



中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGINEERING (HONG KONG) LTD.

良好工作場所整理分享



日出康城7期A及B商住項目



1. 地盤簡介

日出康城7期A及B商住項目

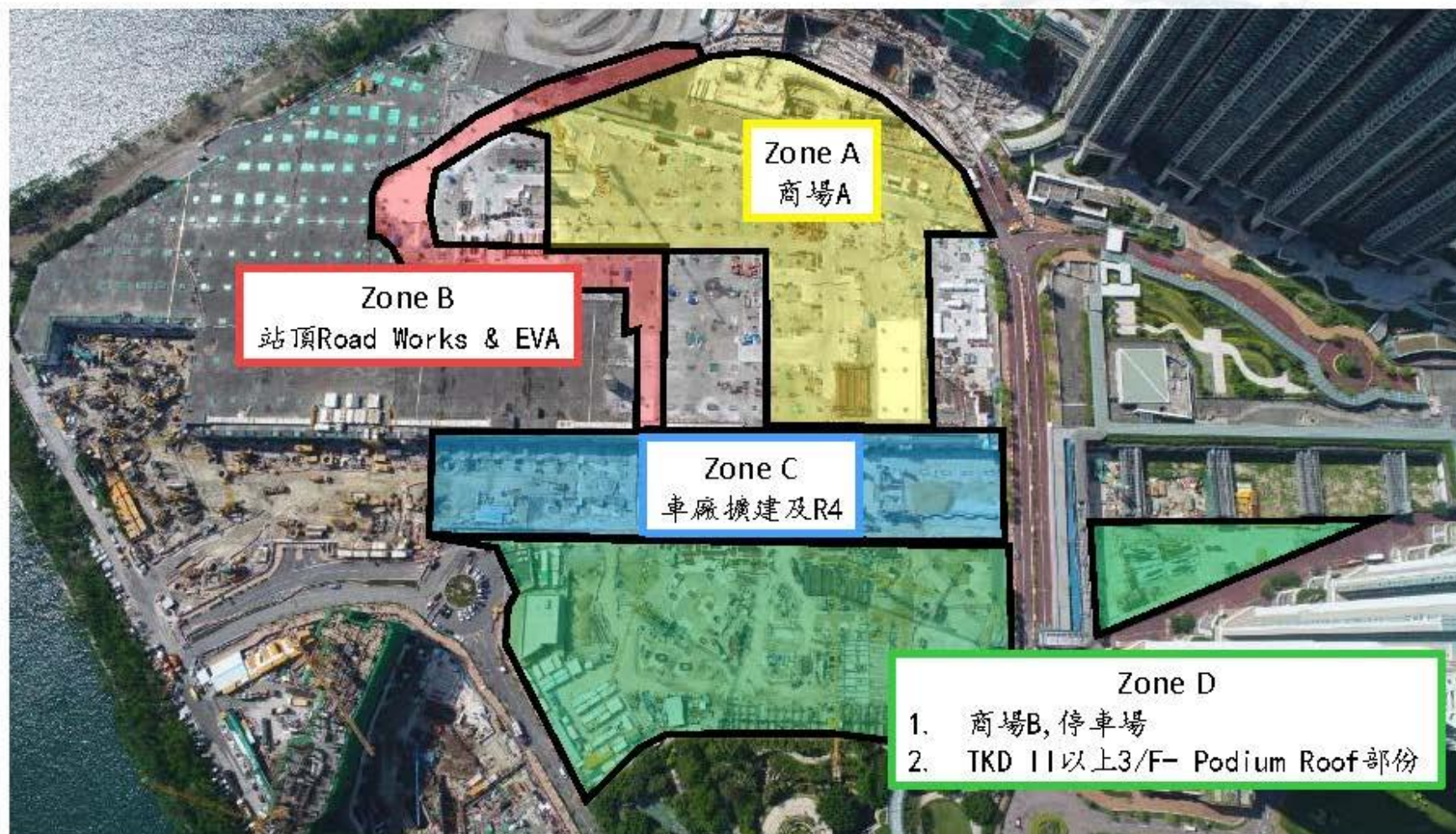
本地盤為港鐵日出康城站旁車廠上蓋發展項目，總承建商為中國海外房屋工程有限公司，工期為2017年6月至2022年5月。

由於本地盤位置康城中心，也是康城區內最大、最複雜，最多工作種類的工地。工作種類涉及為興建車廠延伸部份、5層高商用樓宇、2座58層高住宅大樓的建設、泳池、會所建造、幼稚園及有相關的外部工程和裝修工程，包括環境美化，臨時鋪設工程，道路工程，EVA和鋪路。

工程名稱	:	日出康城7期A及B商住項目
工程地點	:	將軍澳日出康城
總工期	:	52個月
合約金額	:	49.18億港元
開工日期	:	2017年6月



1. 地盤簡介——地盤分區



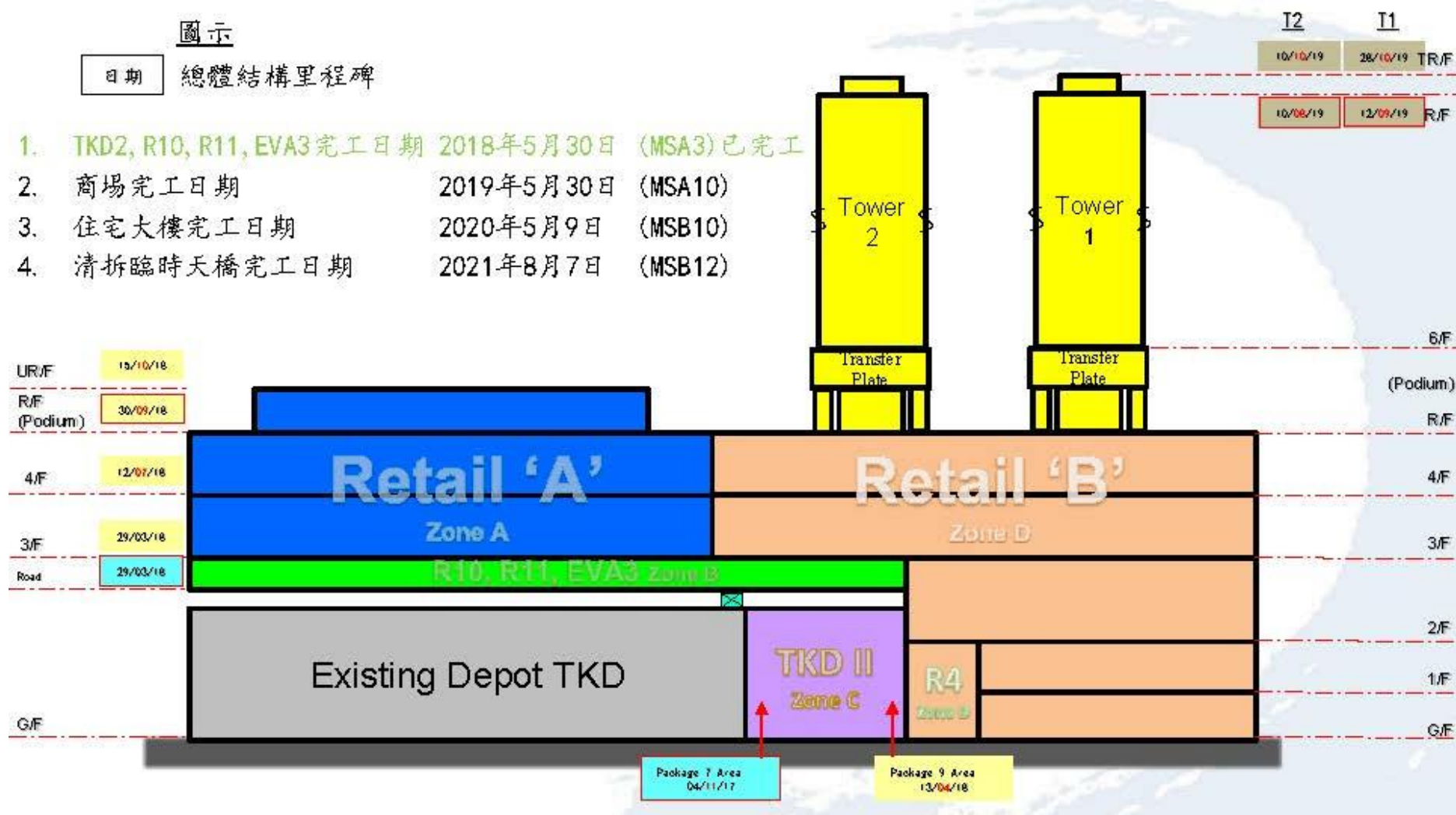


1. 地盤簡介——里程碑

圖示

日期 總體結構里程碑

- TKD2, R10, R11, EVA3 完工日期 2018年5月30日 (MSA3) 已完工
- 商場完工日期 2019年5月30日 (MSA10)
- 住宅大樓完工日期 2020年5月9日 (MSB10)
- 清拆臨時天橋完工日期 2021年8月7日 (MSB12)





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1. 地盤簡介——5S執行目標指標

由職安局、建造業議會及勞工處主辦的比賽中，獲得以下殊榮及受到業界肯定：

- (金獎) 2017 & 2018 良好工作場所
- (銅獎) 2017 最佳演譯





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地盤簡介——5S工作

5S規劃-分區責任制

Zone 4

地盤總管	: 陳榮樂
高級管工	: 李樂生
管工	: 歐廣興
管工	: 袁偉文
管工	: 陳俊雄
管工	: 李德康
助理管工	: 陳祈孝
助理管工	: 鄭偉耀
助理管工	: 羅永棠
助理管工	: 張偉杰
助理管工	: 蘇俊錫
助理管工	: 范志豪
助理管工	: 陳許倫
助理管工	: 江景峰
助理安全經理	: 張帆
安全主任	: 劉偉傑
安全主任	: 曾楚濤
安全主任	: 朱偉傑
助理安全主任	: 陳漢探
助理安全主任	: 曾正明

Zone 5

地盤總管	: 陳榮樂
管工	: 徐錦偉
管工	: 譚展豪
助理管工	: 陳許倫
助理安全經理	: 張帆
安全主任	: 劉偉傑
助理安全主任	: 曾正明

Zone 6

地盤總管	: 龔錦祥
管工	: 陳俊雄
助理管工	: 范志豪
助理管工	: 陳許倫
助理安全經理	: 張帆
安全主任	: 劉偉傑
助理安全主任	: 曾正明

Zone 7

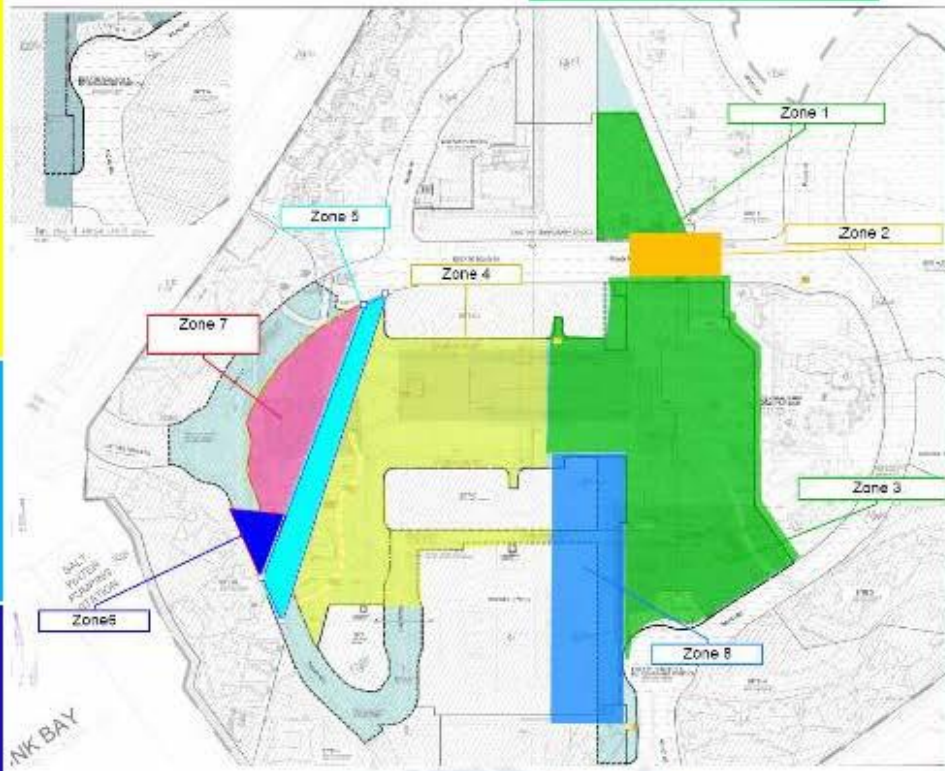
地盤總管	: 陳榮樂
管工	: 陳俊雄
助理管工	: 江景峰
助理安全經理	: 張帆
安全主任	: 劉偉傑
助理安全主任	: 曾正明

Zone 1

地盤總管	: 林振忠
高級管工	: 曾偉權
助理管工	: 蔡宇謙
助理安全經理	: 黃立然
安全主任	: 李秉濤
安全主任	: 戚克智
助理安全主任	: 練建呈

Zone 2

地盤總管	: 林振忠
高級管工	: 曾偉權
助理管工	: 蔡宇謙
助理安全經理	: 黃立然
安全主任	: 黃俊傑
安全主任	: 吳永權
助理安全主任	: 練建呈



Zone 3

地盤總管	: 林振忠
高級管工	: 曾偉權
高級管工	: 周頌邦
高級管工	: 達偉基
管工	: 蔡偉文
管工	: 郭偉雄
管工	: 傅志恒
管工	: 朱善良
助理管工	: 魏嘉輝
助理管工	: 李政恆
助理管工	: 楊兆奇
助理管工	: 張輝宇
助理管工	: 楊澤榮
助理安全經理	: 黃立然
安全主任	: 黃俊傑
安全主任	: 吳永權

Zone 8

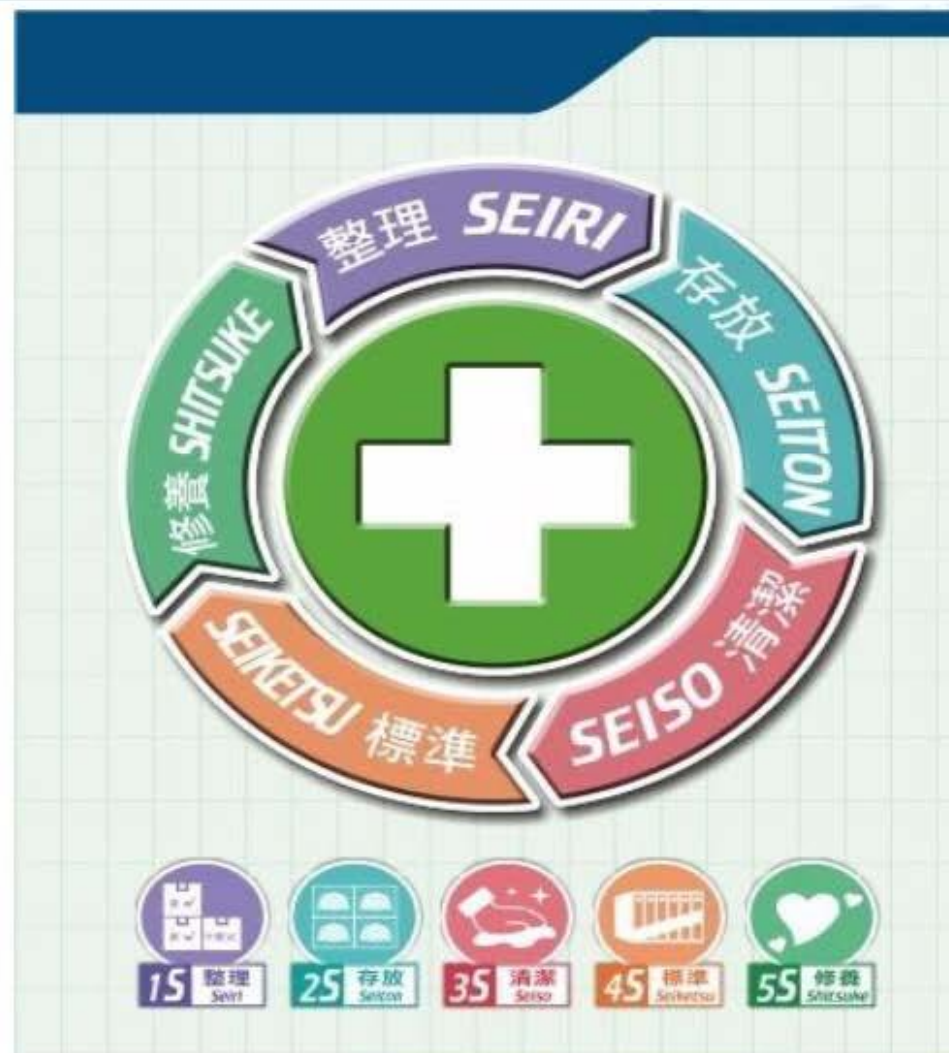
地盤總管	: 林振忠
高級管工	: 曾偉權
管工	: 柳勁淋
助理管工	: 羅明德
助理管工	: 張燦林
助理安全經理	: 黃立然
安全主任	: 李秉濤
安全主任	: 戚克智
助理安全主任	: 練建呈



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地盤5S推行情況





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地盤5S推行情況——1S 整理

5s 整理 Seiri
存放 Seiton
清潔 Seiso
標準 Seiketsu
修養 Shitsuke

1S 整理
Seiri

要 ✓
要 ✓ 不要 ✕

區別與處理要的和不要的物品

Sort out and handle needed and not needed things



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地盤5S推行情況——1S 整理

地盤大門整潔，栽種驅蚊草





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地盤5S推行情況——1S 整理

整潔通道，人車分路





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地盤5S推行情況——1S 整理

寫字樓清晰指示





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地盤5S推行情況——1S 整理

分判工人生活區



提供工人舒閒休息區



洗手間



沖身



衣物晾曬區



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地盤5S推行情況——2S 存放



5s 管理辦法
整理 Seiri
存放 Seiton
清潔 Seiso
標準 Seiketsu
保養 Shitsuke

2S 存放
Seiton

有條理地儲存
和放置物品

Arrange and store things in order



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地盤5S推行情況——2S 存放

鐵料儲存區





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地盤5S推行情況——2S 存放

設立停泊區



大型海報推廣





地盤5S推行情況——2S 存放

辦公室文件有序放置





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地盤5S推行情況——2S 存放

物料分類存放





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地盤5S推行情況——2S 存放

手工具整齊存放





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地盤5S推行情況——3S 清潔



5s 管理法
整理 Seiri
存放 Seiton
清潔 Seiso
標準 Seihetsu
修養 Shitsuke

3S

清潔

Seiso

使工作場所
乾淨無污垢

Keep workplace free of dirt and rubbish



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地盤5S推行情況——3S 清潔

地盤各區環境





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地盤5S推行情況——3S 清潔



於地盤各處安排垃圾桶，
並列明清潔時間



提供洗手設備



定期清理污水處理泥漿



定期清理去水口



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地盤5S推行情況——3S 清潔



提供足夠飲水設備及定期更換飲水機濾心;
提供制冰機制冰, 供工人冰凍飲品之用。



地盤5S推行情況——3S 清潔

先鋒隊每日清潔

地盤每日根據巡查情況，分區定出每日的清掃地點。由分區管理人員帶領雜工，每日由17:30至18:45集中地盤資源清掃。工地相信每日清潔一點點，工地整潔必定得到很大的改善。

安排推行後，工地的整潔有明顯的改善，逐步向前。





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地盤5S推行情況——4S 標準



5s
整理 Seiri
存放 Seiton
清潔 Seiso
標準 Seiketsu
修養 Shitsuke

4S 標準
Seiketsu

將整理、存放和清潔
工作標準化，制定化

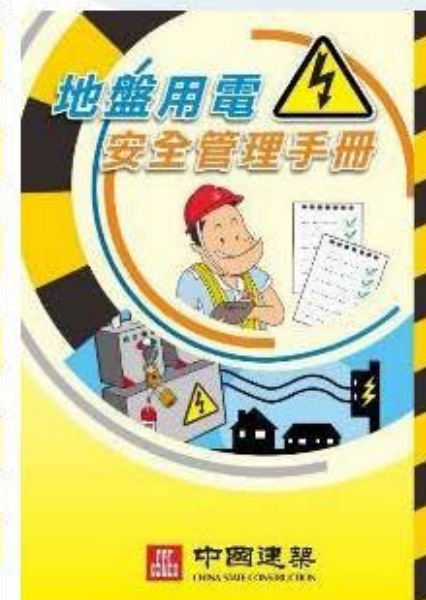
*Standardise and systemise the
housekeeping work*



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地盤5S推行情況——4S 標準

安全工作手冊及安全管理手冊





地盤5S推行情況——4S 標準

吊運工作標準及要求





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地盤5S推行情況——4S 標準

「高處工作安全三寶」展示區



以海報及LED顯示安全資訊





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地盤5S推行情況——4S 標準

手電工具檢驗標籤





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地盤5S推行情況——4S 標準

制定吊重工具識別的標準方案

Colour Code System on Lifting Gears
起重裝置辨色定期檢查表

Jan – Mar 一月至三月	BLUE 藍	
Apr – Jun 四月至六月	YELLOW 黃	
Jul – Sept 七月至九月	GREEN 綠	
Oct – Dec 十月至十二月	ORANGE 橙	
To be removed from the site 不能再使用 待移離工地	RED 紅	
Equipment under quarantine 工具待驗	WHITE 白	



吊重工具使用前需由
已委任訊號員檢查





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地盤5S推行情況——4S 標準

5S 良好例子

○ 沒有最安全 ○ 只有更安全 ○

Main Contract Package A and B For Lohas Park Seven

5S 良好例子 5S Good Example

1S 整理
Seiri



區別與處理廢物和不潔的物品
Sort out and handle wastes and not needed things

2S 存放
Seiton



有秩序地儲存與放置物品
Arrange and store things in order

3S 清潔
Seiso



使工作場所乾淨無污
Keep workplace free of dirt and rubbish

4S 標準
Seiketsu



規範化、有秩序清潔工作標準化、制度化
Standardize and organize the workplace well

5S 修養
Shitsuke



員工自律守規，自覺改善
Self-discipline and self-improvement

日出康城 7 A&B
LOHAS PARK 7 A&B 最佳項目

安全工作系列
Safety at Work Series

CSCEC 中國建築
CHINA STATE CONSTRUCTION



地盤5S推行情況——4S 標準

創新及具創意的安全措施 管道作業智能手帶安全管理系統



即時監察
系統畫面

4G信號 ↑

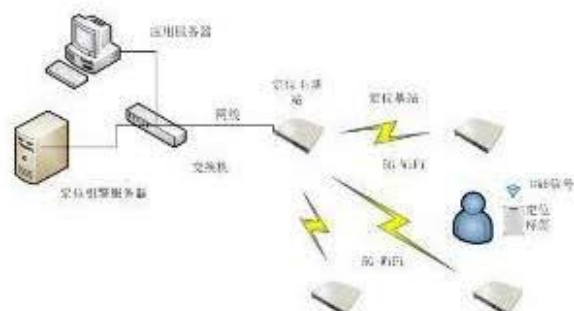


移動基站
-每條隧道內
安裝3~4個

藍牙 ↔



智能
手帶



工友進入非核準的管道：
• 手環會震動，發出警報，提醒該工友。



工友進入非核準的管道：
• 監察畫面會發出警報，並即時指出是該名工友及其位置。



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地盤獲獎情況

2018 - 創意工程安全獎

由發展局、建造業議會及香港建造商會主辦的比賽中，本工地獲得以下殊榮，受到業界肯定：

- (金獎) 2018 創意工程安全獎 - 安全操作設施類別
- (銀獎) 2018 安全短片比賽 - 密閉空間工作





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地盤5S推行情況——5S 修養

5s 整理 Seiri
存放 Seichow
清潔 Seiso
標準 Seiketsu
修養 Shitsuke

5S 修養
Shitsuke

員工自律守規
自發改善

*Rules followed and conditions improved by employees
in a self-disciplined and voluntary manner*



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地盤5S推行情況——5S 修養

早會早操

與工人齊練氣功，推廣工地整潔注意點





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地盤5S推行情況——5S 修養

地盤注重公德和鄰里關係，保持投入資源進行地盤外的環境整理



為康城站A出口提供圍街照明



安排工友定期清潔地盤周邊環境



為鄰里 (7-11) 解決輕微工程問題



安排工友定期清潔去水口，避免水淹



地盤5S推行情況——5S 修養

制訂建造業關顧新人工作安全指引，關顧新入行(P牌)，新到工地工人(N牌)和關愛組工人(C牌)

每星期安排由專人向P牌工人進行連續六次(兩個月)重點培訓，認識地盤內工作的安全及衛生理念，為日後施工安全和衛生的工地環境打好根基。

P Probationer 實習員

N Newcomer 新力軍

Caring 關顧組

導師員 Mentor

新入行工人沒有專業培訓
特色編導員負責培訓新入行
培訓期最少不少於三個月

新到工地工人已具備專業培訓
指導員協助工人安全工作
培訓期最少不少於兩星期

安排專人向C牌工人關顧其工作情況及不可單獨工作。

C Caring 關顧組

比工人數低或專業程度低
比工人數低或專業程度低
比工人數低或專業程度低

關顧對象：
60歲以上年長工友或女性工友

C牌特色：
1. 特別關顧工作情況 2. 不會安排單獨工作

實行C牌的好處：

- 效率提升
- 安全提升
- 和諧提升
- 工傷下降

日出康城 LOHAS PARK A&B 商住項目 | +安全工作系列 Safety at Work Series | 中國建築 CHINA STATE CONSTRUCTION



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地盤5S推行情況——5S 修養

推動行為安全之星，鼓勵工友主動推行工地整潔

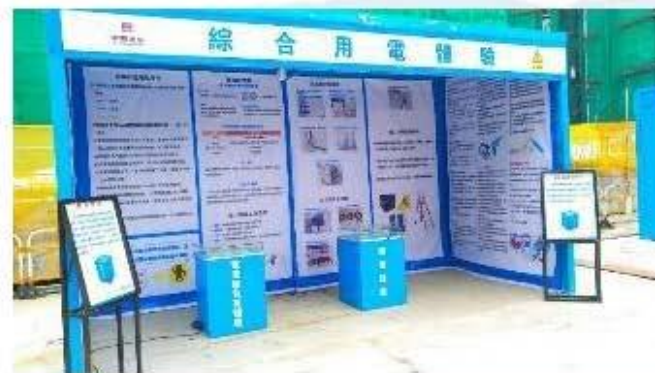


行為安全之星是由本司開發的手機程式，工友在工地執行安全、工地整潔等工作時將會收到獎勵，從而推動工友自發保持工地整潔。7月在本地盤率先開始試行行為安全之星系統，並在9月19日於本地盤舉行中海集團行為安全之星的啟動儀式。



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地盤5S推行情況——5S 修養



VR體驗



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總結

本項目相信，推行5S，並不單單從單一S便可成功，**每一S是環環相扣而不可分割的**。決定能否成功推行5S的因素中，除了令工友有標準可跟隨外，**工友本身的自律及自發**是最重要的一環。

本項目注重**鼓勵工友多關注5S計劃**，將**5S宣傳融入**到工友的工作環境中，比如提供展覽、宣傳海報、早會分享等。項目之後會繼續推動5S，令工友可享受由5S所帶來的**安全和衛生工作環境**。

項目亦因積極推動5S政策之實行，至今**保持良好安全紀錄**，並提供一個**整齊及舒適的工作環境**。

本項目透過執行不同階段之5S管理方案，並針對相應的工序而做出應對，本項目團結一致，繼續保持成效。





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— 匯報完畢 —

謝謝!

Here is the footage of

“Safety Forum 2019 for Works Contracts and Property Services Contracts”

which was held on 3 July 2019

by the Hong Kong Housing Authority

The Speaker is

Mr. Chu Wai Kit

Safety Officer of China Overseas Building Construction Ltd.

His topic is Sharing of Construction Category of

Good Housekeeping Competition 2018-2019 by the Gold Award Winner

Next, besides the keynote speeches just now

we are very happy to have the Construction Group Gold Award winner

of the Good Housekeeping Campaign 2018-2019

organised by the Labour Department (LD), OSHC and CIC

to share with us

Please welcome

Safety Officer of China Overseas Building Construction Ltd

Mr. Chu Wai Kit

to share his experience

Mr. Chu Wai Kit, please

Good afternoon, everyone

Time is limited

I will try to finish my sharing quickly

Let me introduce myself

I am from China Overseas Construction Ltd

Safety Officer Chu Wai Kit

I am happy to speak on behalf of our site today

With the success of the project of Phase 7 Lohas Park

I will share our feelings of winning this award

I will first introduce the site

It is a development above the MTR

Wheelock Properties is the developer

We are the main contractor
and responsible for MTR Corporation shopping mall development

Work period is 52 months, project cost is \$5 billion

Work started in 2017

Look at this aerial photo

It is a very big site

The grey area in the middle

is the Lohas depot currently

On this depot, we will build

the only shopping mall in Lohas Park

There are roadworks too

On top of the shopping mall

there are two 58-storey residential buildings

From the section

it is clear that the grey area is the current depot

The shopping mall will be in area A and B

There are 2 transfer plates on the shopping mall

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where two 58-storey buildings will be built

I will share our site management methods

We adopted 5S management system

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You must have heard of 5S

It is not an easy task in implementing that on site

In 2017 we started to implement the 5S system

we experienced good effects of the 5S system

In 2017 and 2018 we received the gold award

I have a little experience to share

First is Seiri

We believe that effective housekeeping need to rely on
workers and subcontractors working together

We started from gates and doors
Even a simple main door must not be taken lightly
Say, the entrance of a mall
can actually affect the behaviour when you go shopping
for example, between Argyle Centre and Pacific Place
When you go to Admiralty
you would tend to display more decent behaviour
We are convinced of this
Therefore, resources are devoted to the housekeeping of the gate
We do greening work at the gate
plant anti-mosquito species on-site
and pay attention to the ethics on site
Regularly arrange mobile working platform to clean the gates
to keep up our company image
and let people see our effort
Regarding housekeeping on site
we put a lot of resources outdoors
Look at the first photo
There were plastic barriers outdoors
separating vehicles and pedestrians and materials storage
On the right, there were safety cones and barriers indoor
along pedestrian access
to prevent subcontractors from accumulating materials there
We devoted plenty of resources on site
regarding signage on site
there were attractive signs all over the site
For example, when the Labour Department comes to inspect
they don't have to ask
but know their way to everywhere
We had done a good job in this aspect
We provided clear instructions for different people

We concerned about workers' welfare

Many facilities were set up

There were different living zones

On the right was an air-conditioned pantry

In the middle was a green rest zone

and subcontractor's workshop

Regarding toilets

we understood people are annoyed with the toilets on site

We avoided using mobile latrines

but used container-type toilets

There were also shower facilities

and clothes drying zone for workers

Regarding Seiton

Generally people think sites are messy

Under 5S system, innovation, money

and manpower are needed for housekeeping

We did it effectively

We called it bullpen

Blue iron barriers with an iron base

We had made a huge order of these barriers

We set up storage areas in different zones

Especially for big items

such as iron items or steel formwork

Set up storage areas for storing materials

In outdoor areas, there were designated locations

for the parking of mobile plants

We had hung many flyers to show parking zones for vehicles

Stuff would not be left lying in the parking zones

We had also made many banners for project promotion

Regarding the office, documents were placed orderly

Filing Colour Code System in offices provided visual clarity

which saved filing time and raised work efficiency

Labelling was important for storage

Materials were sorted out by different names

Different storage cages were provided

We started from the machine room and material storeroom

and hoped to extend this culture to our subcontractors

The third S is Seiso

The site must be kept clean

There were many covered rubbish bins on-site

On every rubbish bin

there was a label stating the daily removal time

We provided sufficient facilities for washing hands

Sewage was also processed through

precipitation tank and chemical tank

Workers regularly

cleaned up pipe outlets around the site

We paid attention to drinking water facilities for workers

These facilities were placed in covered areas inside the building

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For the outdoors

drinking water facilities were also put in covered areas

There were kettles

Boiled water was provided for workers

There was also an ice machine

All drinking water facilities had the

filters replaced and repaired regularly

Regarding cleaning

the industry consider it difficult to keep sites safe

even more difficult to keep them clean

Our decision was

At 5:30 daily, foremen would lead their teams

of general labourers

to clean up various locations on site

Clean up for the day, do not take this task lightly

If 10 Kg of garbage was produced a day without clean-up

100 Kg of garbage would be accumulated

Daily clean-up effectively enhanced site cleanliness

Daily clean-up effectively enhanced site cleanliness

Do consider this strategy

Regarding Seiketsu

There were so many programs

We standardised these programs and implement them on site

We had printed different booklets

and management handbook for the management level

or for the reference of subcontractors

so that they knew the standards of our site

These standards were printed on different banners

and hung at various locations on site

Workers knew the simple requirements onsite

Follow them and visualise them

Many companies just now

have introduced the 3 safety bobbies

We made this standard visualised

and showed it in the display zone of the site

Look at the right hand side of the photo

For work at height and work above ground

What equipment was necessary

The display in a museum-like area gave a visual effect

That made an impact on the workers

They would not use the facilities without any safety equipment

We hoped to achieve this effect

The effect was quite good

Different banners demonstrated good and bad practices
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They were good education tools
Let me share about our site situation
Lohas Park was on the MTR depot site
Above the depot, a shopping mall would be built
There were 24 throughways in the depot
We just saw these throughways
They were like subways
Not much taller than me
Each was about 100m long
We devoted some resources to
develop this item
to manage the flow of workers in and out of the throughways
In the past, throughway management
solely relied on a permit system
This new measure
monitored workers going in and out of the throughways
This invention had won the recognition of the industry
The Development Bureau and CIC
had given us an award of Innovative Safety Initiative
Regarding Shitsuke
we expected our staff to be self-initiative
be a good influence on others in a caring culture
Every morning workers did Qigong exercise together
and be reminded of points to be aware of
There were volunteers in the Lohas Park neighbourhood
They did cleaning and minor works
Lastly were the Newcomer group and Probationer group
Site personnel are familiar with them
Dr. Yeung mentioned them just now

we also had Caring group

Workers above 60 would be provided with 'C' label on their helmets

We told workers, when they see workers with a 'C' label

We told workers, when they see workers with a 'C' label

to care about them proactively

as they are over 60 and old

We should show our caring culture

Finally it is Safety Star app

Dr. Yeung mentioned earlier

our site rolled out the Safety Star

mobile app for use on site

When workers showed the caring culture

the management would actively

give them credit points via the app

These credit points could be accumulated

With 5 credit points

workers could redeem a gift coupon from the site's safety department

We believed the 5S system were closely related

It is rather difficult to adopt 5S system on site

But we believed proper site management

would lead to good site safety

The sharing today ends here

Thank you

Thank you Mr. Chu

Please be seated

We now understand

We must have heard of 5S system

but are we willing to implement it

Promote it extensively, consistently, for workers

it can create a safe work environment

As Mr. Chu has shared

5S system can be applied to all situations

Be it a door, access or signage

Be more creative and it can be done

Thank you for watching