefed on the progress of the work at every stage of the project. If you are an account customer, you are able to track the progress of your project online through our website.

### **PRODUCTS & SERVICES**

#### STRUCTURAL ENGINEERING

At H&I Consulting Engineers, we endeavour to provide value to our clients by providing cost effective structural engineering solutions. Our vision is to be a leader in providing structural consultation to a range of projects throughout Australia.

We specialise in designing a wide range of projects including volume housing, custom design homes, multiunit development, basement designs, industrial structures including factories and pavement design, public buildings, apartments, extensions, retaining walls and pools etc.

We have strong technical expertise in the field of structural engineering with over 30 years of experience. Our team of

qualified engineers, draftspersons and management staff strive to achieve the most economical and innovative engineering solutions while maintaining the timely delivery of projects. We utilise the latest structural design, drafting and management software to achieve our client's goals. Our In-house Geotechnical and Engineering department gives us better insight into the project which helps in providing economical structural solutions to our clients.

Providing excellence in service to client throughout the design and construction process is paramount.

#### **DILAPIDATION REPORTS**

A dilapidation report is a comprehensive inspection and documented report of the current condition of the neighbouring properties of a dwelling. It's a way for homeowners to take proper precautions and obtain a record of a dwelling's current condition.

#### **ENERGY RATING**

Energy Rating is a calculation of the heating and cooling loads required to maintain a comfortable living environment within a given building. Factors taken into consideration include insulation, glazing, construction type, building size, orientation, and climate zone.



# SITE CLASSIFICATION & FOOTING DESIGNS

A Site Classification is an important document for many building projects. In order for a buildings footing system to be designed appropriately one of the first steps is to determine the site classification. At H&I Consulting Engineers we have a team of experienced soil testers who work closely with our dedicated engineers to ensure that each site is classified correctly. In addition to the basic site classification, our report provides in-depth information on any site and/or soil problems that could be irregular to the individual site as well as providing minimum footing recommendations and expected soil movements based on our broad experience and testing results.

As a company we pride ourselves on being at the "leading edge" of soil testing procedures and our testing practices comply with Australian Standards AS 1726, AS 2870-2011 and Foundation and Footings Society (Vic) practice notes, all of which are established and accepted industry practice.

# GEOTECHNICAL INVESTIGATION

Understanding the ground conditions is important for any building design. We can provide the following geotechnical services:

- Geotechnical investigation for residential, commercial and industrial sites
- Basement retaining wall design and investigation
- Landslip risk assessment for property development on hillside
- Geotechnical inspection of excavated batter and retaining wall systems
- Car parking pavement and local roads



## FEATURE SURVEYS

Feature surveys are required as the initial starting point for most developments. A feature survey provides essential information for use by architects, structural/civil engineers, councils and builders. H&I Consulting Engineers has an experienced survey team which can provide detailed surveys with information that can include but is not necessarily limited to:

- Fall of the land (Spot levels)
- Overlay Title & Easements onto survey
- Levels connected to Australian Height Datum (AHD)
- Location of habitable windows
- Visible pits/services
- Location & size of trees/vegetation
- Finished floor levels of existing dwellings
- Fence heights & types
- Location of footpaths & driveways
- Place bench marks at the front of property
- We cater to individual requirements and can add or remove the required features upon request. All of our feature & levels survey are drafted to scale and can be made available in most Autocad Drawing formats.

#### **RE-ESTABLISHMENT SURVEY**

A re-establishment survey is done when a lot or property boundary needs to be redefined. Re-establishment surveys are necessary when the accurate location of your title position is required. In Victoria, a Title Re-establishment can only be performed by a Licensed Surveyor.

Our survey technicians have been trained to provide an accurate representation of the on-site features. We have modern surveying equipment including Total Stations, high accuracy GPS and Laser equipment to precisely carry out these surveys. In order to reduce overall site costs our surveys can be carried out during the soil investigation.



# BUSHFIRE ATTACK LEVEL AND WIND RATING

Wind Rating is an important parameter in determining what wind loading or wind speed is to be used on specific sites. It is an important design parameter in determining types of windows and structural bracing requirements for the building. We can carry out a field assessment and provide a Wind Rating Certificate for sites in accordance with AS 4055-2012 Some sites may fall within a Bushfire Prone area, we offer a complete assessment to determine the Bushfire Attack Levels (BAL) of your site to satisfy requirements for building approvals. Your assessed BAL may mean that additional or specialised materials need to be used during construction and may add to the cost of your development. The assessment we provide could be important to undertake during the initial stages of development to ensure your project is costed accurately. All of our BAL assessments are carried out in accordance with AS 3959-2009.

# CIVIL ENGINEERING DESIGN

Our experience and close working relationship with Australian local government, Catchment Management Authorities, Road Authorities, and other relevant authorities ensure that our civil designs adhere to relevant criteria, while providing the most efficient solution for your development application. We can provide cost-effective design solutions.

#### **KEY SERVICES INCLUDE:**

- Residential, Commercial and Industrial Stormwater
  Drainage Design
- On-site Detention System
- Storm Water Pump System Design
- Car park & driveway design
- Design of Subsoil Drainage
- Absorption Trenches and Beds Design

- Multi-cell System/ Soakage Pit Design
- Water Quality Assessments
- STORM Rating Report
- Water Sensitive Urban Design (WSUD) with rainwater gardens, rainwater tanks, sentinel pits and other WSUD products.



### BUILDING DAMAGE FORENSIC INVESTIGATION

We can provide an engineering assessment on buildings or houses that experience distress due to natural hazards or in-sufficient design or poor construction practice. Our qualified engineers can inspect the buildings and provide advice on the possible causes of distress and recommend remedial solutions. If you represent building loss adjuster, builders, or building insurance companies, you're welcome to call us and discuss your project requirements.



# TARGET MARKET

#### VOLUME HOME BUILDERS

Volume home builders typically have a set of house plans that have been carefully designed and vetted to meet the needs and preferences of their target audience. This allows them to build homes faster and more efficiently than custom builders.

#### MEDIUM DENSITY HOUSING DEVELOPERS

A medium-density housing developer is a company that specializes in constructing multiple housing units within a single structure or within a planned community. These developers typically focus on creating neighbourhoods that are denser than traditional single-family home communities but less dense than high-rise urban environments.

#### MIXED USE Developers

A mixed-use property developer is a company that specializes in the construction and management of projects that combine residential, commercial, retail, and/or office spaces within a single building or development. These developers seek to create vibrant and interconnected communities that offer a variety of amenities and opportunities for living, working, and leisure.

#### ARCHITECTS

An architect is a licensed professional who plans, designs, and oversees the construction of buildings and other structures. They use their creative and technical skills to create functional, safe, and aesthetically pleasing spaces that meet the needs of their clients and the general public.

#### CUSTOM HOME BUILDERS

A mixed-use property developer is a company that specializes in the construction and management of projects that combine residential, commercial, retail, and/or office spaces within a single building or development. These developers seek to create vibrant and interconnected communities that offer a variety of amenities and opportunities for living, working, and leisure.

#### COMMERCIAL BUILDERS

An architect is a licensed professional who plans, designs, and oversees the construction of buildings and other structures. They use their creative and technical skills to create functional, safe, and aesthetically pleasing spaces that meet the needs of their clients and the general public.

#### **COMPETITIVE ADVANTAGE:**

At H&I, we deliver cost-effective and fit-for-purpose design solutions, drawing upon over 30 years of experience in the industry. Our commitment to excellence is reflected in our standardised processes, active involvement in industry memberships and conferences, and cultivated network of industry contacts. We understand the importance of seamless client integration. Our collaborative approach ensures that we not only meet, but exceed, your service expectations on a daily basis. We prioritise open communication and embrace continuous improvement to consistently deliver market-leading design services, fostering longterm partnerships with our clients.

#### **H&I CONSULTING ENGINEERS**

P: +61 3 9375 7515 A: 407 Flemington Road, North Melbourne VIC 3051 E: enquiries@hice.com.au W: www.hice.com.au