

# No. 101 PENANG ROAD

Retrofitting A Masterpiece



**Owner:**

Winpeak Investment Pte Ltd

**Architect:**

RSP Architects Planners & Engineers (Pte) Ltd

**Engineer:**

RSP Architects Planners & Engineers (Pte) Ltd

**Contractor:**

Singapore Piling & Civil Engineering Pte Ltd

This project involved the restoration of the House of Tan Yeok Nee and the creation of an auditorium within one of the buildings. Built in 1885, this traditional Chinese Chou Zhou-style courtyard house was gazetted a national monument in 1974. The owners had turned it into a “campus” for the University of Chicago Graduate School of Business to maintain the dignity of the House. This project was approached with great sensitivity to ensure that the original architecture and character of the house were kept intact while satisfying the needs of the tenant.

Prior to restoration, extensive research was carried out including three surveys - a Measured Building survey, a Photographic Record survey and a traditional Chinese Architectural Works survey. A special team consisting of an expert in traditional Chinese architecture, a material specialist, acoustics consultants and skilled craftsmen were engaged to carry out the works.

During restoration, a “Top-Down” approach was adopted and the 3-R principle - maximum retention, sensitive restoration and careful repair - was closely observed. To address the problem of rising damp, the existing brick base 300 mm above the structural floor level was drilled and injected with DPC (damp proof course). Termite-infested timber trusses, beams and joists were thoroughly investigated, removed

and replaced with matching materials of the same size. To salvage the four badly termite-infested gold-gilded timber beams in the main hall, the central portion was carved out and inserted with galvanised mild steel hollow sections to strengthen them.



A masterpiece of traditional Chinese architecture

All original elements and traditional Chinese decorative features of the House were retained and restored. Replacements for missing fragments of the *jian nian* on the roof ridges were recreated by skilled Chinese craftsmen. Paintings or *cai hua* were cleaned up and their surfaces touched up before colours were applied. Similar procedure was carried out on the clay sculptures or *ni su*.

The elaborate wood carvings and gold-gilding works were also repaired and touched up where necessary. The gable end walls with their fine artworks and unique shapes depicting the five elements of metal, wood, water, fire and earth were also restored.

The modern needs of the tenant were also carefully and neatly integrated into the building’s architecture. This includes the introduction of air-conditioning with the use of frameless glass to separate the air-conditioned spaces from the external environment while maintaining the open-to-the-sky courtyards. The result is a masterpiece of traditional Chinese architecture retrofitted with modern state-of-the-art facilities to suit its new lease of life as home to a prestigious educational institution.





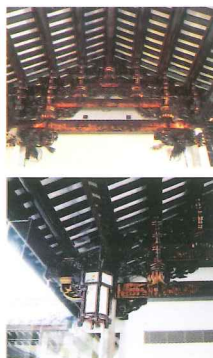
*Gable end walls with fine artworks*



*Uniquely-shaped gable end walls*



*Open-to-the-sky courtyard*



*Exposed timber joists and cantilevered brackets*



*Interior of main hall*



*Aerial view of the restored building*



*Restored spirals*



*Chinese roofscape with decorative features*



*Porcelain and clay decorative elements*



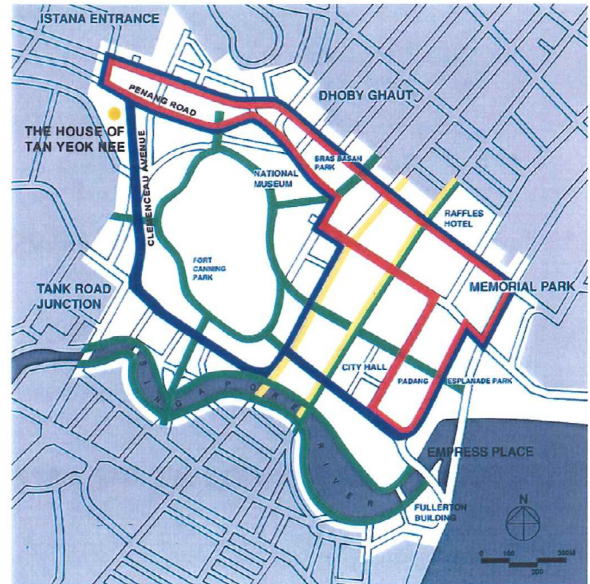
The House of Tan Yeok Nee is strategically located at the junction of Cleminceau Avenue and Penang Road opposite the Istana Park. It is sited along the Heritage Link and the Celebration Route.

The House was built around the end of 19<sup>th</sup> century by Tan Yeok Nee, a wealthy Chou Zhou (潮州) merchant from Southern China. It is the only remaining traditional Chinese courtyard house that can be found in Singapore.

The building was subsequently gazetted as a national monument in 1974 and was occupied by Salvation Army until 1991. When it was acquired by a consortium lead by Wing Tai Holding in 1996, the house was already in a state of disrepair.



TAN YEOK NEE (1827-1902)



LOCATION PLAN

LEGEND

- CELEBRATION ROUTE
- HERITAGE LINK
- THE HOUSE OF TAN YEOK NEE

## HISTORY



ST. MARY'S HOME (1912)



SALVATION ARMY HEADQUARTERS (1935)



# HISTORY



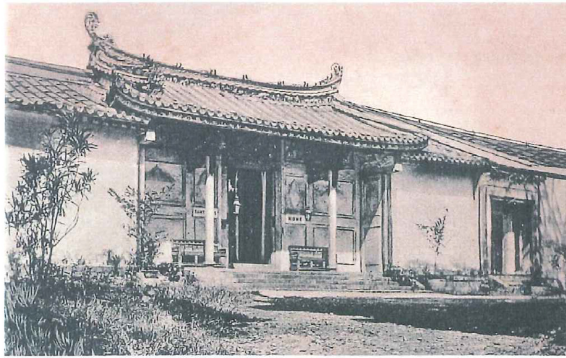
TAN YEOK NEE (1827 - 1902)

BUILT IN TRADITIONAL CHAO ZHOU ARCHITECTURAL STYLE. THE HOUSE IS THE ONLY TRADITIONAL CHINESE COURTYARD HOUSE STILL IN EXISTENCE IN SINGAPORE TODAY.

AS A MONUMENT, IT WAS RECENTLY RESTORED AND ADAPTED INTO A GRADUATE SCHOOL OF BUSINESS STUDY.

EXCEPT FOR MINOR MODIFICATIONS MADE TO COMPLY WITH BUILDING REGULATIONS, ALL THE ORIGINAL STRUCTURE WAS RETAINED.

Monument	: House of Tan Yeok Nee
Address	: 101 Penang Road S'pore
Date of Construction	: 1882
Original Architect	: Unknown
Date of Gazette	: 29 <sup>th</sup> Nov 1974
Present Owner	: Winpeak Investment (Pte) Ltd
Lot Number	: 515X PT TS 20
Land Tenure	: Freehold
Plot Area	: 2445m <sup>2</sup>
Gross Floor Area	: 2109m <sup>2</sup>
Investment Cost	: \$12.0 Million
Construction Period	: 1 Mar 1999-1 Sept 2000



POSTCARD VIEW OF ST.MARY'S HOME



VIEW BEFORE RESTORATION

# RESEARCH



DETAILS OF THE ROOF RIDGE IN CHINA



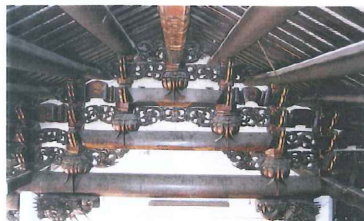
DETAILS OF WOOD CARVING IN CHINA



DETAILS OF STONE CARVING IN CHINA



DETAILS OF THE ROOF RIDGE IN S'PORE

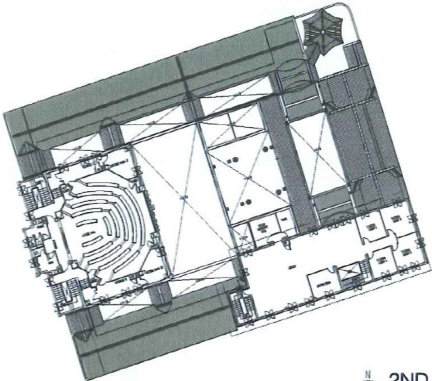


DETAILS OF WOOD CARVING IN S'PORE

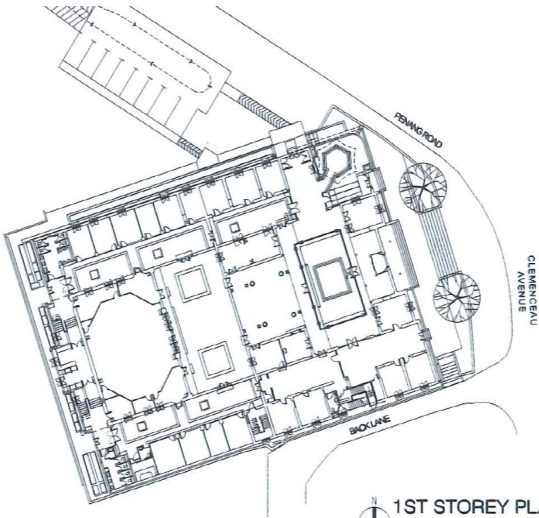


DETAILS OF NI SU IN S'PORE

# PLANS



2ND STOREY PLAN  
SCALE 1:250



1ST STOREY PLAN  
SCALE 1:250



FIRST COURTYARD BEFORE RESTORATION



FIRST COURTYARD AFTER RESTORATION



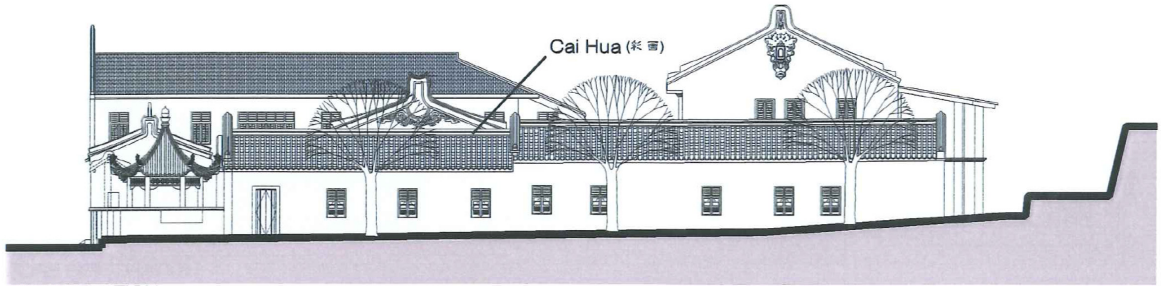
NORTH WING CORRIDOR BEFORE RESTORATION



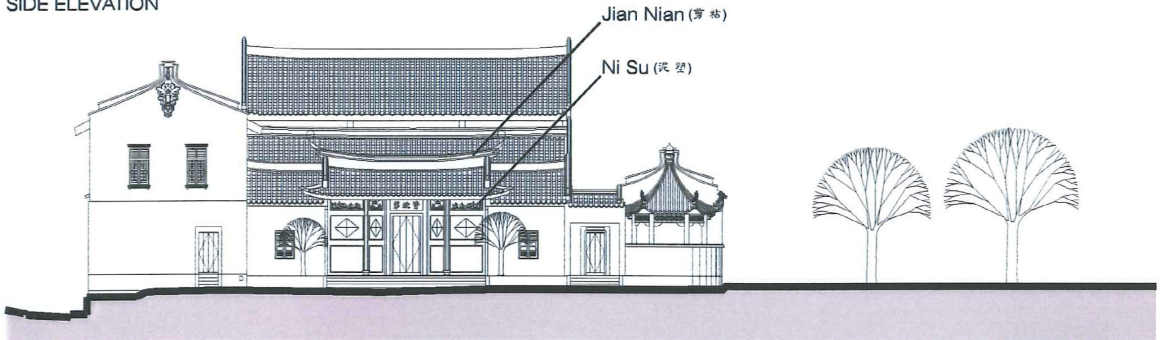
NORTH WING CORRIDOR AFTER RESTORATION



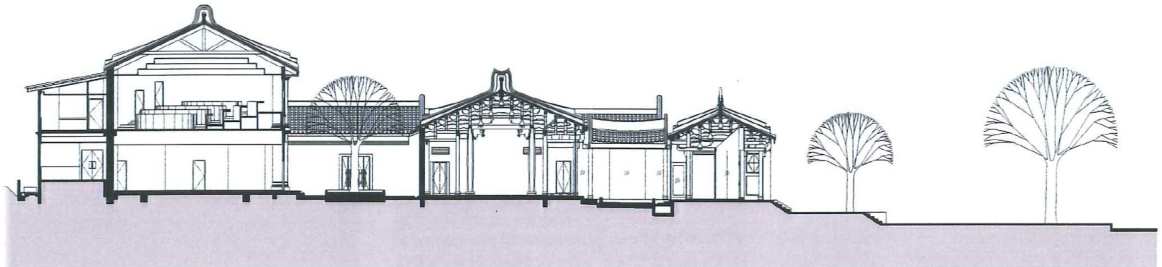
# ELEVATIONS AND SECTIONS



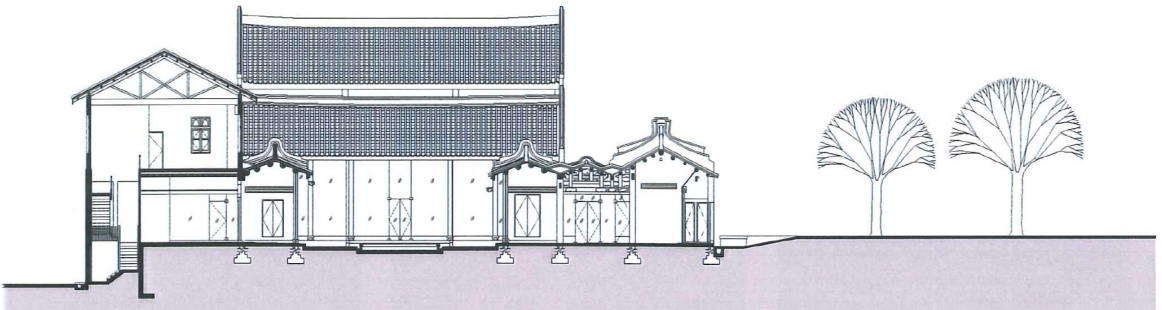
SIDE ELEVATION



FRONT ELEVATION



LONGITUDINAL SECTION



CROSS SECTION