

# PROFILE

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### **PARTNERS & DIRECTORS**

#### HO Weng Hin

Architectural Restoration Specialist Consultant Adjunct Senior Lecturer, NUS Dept of Architecture

> Founding Exco Member, Docomomo Singapore Working Group-in-progress Expert Voting Member, ICOMOS Scientific Committee for 20<sup>th</sup> Century Heritage Founding Director, International Council on Monuments & Sites Singapore (ICOMOS Singapore) Affiliate, Asian Academy for Heritage Management (UNESCO-ICCROM) Specialista in Restauro dei Monumenti (cum laude) [University of Genoa, Italy] Master of Architecture; Bachelor of Arts (Architectural Studies) [NUS]

# TAN Kar Lin

#### Architectural Heritage Research Consultant

Founding Exco Member, Docomomo Singapore Working Group-in-progress Founding Director, International Council on Monuments & Sites Singapore (ICOMOS Singapore) Master of Arts (Architecture) degree by research [NUS] Master of Architecture; Bachelor of Arts (Architectural Studies) [NUS]

# OVERVIEW

**STUDIO LAPIS** is an award-winning architectural restoration and research consultancy based in Singapore. The founding partners Ho Weng Hin and Tan Kar Lin are trained in architecture at NUS. Weng Hin read his post-graduate conservation specialisation course at the *Universita' degli Studi di Genova*, Genoa, Italy, while Kar Lin completed a Masters of Arts (Architecture) degree by research.

**SERVICES** Studio Lapis undertakes full-scope architectural conservation consultancy as well as preconservation survey, tender consultancy, material-specific restoration, and laboratory test report evaluation. We specialise in historic architectural materials and construction systems, ensuring the appropriate and effective use of restoration techniques and conservation methods on fragile building fabric.

**APPROACH** Our conservation approach emphasizes thorough research and investigation on the historic building, including its constructional, historical, artistic, cultural, technological and material attributes. This establishes a solid knowledge base that informs decision-making and cost analysis in the complex process of architectural conservation. It enables consultants to make the best use of design opportunities in the historic edifice that may not be immediately apparent. We work closely with the client, architect, contractor and other consultants to conserve the materiality and character of historic architecture, ensuring the continuity of these unique qualities in the building's new lease of life.

**RESEARCH** The partners of Studio Lapis each has two decades of specialised research experience in architectural history, bringing to conservation projects their skills in archival research, investigation, and analysis. As part of the firm's ongoing research and development, the partners are working on a publication project on the early Modern Architecture of Singapore from the 1920s-1970s, covering extensive groundwork on colonial to independence period Modernist structures including Kallang Airport, Tanjong Pagar Railway Station, former Supreme Court, Singapore Conference Hall and so on.

# HO WENG HIN

Architectural Conservation Specialist Director, STUDIO LAPIS Adjunct Senior Lecturer, NUS Dept of Architecture

Specialista in Restauro dei Monumenti (cum laude) [University of Genoa, Italy, 2008] Master of Architecture [NUS, 2001]; Bachelor of Architectural Studies [NUS, 1998]

Nationality	Singapore Citizen
Email	howh@studiolapis.sg

# Expertise

- Architectural restoration techniques
- Deterioration diagnostics of historic building materials
- Field survey and documentation of heritage sites
- Historic construction technology
- Conservation project planning & management
- Adaptive reuse architectural design
- Modern Architecture, Sites and Landscapes

### Professional Membership & Public Service

- Member, Heritage and Identity Panel, Urban Redevelopment Authority (2018 present)
- Founding Exco Member, Docomomo Singapore Working Group-in progress
- Expert Voting Member, ICOMOS International Scientific Committee for 20<sup>th</sup> Century Heritage
- Founding Director, ICOMOS Singapore; Member, AAHM
- Member, URA Architectural Heritage Awards Jury Panel (2009-2012)
- Member, URA Conservation Guidelines Review Panel (2010-15, 2017-2020 cycle)
- Member, MND Rail Corridor Partnership (2011- present)
- Member, Singapore Heritage Society (Exco Member 2004 2005)

# Awards & Grants

2018 2017	URA Architectural Heritage Award Special Mention – Sophia Hills Development UNESCO Asia Pacific Awards for Cultural Heritage Conservation (Honourable Mention) – Cathedral of the Good Shepherd
2017	URA Architectural Heritage Award for Restoration – Cathedral of the Good Shepherd
2016	URA Architectural Heritage Award for Restoration & Innovation – Capitol Development
2016	URA Architectural Heritage Award Special Mention – South Beach Development
2011	<b>Mubin Sheppard Memorial Prize</b> , Cycle 9 for "Conservation Area Study" category, awarded by Badan Warisan Malaysia (with NUS Dept of Architecture)
2011	Urban Redevelopment Authority of Singapore sponsorship for KTM Built Heritage
	Conservation Survey undertaken by Singapore Heritage Society (With Tan Kar Lin and Lim Chen Sian, for SHS)
2005, 2007	<b>Italian Government Scholarship</b> for postgraduate specialization course in architectural restoration at the Universita' degli Studi di Genova, Italy
2004	Urban Redevelopment Authority of Singapore Architecture and Urban Design Excellence
	<b>Grant</b> for book project <i>Our Modern Past: Modern Architecture in Singapore 1920s – 70s</i> , to be published by Singapore Heritage Society (With Dinesh Naidu and Tan Kar Lin, for SHS)
2004	Singapore International Foundation & Lee Foundation Grant for conference presentation at
	<i>VIIIth DOCOMOMO International Conference</i> , 26 <sup>th</sup> Sep – 2 Oct 2004; Columbia University, New York City (with Dinesh Naidu and Tan Kar Lin).
1996	<b>Dean's List Award</b> for outstanding academic performance, Faculty of Architecture, Building and Real Estate, National University of Singapore

# Professional Experience

2013 – 2017, 2018 – present	Adjunct Senior Lecturer, Dept. of Architecture, National University of Singapore
2010 - 2012	Adjunct Lecturer, Dept. of Architecture, National University of Singapore
2009 - present	Partner & Director, Studio Lapis/ Studio Lapis Conservation Pte Ltd
2008 - 2009	Architectural Restoration Specialist Consultant
2004 - 2007	Editor, Singapore Architect Journal, Singapore Institute of Architects
2002 - 2003	Research Assistant, Department of Architecture, National University of Singapore
2000 - 2002	Editor, Singapore Architect Journal, Singapore Institute of Architects
2000 - 2001	Junior Research Assistant, Department of Architecture, National University of Singapore
1998 - 1999	Architectural Assistant, William Lim Associates Pte, Singapore.

# Selected Projects

2019 – present	Architectural conservation specialist consultancy for National Museum of Singapore
	Feasibility Studies, for National Heritage Board
2019 – Ongoing	Architectural conservation specialist consultancy for former Kallang Airport and
	Hangar, for Singapore Land Authority
2019 – Ongoing	Architectural conservation specialist consultancy for Cairnhill Road Bungalow, for
	Low Keng Huat (Singapore) Ltd
2018 – Ongoing	Architectural conservation specialist consultancy for former Tanjong Pagar
	Railway Station, for Singapore Land Authority
2018 – Ongoing	Architectural conservation specialist consultancy for restoration of Church of St
	Teresa, for Church of St Teresa
2017 – Ongoing	Architectural conservation specialist consultancy for Additions & Alterations to
	Singapore Art Museum, for Ministry of Culture, Community and Youth
2017 – Ongoing	Architectural conservation specialist consultancy for State-owned historic
	properties, for Singapore Land Authority
2017 – Ongoing	Architectural conservation specialist consultancy for former St James Power
2016 2010	Station, for Mapletree Holdings Ltd
2016 – 2019	Architectural conservation specialist consultancy for redevelopment former
2016 0 1	Traffic Police HQ (Maxwell Chambers Suites), for Ministry of Law, SIngapore.
2016 - Ongoing	Conservation and adaptive reuse specialist consultancy for Halic Tersane, Istanbul,
2016 2010	<b>Turkey</b> , for Sembol-Ekopark İnşaat-Fine Otelcilik JV
2016 – 2018	Architectural conservation specialist consultancy for Yangon Central Railway
	Station Redevelopment RFP, for Yoma Strategic Holdings, Ltd.
2014 0 :	Finalist Team: Aedas – Arup Singapore – Ramboll Atelier Dreiseitl
2014 - Ongoing	Architectural conservation specialist consultancy and impact studies on historic
2012 2010	buildings affected by Circle Line Stage 6, for Land Transport Authority
2013 - 2019	Architectural conservation specialist consultancy for Raffles Hotel, for Katara
2012 2010	Hospitality Ltd.
2013 - 2018	Architectural conservation specialist consultancy for former MGS Olson Building, Trinity Theological College Chapel, and Nan Hwa Girls' School, Singapore, for Hoi
	Hup Sunway Mount Sophia Pte. Ltd.
2013 - Ongoing	Architectural conservation specialist consultancy for former Myanmar Railways
2013 - Origoirig	Building, Yangon, Myanmar, for Peninsula Yangon Ltd.
2012 - 2017	Architectural conservation specialist consultancy for Cathedral of the Good
2012 - 2017	Shepherd, Singapore, for Cathedral of the Good Shepherd.
2011 - 2015	Architectural conservation specialist consultancy for Capitol Building, Theatre and
2011 2013	Stamford House, Singapore, for Architects 61.
2009 - 2015	Architectural conservation of former military complex and NCO Club at Beach
2009 2015	<b>Road, Singapore (South Beach Development)</b> , for South Beach Consortium Pte Ltd.
2008-09	Façade restoration (artificial stone) for the former Victoria School building
2000 09	(People's Association HQ Project) for Singapore Piling & Civil Engineering Pte Ltd.
2007-08	Documentation, Analysis and Conservation Guidelines for the Former Supreme
2007 00	<b>Court Building Singapore</b> (with School of Specialization in Restoration of Monuments,
	Genoa, submitted to MICA and PMB for use in National Art Gallery Project).
	Sensa, saonneed to mich and rind for ase in National Are Gallery Projecty.

# <u>TAN</u> KAR LIN

Architectural Heritage Research Specialist Director, STUDIO LAPIS

Master of Arts (Architecture) [NUS, 2004] Master of Architecture [NUS, 2001] Bachelor of Architectural Studies [NUS, 1998]

Nationality	Singapore Citizen
Email	mail@studiolapis.sg

# Expertise

- Archival research and analysis
- Colonial and modernist architectural heritage in Singapore
- Place history and urban culture
- Built heritage documentation and evaluation
- Adaptive reuse architectural design
- Modern Architecture, Sites and Landscapes

# Professional Membership & Civil Society Involvement

- Founding Exco Member, Docomomo Singapore Working Group-in progress
- Founding Director, ICOMOS Singapore
- Member, Singapore Heritage Society (Exco Member 2004 2005)

# Awards & Grants

2018	URA Architectural Heritage Award Special Mention – Sophia Hills Development
2017	UNESCO Asia Pacific Awards for Cultural Heritage Conservation (Honourable
	Mention) – Cathedral of the Good Shepherd
2017	URA Architectural Heritage Award for Restoration – Cathedral of the Good Shepherd
2016	URA Architectural Heritage Award for Restoration & Innovation – Capitol
	Development
2016	URA Architectural Heritage Award Special Mention – South Beach Development
2014	NHB Heritage Project Grant for book project Our Modern Past: Modern Architecture in
	Singapore 1920s – 70s
2004	URA Architecture and Urban Design Excellence Grant for book project Our Modern
	Past: Modern Architecture in Singapore 1920s – 70s
2002	National Heritage Board (Singapore) Research and Curatorial Grant for
	improvement of the National Archives Building Plans Collection.
2001-03	National University of Singapore Research Scholarship for MA(Arch) by Research
	degree at the Centre for Advanced Studies in Architecture, NUS.

# Professional Experience

2009 - present	Partner & Director, Studio Lapis
2008-2009	Architectural Heritage Research Consultant
2004 - 2007	Editor & Chinese Editor, Singapore Architect Journal, Singapore Institute of Architects
2003	Teaching Assistant, Department of Architecture, National University of Singapore
2000 - 2002	Editor, Singapore Architect Journal, Singapore Institute of Architects
2000 - 2001	Junior Research Assistant, Department of Architecture, National University of Singapore
1998 - 1999	Architectural Assistant, Point Architects, Singapore.

# Selected Projects

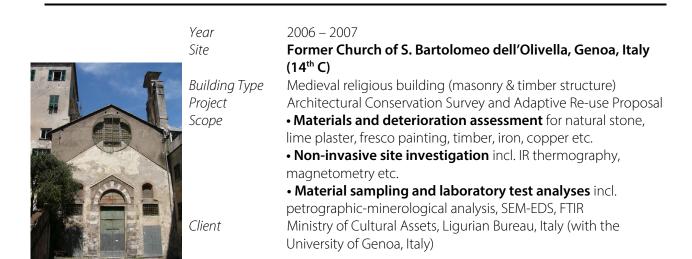
2020 – ongoing	Architectural conservation specialist consultancy for <b>conserved bungalow at</b>
	Mountbatten Road, for DSLSG Investment Co. Pte Ltd
2018 – Ongoing	Architectural conservation specialist consultancy for NHB Museums, for National
	Heritage Board
2017 – Ongoing	Chief Editor & Expert Contributor, Conservation Technical Handbook Series: A
	Guide to Best Practices, for Urban Redevelopment Authority & ICOMOS Singapore
2017 – Ongoing	Architectural conservation specialist consultancy for State-owned historic
	properties, for Singapore Land Authority
2016 - 2017	Research Study and Conservation Management Plan for Haw Par Villa, Singapore
	for National Heritage Board Singapore
2016 - Ongoing	Conservation and adaptive reuse specialist consultancy for Halic Tersane, Istanbul,
	<b>Turkey</b> , for Sembol-Ekopark İnşaat-Fine Otelcilik JV
2015	Architectural conservation specialist for Singapore Rail Corridor RFP, for Urban
	Redevelopment Authority Singapore
	Finalist Team: Office of Metropolitan Architects – OLIN – DP Architects
	Finalist Team: MVRDV – Grant Associates – Architects 61
2014 - Ongoing	Architectural conservation specialist consultancy and impact studies on historic
	buildings affected by infrastructural development, for Land Transport Authority
2013 - 2018	Architectural conservation specialist consultancy for former MGS Olson Building,
	Trinity Theological College Chapel, and Nan Hwa Girls' School, Singapore, for Hoi
	Hup Sunway Mount Sophia Pte. Ltd.
2013 - Ongoing	Architectural conservation specialist consultancy for former Myanmar Railways
	Building, Yangon, Myanmar, for Peninsula Yangon Ltd.
2012 - 2017	Architectural conservation specialist consultancy for Cathedral of the Good
	Shepherd, Singapore, for Cathedral of the Good Shepherd.
2011 - 2015	Historiography documentation of the restoration of Victoria Theatre and Victoria
	Concert Hall, Singapore, for MICA/ NAC
2011 - 2015	Architectural conservation specialist consultancy for Capitol Building, Theatre and
	Stamford House, Singapore (URA Land Sales redevelopment), for Architects 61.
2011-12	Built heritage documentation and evaluation of Singapore railway landscapes,
	structures and artefacts, for Singapore Heritage Society, submitted to MND and URA.
2009 - 2015	Architectural conservation of former military complex and NCO Club at Beach
	Road, Singapore (South Beach Development), for South Beach Consortium Pte Ltd.
2013	Author & Researcher, Architectural Monograph on Sonny Chan S Y.
2011-12	Built heritage documentation and evaluation of Singapore railway landscapes,
	structures and artefacts, for Singapore Heritage Society, submitted to MND and URA.
2009	Restoration cleaning of historic stelae at Hong San See Temple (National
	Monument) for Preservation of Monuments Board Singapore.
2005-07	Editor, Singapore Architect Journal #225 – 237, Singapore Institute of Architects.
2004 - 2014	Author & Researcher (With Ho Weng Hin and Dinesh Naidu), Our Modern Past:
	Modern Architecture in Singapore 1920s – 70s, Singapore: Singapore Heritage
	Society, in 2 Vols.
2003-04	Building Plans Database for National Archives of Singapore, funded by National
	Heritage Board Research and Curatorial Grant (Awarded 2002).
2001-04	The 'Worlds' Entertainment Parks of Singapore (1920s-1980s): New Urban Form
	and Social Space for Culture and Consumption (Academic dissertation for MA(Arch)
	degree, NUS, Supervisor: Dr Wong Yunn Chii).

# ARCHITECTURAL CONSERVATION PORTFOLIO



### \* National Monuments

Neo-classical institutional buildings (steel, RC and masonry Initial Conservation Assessment for the National Art Gallery Project (Singapore) in collaboration with NUS Department of





\* National Monument

### 2006 - 2008

Year

#### Site Former Supreme Court, Singapore (1939) Building Type Neoclassical institutional building (steel, RC & masonry structure) Specialisation Thesis submitted to MICA and PMB for use in NAG Project Project Architectural conservation documentation analysis & Scope guidelines • Materials and deterioration assessment for artificial stone facades, terrazzo finishes, plasterwork, rubber tiling etc. • Material sampling and laboratory test analyses incl. petrographic-minerological analysis, SEM-EDS, FTIR, tests for soluble salts, carbonation of artificial stone finishes Restoration specification and techniques for artificial stone and terrazzo

	Year	2008 – 2009
	Site	54 & 56 Heeren Street, Malacca, Malaysia (Late 18 C &
		1930s)
	Building Type	Dutch & British colonial terraced townhouses (masonry & timber structure)
	Project	Architectural Conservation and Adaptive Re-use for NUS-DOA Tun Tan Cheng Lock Centre for Asian Built Heritage Research and Conservation
	Scope	<ul> <li>Materials and deterioration assessment for brick masonry, lime plaster, mineral paintwork and metallic elements</li> <li>Non-invasive site investigation incl. IR thermography</li> </ul>
	Client/ Architect	NUS Department of Architecture

# \* Restoration Project in UNESCO World Heritage Site



\* Winner of URA Architectural Heritage Awards 2009

	Year	2009
	Site	Hong San See Temple, Singapore (1913)
	Building Type	Southern Chinese religious building (Minnan traditional timber
		and stone structure)
March Para	Project	Restoration of National Monument
A DECEMBER OF A	Scope	<ul> <li>Materials and deterioration assessment for natural stone</li> </ul>
		stelae
	1	<ul> <li>Conservation specifications, trial mock-ups and</li> </ul>
	1	restoration cleaning for natural stone stelae
	Client	Preservation of Monuments Board, Singapore

\* UNESCO Asia Pacific Awards for Cultural Heritage Conservation 2010 - Award of Excellence

	Year Site Building Type	2009 <b>9 Units Conservation Shophouses, Joo Chiat, Singapore (1940s-50s)</b> Art Deco/ Modernist terraced shophouses (RC & masonry
	Project	structure) Heritage 9 Development (Adaptive Re-use and New Extension)
3 4 5 PLOT 3 PLOT 4 HOUSE 93 HOUSE 95 HOUSE	Scope	Materials and deterioration assessment for artificial stone facades
		• Conservation specifications, trial mock-ups and site supervision for restoration of artificial stone facades
	Client Architect	Soil-Build Pte Ltd AGA Architects Pte Ltd

Year Site Buildir
Scope
Client

2010, 2012

Scope

Site Building Type

157 Neil Road, Singapore (1890s) Peranakan terraced townhouse (loadbearing masonry and timber structure) • Materials and deterioration assessment for lime plaster and ornamentation

• Trial mock-ups, restoration cleaning, biocide treatment and consolidation of lime plaster and ornamentation NUS Museums, National University of Singapore

	Year	2009 – 2011
	Site	St. George's Church, Georgetown, Penang, Malaysia (1818)
	Building Type	Georgian Neo-classical religious building (masonry & timber
		structure)
	Project	Restoration of National Monument
4	Scope	<ul> <li>Architectural conservation documentation analysis &amp;</li> </ul>
		guidelines
		Materials and deterioration assessment for brick masonry,
		lime plaster, paintwork, stone, terrazzo, timber and metallic
		finishes
THE AL		Interpretation of laboratory test analyses incl. petrographic-
		minerological analysis
		<ul> <li>Restoration specification and techniques</li> </ul>
and the second	Client/ Architect	East Design Architects Sdn Bhd

\* National Monument (Malaysia) in UNESCO World Heritage Site

Year	2009 – 2015
Site	Former military complex & NCO Club at Beach Road,
	Singapore (1930s-50s)
Building Type	Modernist military/ institutional buildings (RC & masonry structure)
Project	South Beach Development, Singapore
Scope	<ul> <li>Architectural conservation documentation, analysis &amp;</li> </ul>
	guidelines
	<ul> <li>Architectural design review for conservation buildings</li> </ul>
a. N	• Materials and deterioration assessment for natural stone,
	brick masonry, terrazzo, steel, bronze, cast iron, ceramics,
	architectural glass, timber, plasterwork, paintwork etc.
	<ul> <li>Restoration specification and techniques</li> </ul>
	<ul> <li>Construction stage specialist consultancy</li> </ul>
Client	South Beach Consortium Pte Ltd
Design	Foster and Partners (UK)

Design Architect

#### \* URA Architectural Heritage Awards 2016 – Special Mention

Aedas Pte Ltd

2010



Year Site Building Type Project Scope

Client Design Architect **Capitol Building & Theatre (1930); Stamford House (1906)** Neoclassical recreational/ residential (RC/ steel/ timber structures)

URA Land Sales for redevelopment (Pre-bid stage)

Architectural conservation initial survey and assessment
 Archival building plans and historical research
 Valparaiso Singapore Pte Ltd/ Gaw Capital
 Herzog & de Meuron (Switzerland)
 Aedas Pte Ltd

#### \* One of three finalists in URA Land Sales Two-Envelope competitive bid

Year	2011 – 2015		
Site	Capitol Building & Theatre (1930); Stamford House (1906)		
Building Type	Neoclassical recreational/ residential (RC/ steel/ timber		
	structures)		
Project	URA Land Sales for redevelopment		
Scope	<ul> <li>Architectural conservation documentation, analysis &amp;</li> </ul>		
	guidelines		
	<ul> <li>Architectural design review for conservation buildings</li> </ul>		
	<ul> <li>Materials and deterioration assessment for natural stone,</li> </ul>		
	brick masonry, terrazzo, mild steel, cast iron, architectural glass,		
	timber, plasterwork, paintwork etc.		
	<ul> <li>Restoration specification and techniques</li> </ul>		
	<ul> <li>Construction stage specialist consultancy</li> </ul>		
Client	Architects 61 Pte Ltd		
Design	Richard Meier & Partners LLP (USA)		
Architect	Architects 61 Pte Ltd		
5			

#### \* URA Architectural Heritage Awards 2016 – Award for Restoration & Innovation



	Year	2011 – 2012
	Site	Singapore railway land (former KTM railway) (1903-70s)
	Building Type	Art Deco/ Modernist transport, infrastructure and ancillary buildings (RC & brick masonry structure)
	Project	Singapore Railway Heritage Survey & Documentation (Rail Corridor Project)
	Scope	• <b>Built Heritage Survey</b> of former train stations, engineering, residential and other structures
III A B. B. B. B. B. B. B. B. B. B. B. B. B.		<ul> <li>Photo-documentation and mapping of railway heritage landscapes, structures and artefacts</li> </ul>
Contra to V	Client	Singapore Heritage Society

2012 - 2015

and timber structure)

Archival research and oral history

videography and photography

\* National Monument (former Tanjong Pagar Railway Station)

Year

Site

Building Type
Scope
Client
Architect

### \* National Monument



Building Type Project Scope Client Architect

Year

Site

#### 2012 - 2016

(MICA) W Architects

Cathedral of the Good Shepherd, Singapore (1846) Neo-classical religious building (masonry & timber structure) Additions & Alterations to National Monument • Archival research and conservation survey

Victoria Concert Hall and Theatre, Singapore (1905)

• Construction and historiography documentation by

Neo-classical institutional building (loadbearing masonry, steel

Ministry of Information, Communication and the Arts Singapore

• Materials and deterioration assessment for brick masonry, lime plaster, paintwork, stone, timber and metal

- Restoration specification and techniques
- Construction stage specialist consultancy

Cathedral of the Good Shepherd Architects 61 Pte Ltd

# \* UNESCO Asia Pacific Awards for Cultural Heritage Conservation 2017 - Honourable Mention

#### \* URA Architectural Heritage Awards 2017 – Award for Restoration

	Year Site	2013 - ongoing Former Myanmar Railways Building, Yangon, Myanmar (1870s)
	Building Type	Victorian-era institutional building (masonry & timber structure)
	Project	The Peninsula Yangon/ Landmark Project
	Scope	<ul> <li>Architectural heritage survey</li> </ul>
		Dilapidation and tactile survey for laterite and fair-faced
4		brick masonry, timber and cast iron
		<ul> <li>Conservation design consultancy</li> </ul>
		<ul> <li>Restoration specifications and techniques</li> </ul>
	Client	Prime Estate Developments Ltd.
		Hong Kong & Shanghai Hotels Ltd.
Test .	Architect	Aedas Pte Ltd



# \* Yangon Heritage Listed Building

	Year	2013 - 2018
	Site	Former MGS Olson Building (1928), Trinitity Theological
		College Chapel (1968), Nan Hwa Girls' School (1941)
	Building Type	Early modern institutional building, postwar modern church
		(masonry & RC structures)
	Project	Mount Sophia development
	Scope	<ul> <li>Architectural heritage survey</li> </ul>
		<ul> <li>Architectural design review for conservation buildings</li> </ul>
		• Materials and deterioration assessment for fairfaced brick
		masonry, clay tiles, mild steel, timber, terrazzo, precast RC
		elements, lime plaster, shanghai plaster, paintwork etc.
		Restoration specification and techniques
TAN		Construction stage specialist consultancy
SPEC -	Client	Hoi Hup Sunway Mount Sophia Pte Ltd
	Architect	Consortium 168 Pte Ltd

# \* URA Architectural Heritage Awards 2018 – Special Mention

	Year	2013 - 2019
	Site	Raffles Hotel (1889-1907) (Raffles Arcade - 1989)
	Building Type	Hotel compound with buildings in various colonial revivalist
	0 ,,	styles (masonry & timber structure)
	Project	Renovation Works to Raffles Hotel
	Scope	Architectural heritage survey
AND DETTY		Architectural design review for conservation buildings
		• Materials and deterioration assessment for brick masonry,
		marble, lime plaster, glazed ceramic, cast iron, clay tiles, timber,
A state of the sta		paintwork etc.
		Restoration specification and techniques
		<ul> <li>Construction stage specialist consultancy</li> </ul>
	Client	Beach Road Hotel (1886) Ltd
	Architect	Aedas Pte Ltd
		• Construction stage specialist consultancy Beach Road Hotel (1886) Ltd

\* National Monument

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11/17



Year Site Building Type Project Scope

Client Architect

Year

# Former Catholic High School (1951)

Art Deco/ Modernist institutional building (RC structure) Feasibility Studies on A&A to Singapore Art Museum

- Initial conservation site survey
- Architectural heritage research
- Conservation design review National Heritage Board

W Architects Pte Ltd



\* National Monument

Site Building Type Project Scope

2014 - 2018

2014

# St George's Church (1911)

Arts & Crafts movement religious building (fairfaced brick masonry structure) Conservation Maintenance and Phased Restoration

- Condition assessment and materials investigation
- Long-term maintenance and restoration plan
- PSM Monuments Grant application
- Construction stage project management
- St George's Church Council



Building Type Project Scope

Client

Year

Site

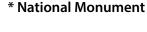
Client

### 2014 - ongoing

Southern Singapore

Various (20<sup>th</sup> C. brick masonry, timber and RC structures) Impact Studies on Historic Buildings Affected by Infrastructural Development including former Tg Pagar Railway Station

- Architectural Heritage Survey
- Building Condition Assessment
- Impact Study & Mitigation
- Land Transport Authority





### 2015

Church of the Nativity of the Blessed Virgin Mary (1901) Building Type Neo-Gothic religious building (partial brick masonry and RC structure) Architectural Restoration of National Monument Condition assessment and materials investigation Scope of restoration work PSM Monuments Grant application

Client

# Church of the Nativity of the Blessed Virgin May

\* National Monument



Year Site Building Type Project Scope Client

Designer

#### 2016 - ongoing

Halic Tersane, Istanbul, Turkey (1700s – 1980s) Brick, masonry, timber, RC and steel workplace buildings (Ottoman and Republic eras) Conservation & Mixed Use Redevelopment • Conservation Design and Adaptive Reuse • Initial Condition Assessment / Restoration Strategies Sembol-Ekopark İnşaat-Fine Otelcilik JV

Year Site Building Type Project Scope

Client

Architect

#### 2016 - 2019

DP Architects Pte Ltd

Former Traffic Police HQ Building, Singapore (1930) Stripped Classicism/ institutional/ barracks - offices Maxwell Chambers Suites

- Architectural heritage survey
- Conservation design analysis and input
- Conservation technical specifications
- Construction stage specialist consultancy

Ministry of Law, Singapore W Architects Pte Ltd



Year Site Building Type Project Scope 2016 – 17

Haw Par Villa, Singapore (1930s – 70s) Landscape gardens with structures, statuary and tableau Research Study on Haw Par Villa

- Archival and bibliographical research
- Field studies and materials testing
- Documentation and condition assessment
- Conservation Management Plan

Client

National Heritage Board, Singapore



Year	2016 - ongoing
Site	Church of St Teresa (1929)
Building Type	Romano-Byzantine influenced religious building (RC
	Structure)
Project	Architectural Restoration of National Monument
Scope	<ul> <li>Architectural Heritage &amp; Dilapidation Survey</li> </ul>
	<ul> <li>PSM Monuments Grant Application</li> </ul>
	<ul> <li>Conservation Design &amp; Tender Stage</li> </ul>
	<ul> <li>Construction Stage Specialist Consultancy</li> </ul>
Client	Church of St Teresa

\* National Monument



2016 - 2018

Year

Site

Project

Scope

Client

Engineer

Building Type

Ellison Building, Singapore (1925)

Art Deco/ Shophouses (loadbearing masonry and timber structure) Conservation Study & Investigation Associated with Construction of North South Corridor • Architectural heritage survey

- Heritage impact assessment
- Conservation technical specifications

Land Transport Authority, Singapore Arup Singapore



Year	2017
Site	Ben Thanh Market, Ho Chi Minh City, Vietnam
	(1914)
Building Type	Fresh and dry goods market building (Ferroconcrete
	structure)
Project	Conservation & Redevelopment Concept Masterplan
Scope	<ul> <li>Architectural Heritage Survey Report</li> </ul>
Client	Tien Phuoc Real Estate JSC
Architect	DP Architects Pte Ltd

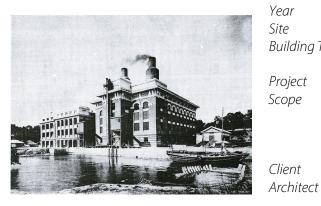


Year Site	2017 - Ongoing Historic State-owned properties in Singapore (1890s – 1950s)
Building Type	Former government bungalows and staff quarters (Brick masonry/ timber/ RC/ steel structures)
Project	Architectural Conservation Specialist Consultancy
Scope	<ul> <li>Built Heritage Survey &amp; Assessment</li> <li>Detailed Conservation Investigation</li> </ul>
Client	• Conservation Management Plan Singapore Land Authority



#### Year 2017 - Ongoing Former St Josephs' Institution (1870s) & Catholic Site High School (1950s) Missionary school buildings adapted as contemporary Building Type art museums (Brick masonry/ RC structures) Additions & Alterations to Singapore Art Museum & 8Q Project SAM Architectural heritage survey Scope Conservation design analysis and input Conservation technical specifications Construction stage specialist consultancy Client Ministry of Culture, Community & Youth SCDA Architects Architect

\* National Monument



Year Site Building Type Project Scope

2017 - ongoing

Former St James Power Station (1928)

Industrial building (Steel structure and fairfaced brick facades)

Redevelopment of St James Power Station

- Architectural heritage survey
- Conservation design analysis and input
- Conservation technical specifications
- Construction stage specialist consultancy

Mapletree Holdings Ltd W Architects Pte Ltd

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\* National Monument

#### ar 2018 - ongoing Former Beach Road Police Station, Singapore (1933) e ilding Type Police station/ offices and quarters (RC structure) Beach Road Mixed Development roject ope Architectural heritage survey Conservation design analysis and input Conservation technical specifications Heritage interpretation Construction stage specialist consultancy GuocoLand Ltd ient Denton Corker Marshall esigner **DP** Architects Architect



A A A A A A A A A A A A A A A A A A A	Year	2018 - ongoing
	Site	Jiak Kim Street Godowns, Singapore (1910s-20s)
	Building Type	Industrial buildings (Load-bearing brick masonry and
		timber structure)
	Project	Jiak Kim Street Development
	Scope	Architectural heritage survey
	,	Conservation design analysis and input
		Conservation technical specifications
,		Heritage interpretation
		Construction stage specialist consultancy
None and	Client	Frasers Properties Ltd
	Designer	SCDA Architects Pte Ltd
S	Architect	P&T Architects and Engineers Ltd
		5
	Year	2018 - ongoing



Year	20
Site	12
Building Type	Βι
Project	Ha
Scope	• /
	• (

Client

Architect

# 018 - ongoing

2 Mount Sophia, Singapore (1893) ungalow (Brick masonry/ timber/ structure) andy Road Redevelopment

- Architectural heritage survey
- Conservation design analysis and input
- Conservation technical specifications
- Heritage interpretation
- Construction stage specialist consultancy

CDL Regulus Pte Ltd Architects 61 Pte Ltd



Year Site Building Type

Project Scope

Client

2018 - Ongoing

Former Tanjong Pagar Railway Station (1930)

Infrastructure/ railway terminus (RC structure, Shanghai Plaster facades)

Architectural Conservation Specialist Consultancy

- Architectural Heritage Survey
- Conservation Management Plan
- Conservation technical specifications
- Protection Works specialist consultancy

Singapore Land Authority

\* National Monument



#### 2018 - Ongoing

Former Empress Place Building (1870s - 1920s) National Museum of Singapore (1880s – 1930s) Former Tao Nan School (1906) Former Istana Kampong Glam (1843) Sun Yat Sun Villa (1901) Building Type Institutional/ Museums (Brick masonry/ timber/ steel structures) Architectural Conservation Specialist Consultancy Architectural Heritage Survey Conservation Management Plan Preservation Guidelines Review

National Heritage Board Singapore

Client

### \* National Monuments

Year Site Building Type Project Scope Client Architect	<ul> <li>2019 - ongoing</li> <li>67 Cairnhill Road, Singapore (1902)</li> <li>Bungalow (Brick masonry/ timber/ structure)</li> <li>Cairnhill Road Condominium Development</li> <li>Architectural heritage survey</li> <li>Conservation design guidance</li> <li>Conservation technical specifications</li> <li>Heritage interpretation</li> <li>Construction stage specialist consultancy</li> <li>Low Kheng Huat (S) Ltd</li> <li>DP Architects Pte Ltd</li> </ul>
Year Site Building Type Project Scope Client Architect	2019 - ongoing Former Kallang Airport and Hangars, Singapore (1937) Civic/ Industrial (Steel/ brick masonry structure) Conservation and • Architectural heritage survey • Conservation design guidance • Conservation technical specifications • Construction stage specialist consultancy Singapore Land Authority Zarch Collaboratives



Year Site Building Type Project Scope

Client

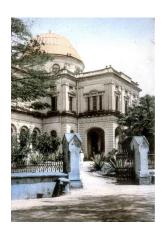
2019 - Ongoing

Shophouses at Stanley Street (1900s)

Terraced shophouses (loadbearing masonry and timber structure)

Architectural Conservation Specialist Consultancy

- Architectural Heritage Survey
- Conservation Technical Specifications
- Taiko Properties Pte Ltd



Year Site Building Type Project

Scope

Client

### 2019 - Ongoing

National Museum of Singapore (1880s – 1930s)

Institutional/ Museum (Brick masonry/ timber/ cast iron) Feasibility Studies on A&A to National Museum of Singapore

- Initial conservation site survey
- Architectural heritage research
- Conservation design review

National Heritage Board Singapore

### \* National Monument



2020 - ongoing
Shaw Tower (1977)
Commercial Mixed Use (RC/ steel structure with precast
concrete cladding)
Shaw Tower Heritage Studies
<ul> <li>Façade cladding technical study</li> </ul>
<ul> <li>Heritage Interpretation</li> </ul>
<ul> <li>Urban Design guidelines</li> </ul>
Shaw Foundation
Aedas



Year
Site
Building Type
Project
Scope
-

Client

2020 - ongoing

Mountbatten Road Bungalow (1930s) Residential (RC and timber structure) Heritage Studies Architectural heritage survey

Heritage Interpretation

DSLSG Investment Co. Pte Ltd