




**Foundation for Public  
Housing Development at Pik  
Wan Road, Site A and Site B**  
碧雲道地盤甲及地盤乙的公營  
房屋發展計劃的地基工程  
(HKHA Contract No. 20220438)

**Design for Safety**  
**建築設計安全**



# Project Particulars 項目工程細節

Contract Title 合約名稱	Foundation for Housing Development at Pik Wan Road Site A and Site B 碧雲道地盤甲及地盤乙的公營房屋發 展計劃的地基工程
Client 業主	 香港房屋委員會 Hong Kong Housing Authority
Commencement Date 工程開始日期	31 March 2023
Original Contract Period 原合約期	27 February 2025
Extended Completion Date 修定合約期	12 July 2025

28 months

Project Duration  
Elapse  
項目進行時間

0

Reportable Accident  
呈報意外

0

Dangerous  
Occurrence  
危險事故

0

AIR per 1,000  
Workers  
千人意外率

757,000 hrs

2024 Cumulative  
Man-hours  
2024年總工時

1,450,000 hrs

Cumulative Accident-  
Free Man-Hours  
項目總工時  
(As at July 2025  
截至2025年7月)



# Site Overview 地盤位置圖





# Scope of Works 工程範圍



## Scope of Work 工程範圍

### Piling Stage 打樁階段

Site A	Bored pile 大口徑樁柱 :	132
	Pipe pile 連續管樁 :	803
	SHP 工字樁 :	91

Site B	Pipe pile 連續管樁 :	83

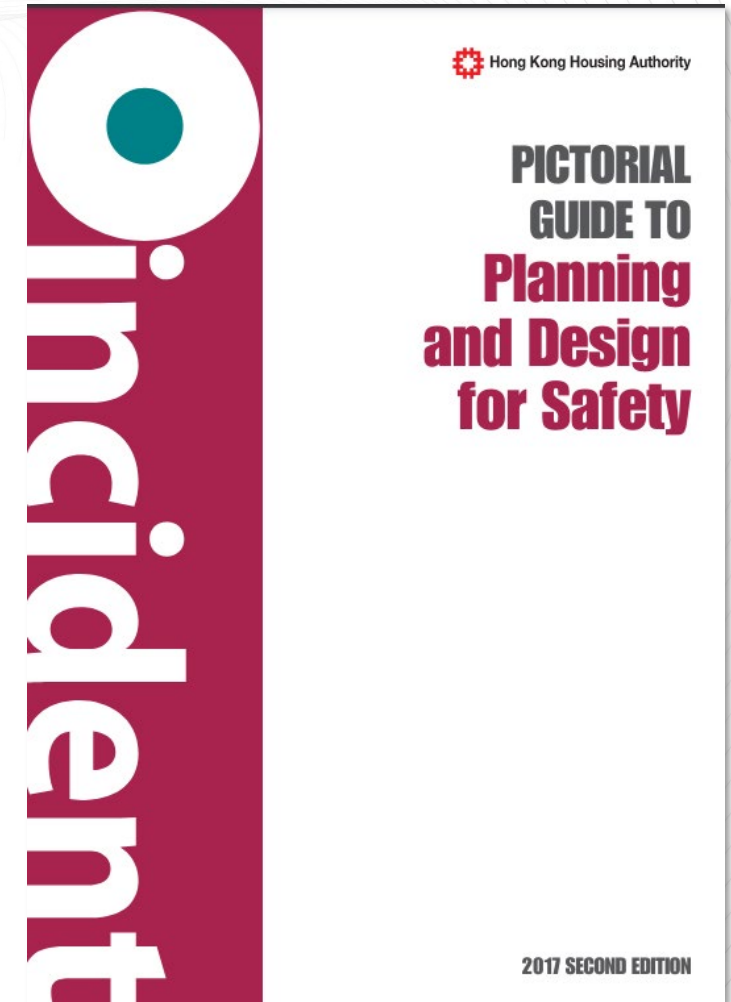
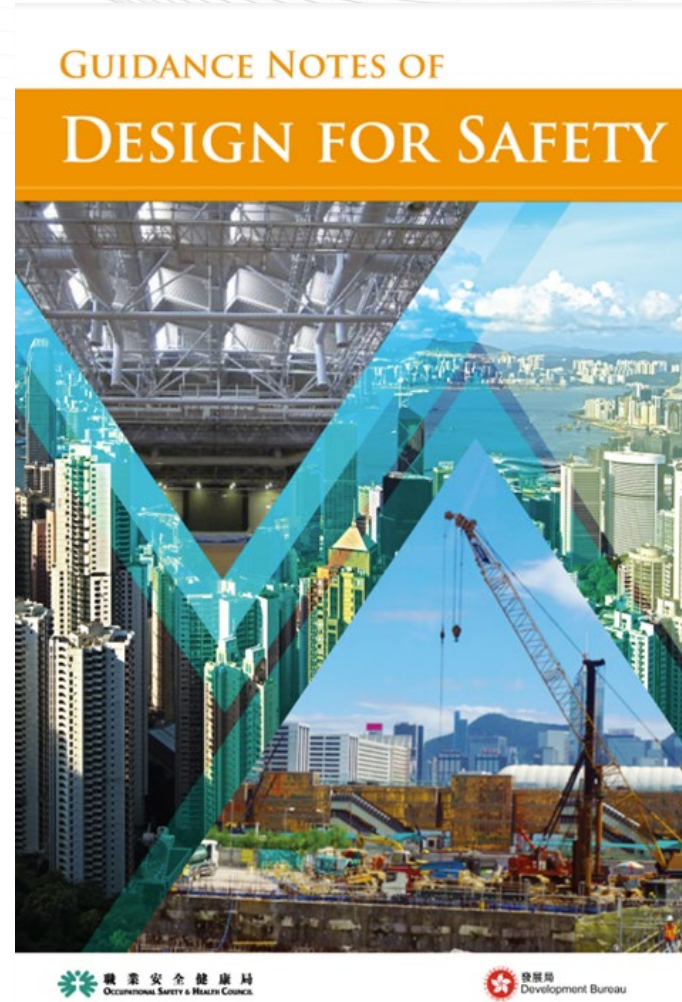
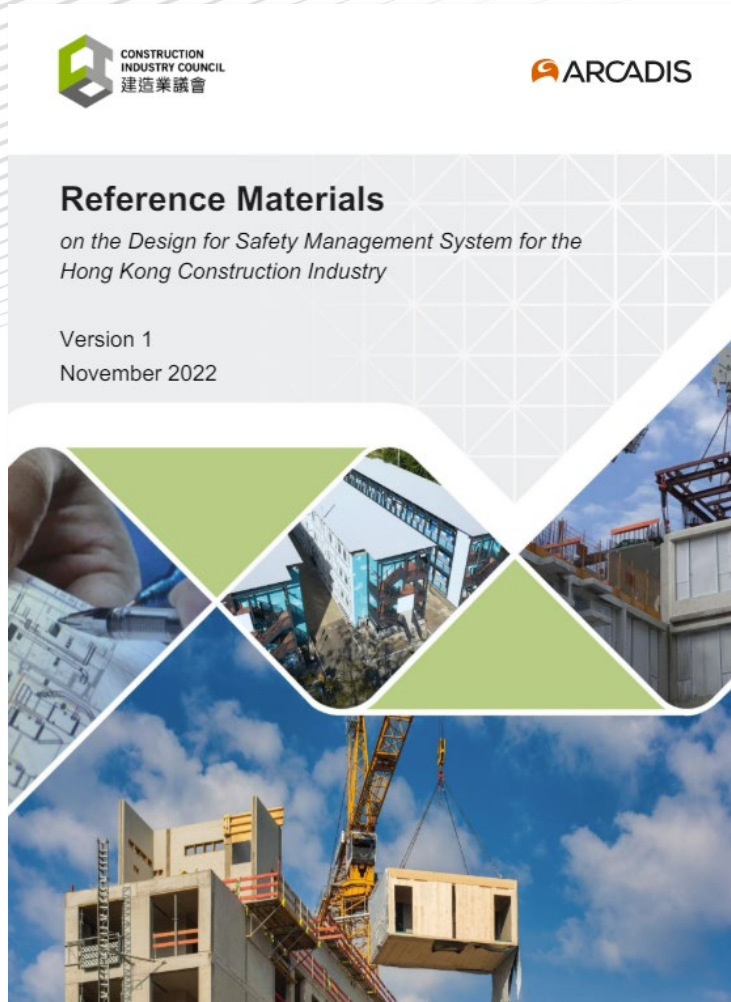
### ELS and Substructure 挖掘及結構階段

Soil excavation 泥土挖掘 :	45,500m3
Rock excavation 硬石挖掘 :	6,100m3
Back fill 回填 :	4,800m3
Footing 基腳 :	35,900m3

Soil excavation 泥土挖掘 :	6,000m3
Rock excavation 硬石挖掘 :	4,600m3
Backfill 回填 :	1,500m3
Footing 基腳 :	9,900m3



# Design of Safety 建築設計安全





# Temporary Works Management 臨時工程管理



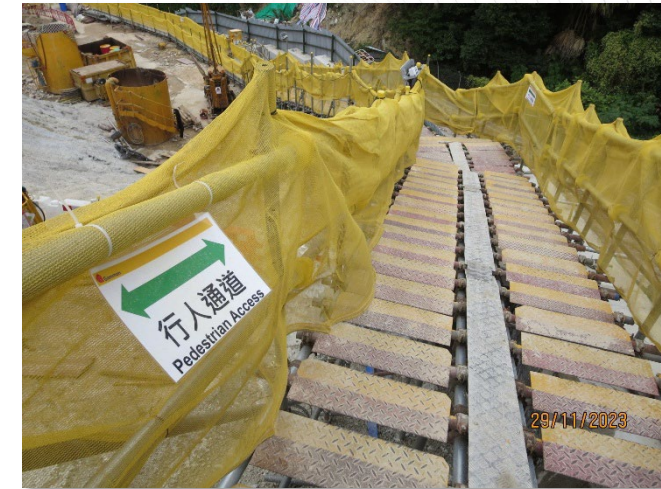
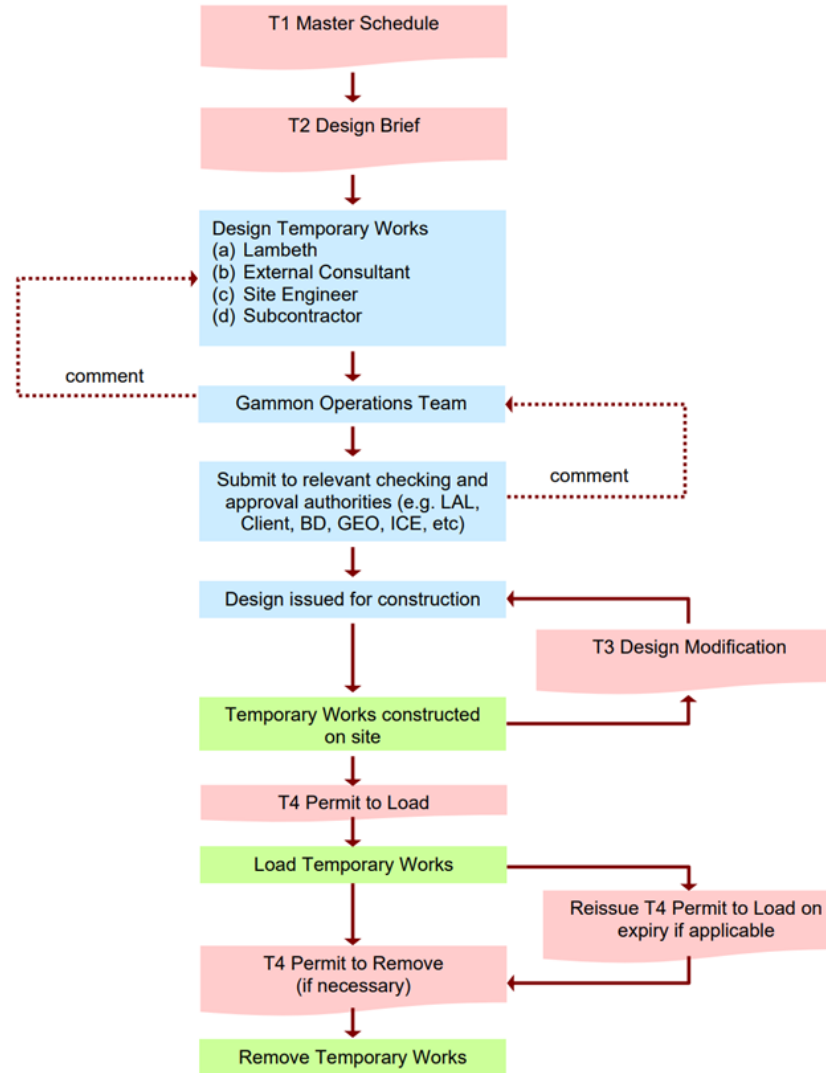
## Reference Material



## Temporary Works Management Plan

www.cic.hk  
www.twforum.org.hk

March 2023





# Design for Site Access and Working Area 通道與工程設計



Designated Loading and Unloading Area  
指定裝卸區及調頭區



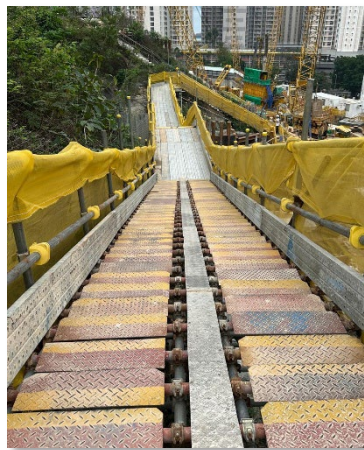
Install Crane Kicker  
near the Retaining Wall  
在擋土牆附近的起重機安裝阻擋設備



Install Metal Bar for  
Water Barriers on the Slope  
在斜坡上的水碼安裝金屬桿



Safety Pedestrian Walkway on the Slope  
於斜坡建立安全行人通道



Using Wheel Stoppers for Vehicles  
使用車用輪擋



Set up Speed Bump  
減速帶

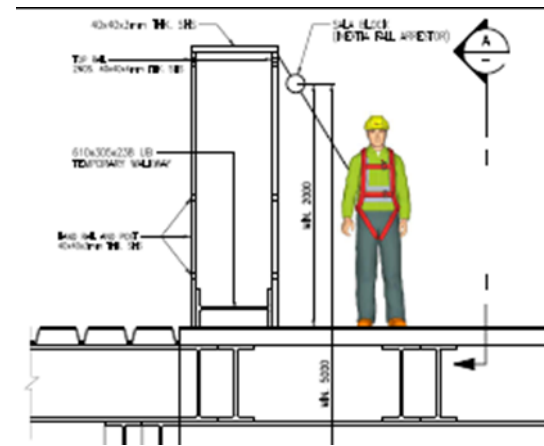


# Safety Design for ELS Works 挖掘及安裝支撐的安全設計

Tailor-made fall arrest system  
度身定制防墮安全系統



Scaffold Working Platform for  
Assembly of Steel Platform  
金屬棚架工作平台組裝大型臨時鐵台

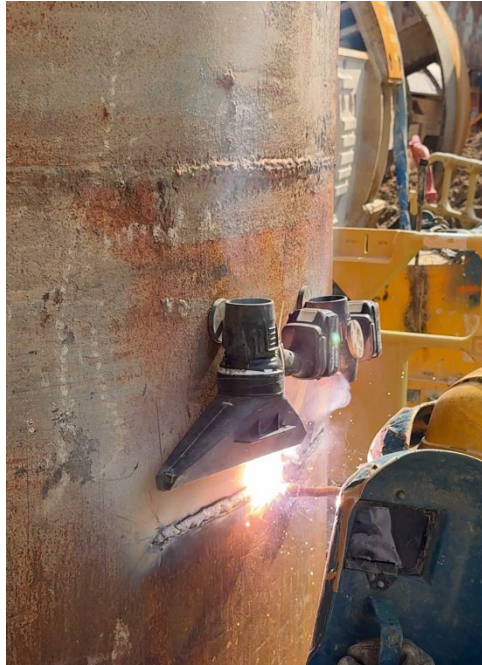




## Piling Works 樁柱工程



RCD Chute  
反循環鑽機滑槽



Portable Welding Ventilator  
便攜式焊接抽風機



Rotator Ring Guard  
磨樁機防墮環



Welding Support  
燒焊支架



# Digital Technology 應用科技 – 4S Applications 安全智慧工地應用



安全智慧工地系統標籤計劃  
SMART SITE SAFETY SYSTEM  
LABELLING SCHEME



Mobile Plant Collision  
Warning System  
機械防撞系統



AI Camera  
人工智能鏡頭




Digital Permit-to-Work  
電子許可工作系統



VR Safety Training  
虛擬實境訓練

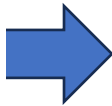


# Dynamic Risk Assessment 動態風險評估



WORK FACE RISK ASSESSMENT  
工地風險評估

Contract 合約名稱: _____		Name of person completing assessment 風險評估人員名稱: _____		Date: 日期: _____	
Number of workers in team: 工作小組人數: _____		Name of direct supervisor: 直接主管名稱: _____		Company: 公司名稱: _____	
Works Location 工作地點	Work being carried out 有關進行之工序	Associated Hazards/Risks 有關之危害 風險	Control measures required 所需之控制措施	Morning (AM) 早上	Afternoon (PM) 下午
Signature of person conducting assessment 風險評估人員簽署			Signature of direct supervisor reviewing assessment 進行風險評估檢討之直接主管簽署		

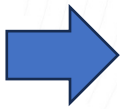




Dynamic 動態風險評估

Risk Assessment

Mindful  
用心致志

PEOPLE 員工	<ul style="list-style-type: none"><li>Insufficient Supervision 監督不足</li><li>New / Inexperienced Workers 新任 / 經驗不足的員工</li><li>Inadequate Communications 溝通不足</li><li>Insufficient Resources 資源不足</li><li>Competence 工作能力</li></ul>	What are the <b>two</b> most serious things that could go wrong and what will you do about it? 列舉兩個可能出錯的嚴重事件，而你會如何處理？  <b>Other Comments</b> 其他意見    Date 日期: _____ Area of Work 工作範圍: _____ Job Description 工作簡介: _____
EQUIPMENT 機械設備	<ul style="list-style-type: none"><li>Scaffolding / Ladders / MEWPS 棚架工程 / 梯 / 移動式升降工作平台</li><li>Incorrect Use of Tools 不適當使用工具</li><li>Stability / Collapse of Equipment 機械的穩定性 / 機械失靈</li><li>Inadequate Maintenance 缺乏維修</li><li>Equipment Failures 機械故障</li><li>Damaged / Faulty Equipment 損壞 / 有缺陷的機械</li></ul>	
MATERIALS 物料	<ul style="list-style-type: none"><li>Hazardous Substances 危險物品</li><li>Flammable Substances 易燃物品</li><li>Explosive Substances 爆炸品</li><li>Dimension / Weight / Centre of Gravity 尺寸 / 重量 / 重心</li><li>Waste 廢料</li></ul>	
ENVIRONMENT 環境	<ul style="list-style-type: none"><li>Confined Space 密閉空間</li><li>Working at Height 高空工作</li><li>Concurrent Work 同時進行的工作</li><li>Temperature 溫度</li><li>Lighting 燈光</li><li>Ventilation 通風</li><li>Vibration 振動</li><li>Weather Extremes 極端天氣</li></ul>	





DRA-00908

Zone/Block: Whole Site Area


Area/Floor: Area 2

Description: Pre work briefing to scaffolding workers for lowering scaffolding work. Remind workers again that during the scaffolding lowering, the scaffolding work should wear the safety belt, and attach continuously to a suitable and secure anchorage.

Briefed Staff: 3

Something might go wrong for:

- People: Without safety PPE like fully body harness during working at height
- Equipment: N/A
- Material: N/A
- Environment: Working at height
- Work nature: Work At Height
- Work Activity: Scaffold







**Thank you**

