



Building Information Modelling (BIM)

- Marketing Opportunities

David Fung
BAEM

MTR Marketing / Retail

Modelling

Kiosk Location Plan
KioskLayout Plan
Sections
Elevations
Perspective/ Rendering
Area Diagrams
Sprinkler Layout
Electrical Layout
Air Diffuser Layout
Details
Tenant Provisions
Material/ Colour
Other Diagrams...

Information

Geographical Data
Name/ Type
Area Schedule
Finishing Schedules
Door/Window/Louvre
Schedules
Equipment Ratings
Provision schedules...
Contract Information
Renting Period
Fitting Out approval Record
FS inspection Record
Complaint Record
Operating Data
SCO Cost
Deficiency Record

Modelling

CAD SYSTEMs

e.g. AutoCAD,
Microstation

Information

Word

Excel (spreadsheet)

Access (Data Base)

MS Project

BQ Softwares

.....

Modelling

Information

BIM

Building Information Modeling

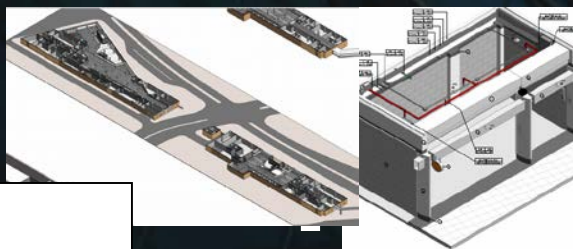
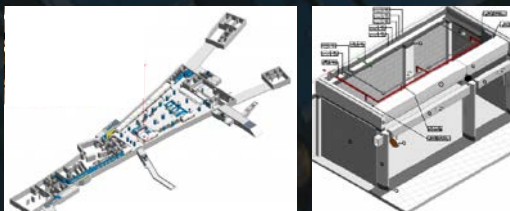
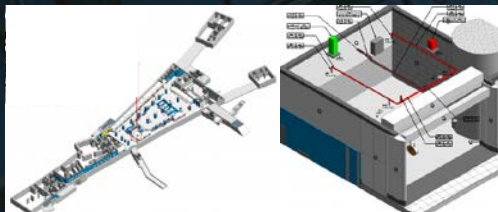
信息化建築模型

- Plan
- Section
- Elevation
- Area Diagrams
- Schematic Designs
- General Building Plans
- Structural Plans
- E/M Drawings
- Schematics
- Other Diagrams

- Area Schedule
- Finishing Schedules
- Door/Window/Louvre Schedule
- Beam/Column Schedule
- Equipment Schedule
- Material Schedule
- Estimate
- Quantity Take Off
- Bills of Materials
- Variations

FACILITY MANAGEMENT ACROSS PROJECTS

MODELLING + INDIVIDUAL DATABASE



SYSTEM WIDE DATABASE

**MEGA
DATABASE**

APPLICATIONS

APP 1

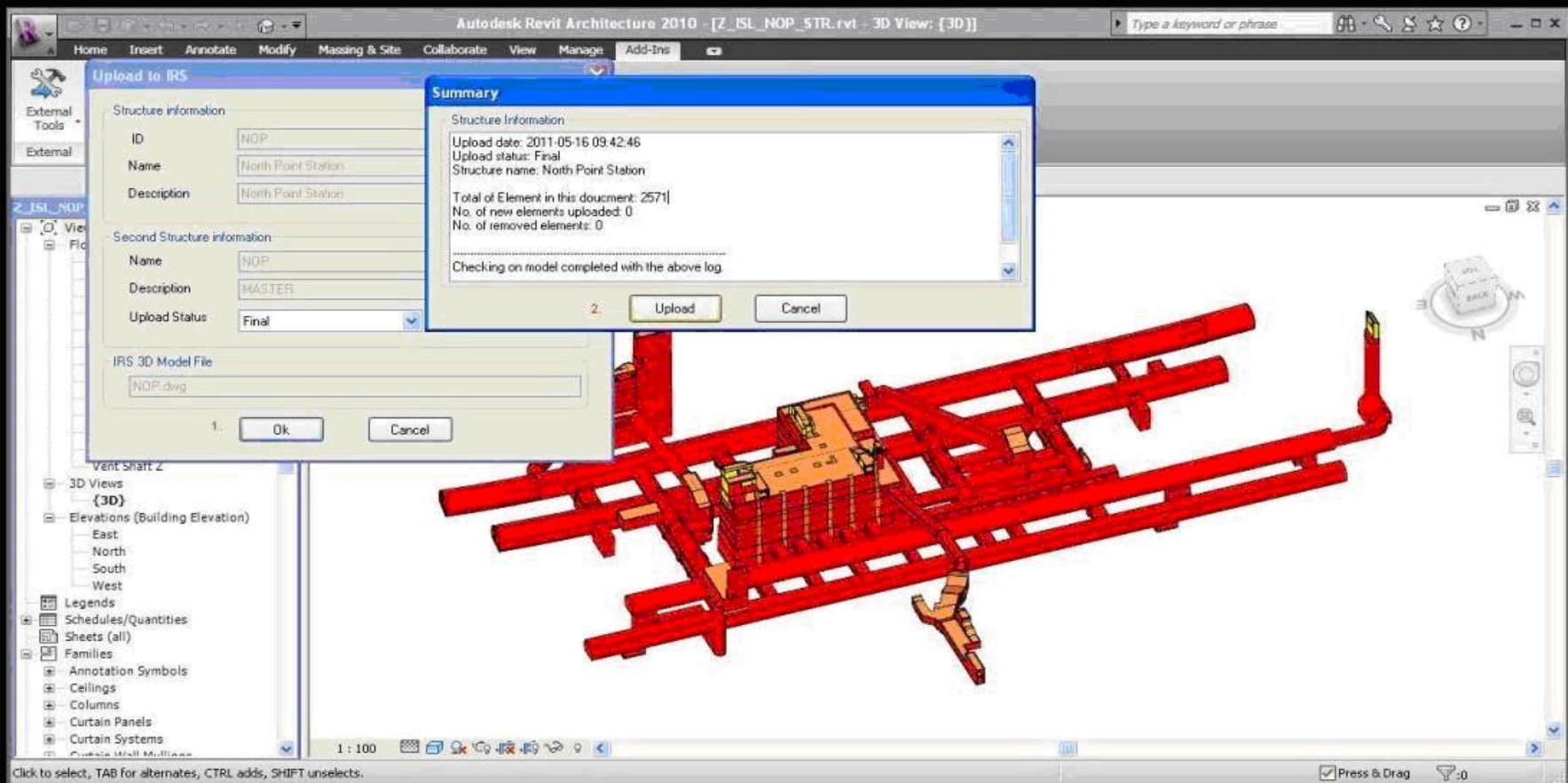
E.G. IRS

APP 2

E.G. RETAIL

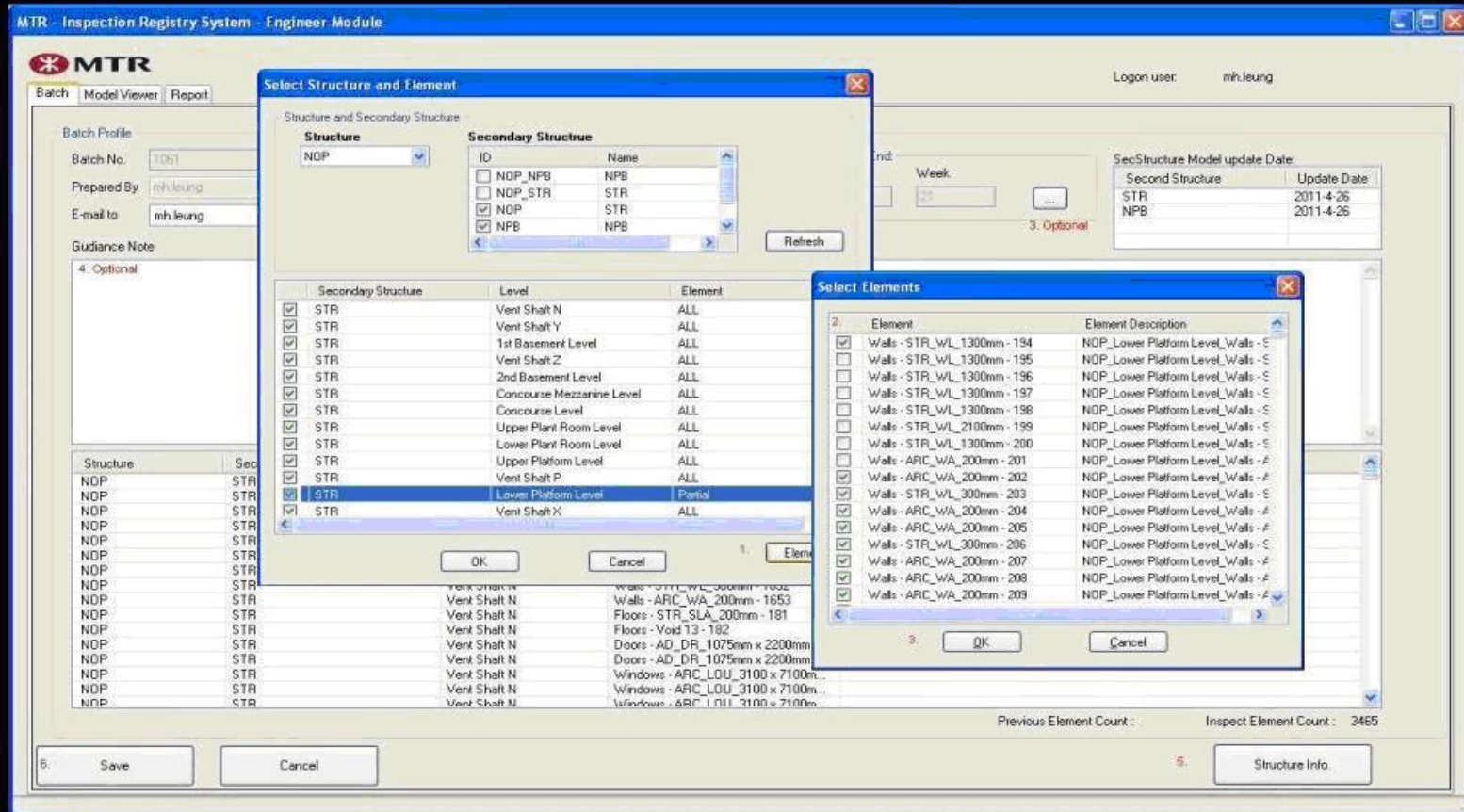
APP 3





1. BIM model preparation

With the help of the Revit application, 3D model of the station structures with detail attributes are prepared. This is the starting point for the lifecycle of the inspection process. After that, the 3D model will be uploaded to the central system server by using customized Revit plug-in to complete the BIM model preparation process.

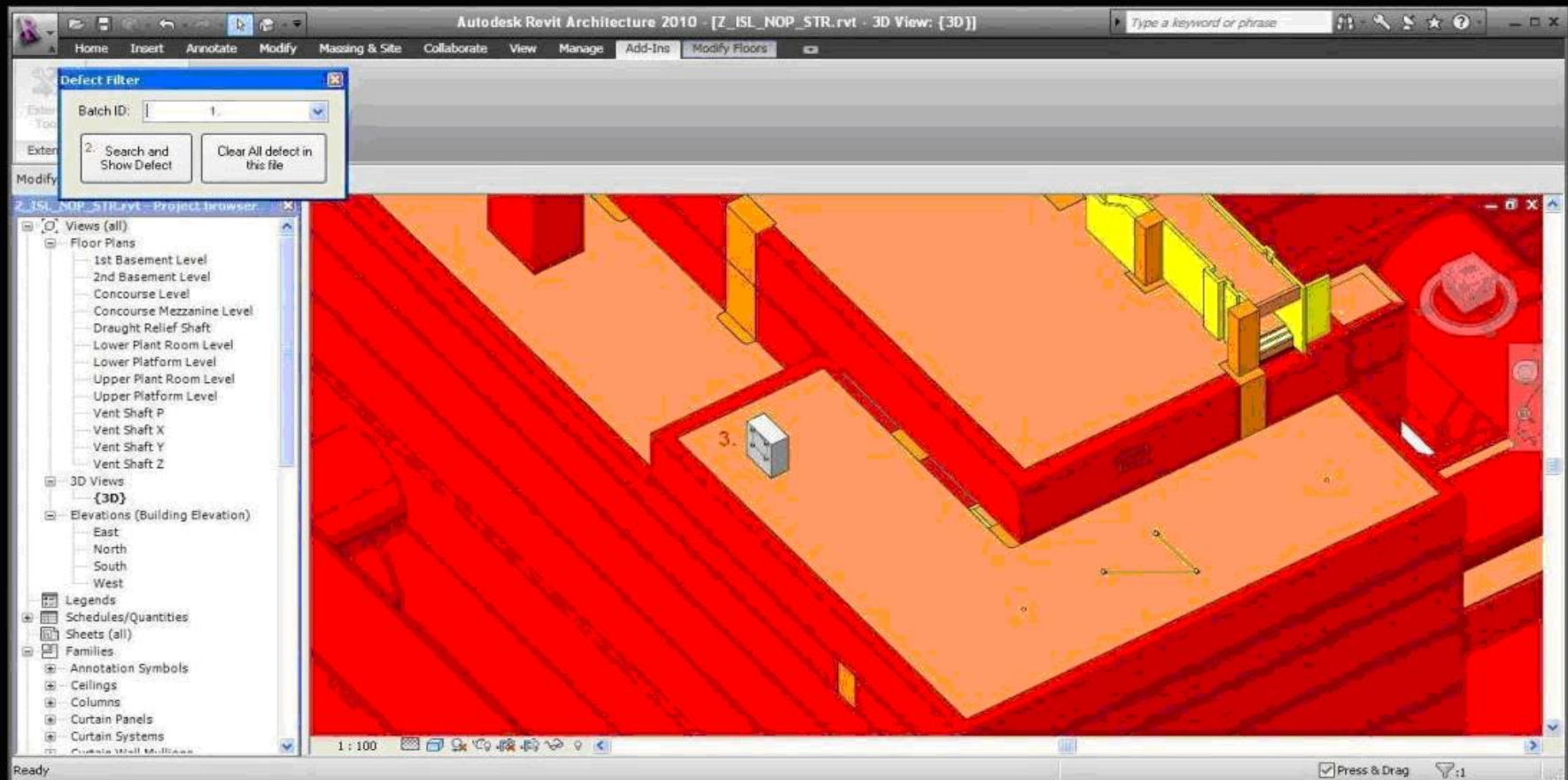


2. Creating inspection order

The second stage of process is creation of inspection order by Engineers. Previously prepared BIM model will be the targeted structure for inspection. Relevant parameters including levels to be inspected, inspection schedule, and responsible Inspector will be assigned in this stage.

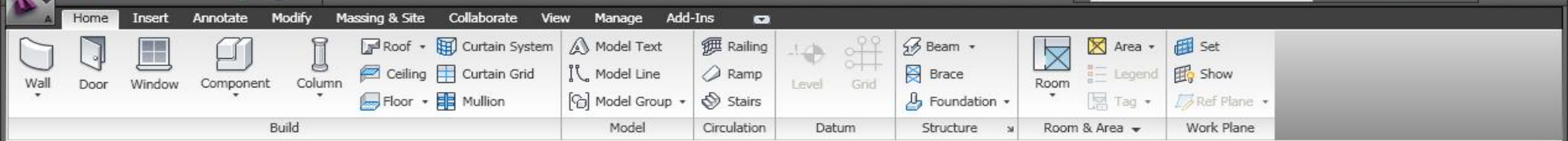
Cost

- Stage 1
Survey 0.5 days
 - Modelling 10 working days
 - Cost about \$5000 - 7,000 per lease
 - Deliverable, Drawings, DWF, Schedules
- Stage 2
 - Marketing Interface,
 - IT tender
- Stage 3
 - System Maintenance, Information Updating



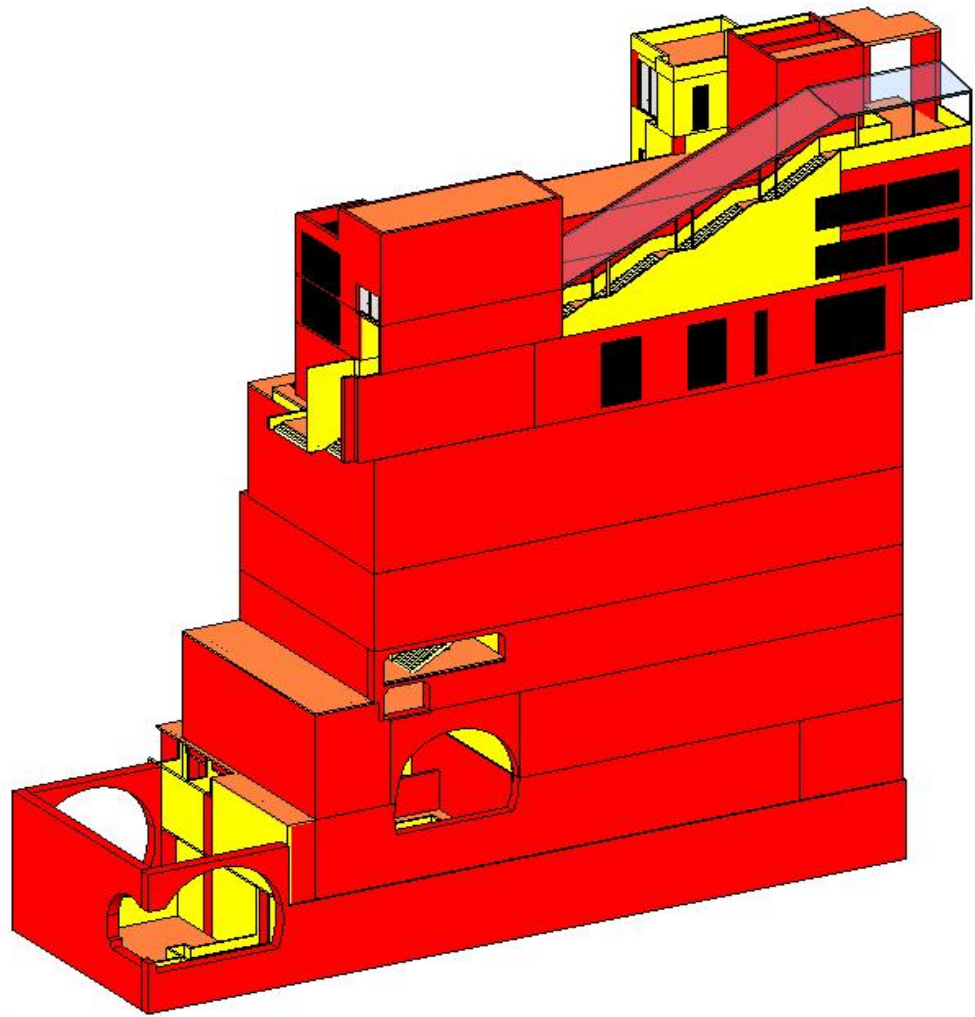
5. BIM model adjustment and checking

During the stage of on-site inspection, Inspector could also report discrepancy found between the BIM model and actual situation (modification, additional facility / feature, etc.). All information can be retrieved and displayed in BIM model inside Revit application thru the customized Revit plug-in tool. The BIM model can then be updated and reload back to IRS system.



IRS_NOP_NPB.rvt - Proj...

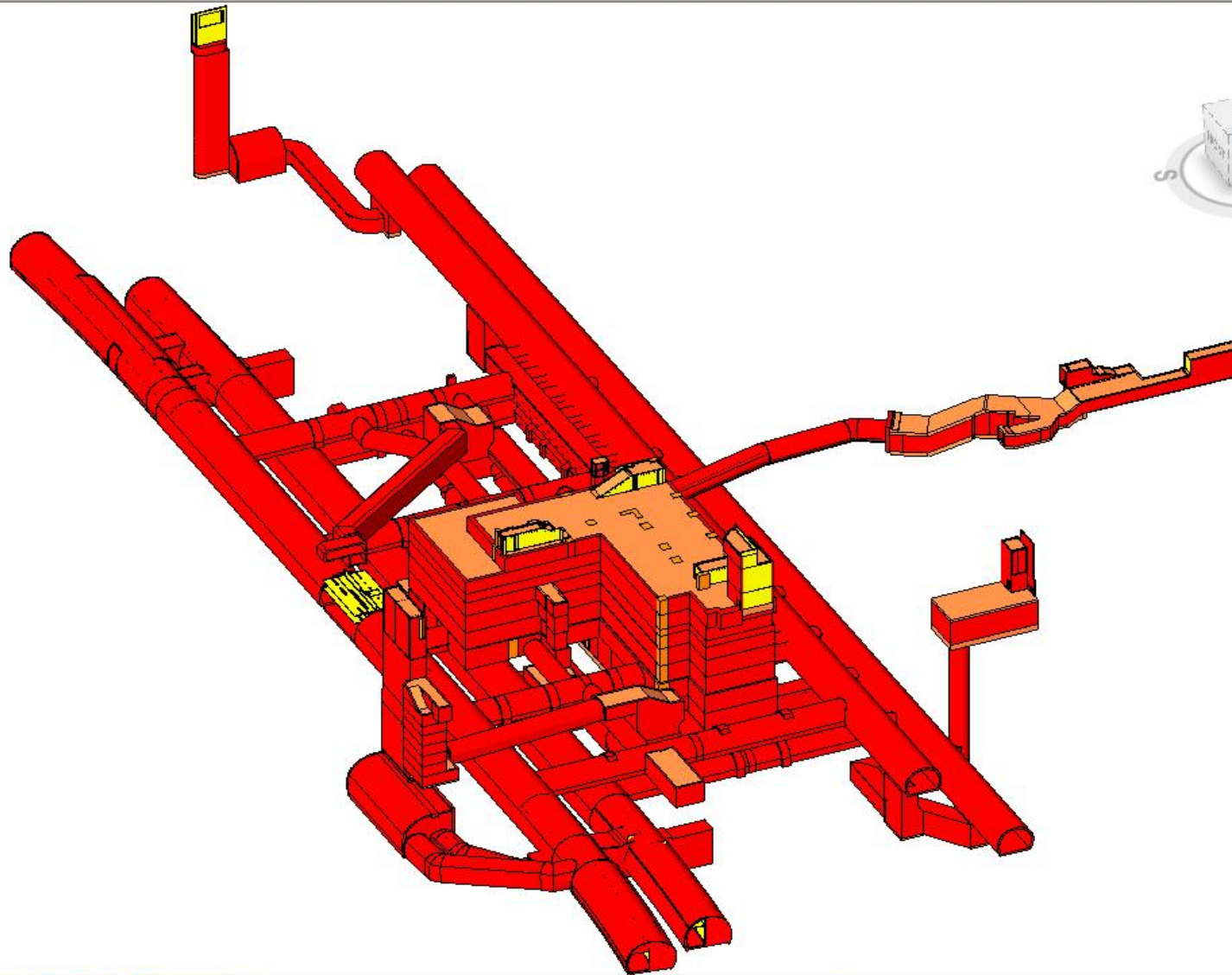
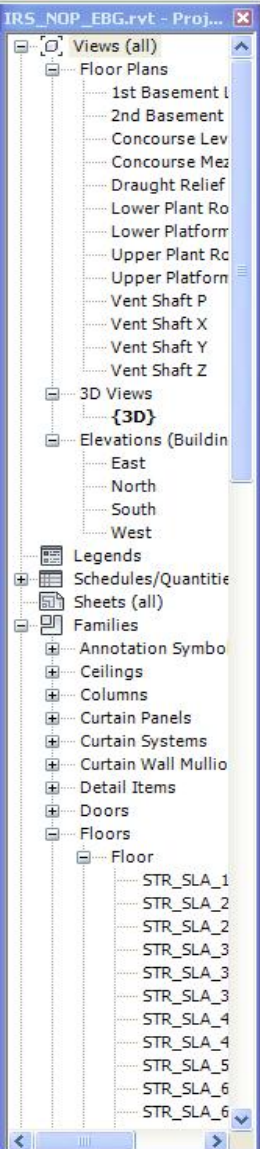
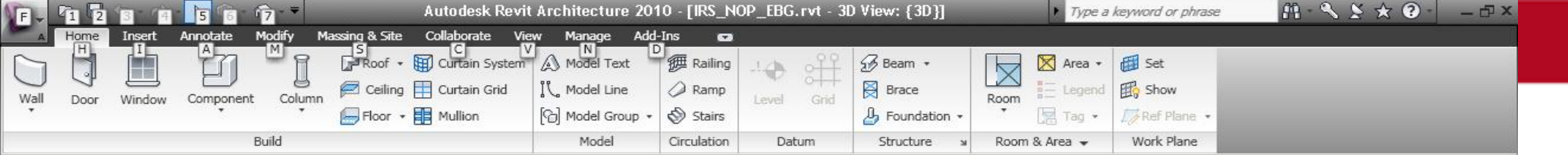
- Views (all)
- Floor Plans
 - Basement 1
 - Basement 3
 - Basement 4
 - Basement 5
 - Basement 6
 - Basement 7
 - Fan Room Level
 - First Floor Level
 - Ground Floor Level
 - Tanner Road Level
 - Upper Chiller Level
 - Upper Vent Level
- 3D Views
 - {3D}
- Elevations (Building)
 - East
 - North
 - South
 - West
- Legends
- Schedules/Quantities
- Sheets (all)
- Families
 - Annotation Symbols
 - Ceilings
 - Columns
 - Curtain Panels
 - Curtain Systems
 - Curtain Wall Mullion
 - Detail Items
 - Doors
 - Floors
 - Generic Models
 - Pattern
 - Profiles
 - Railings
 - Ramps
 - Roofs
 - Stairs
 - Structural Beam System
 - Structural Foundation
 - Walls
 - Windows
 - Groups



1 : 100

Ready

Filter: 0



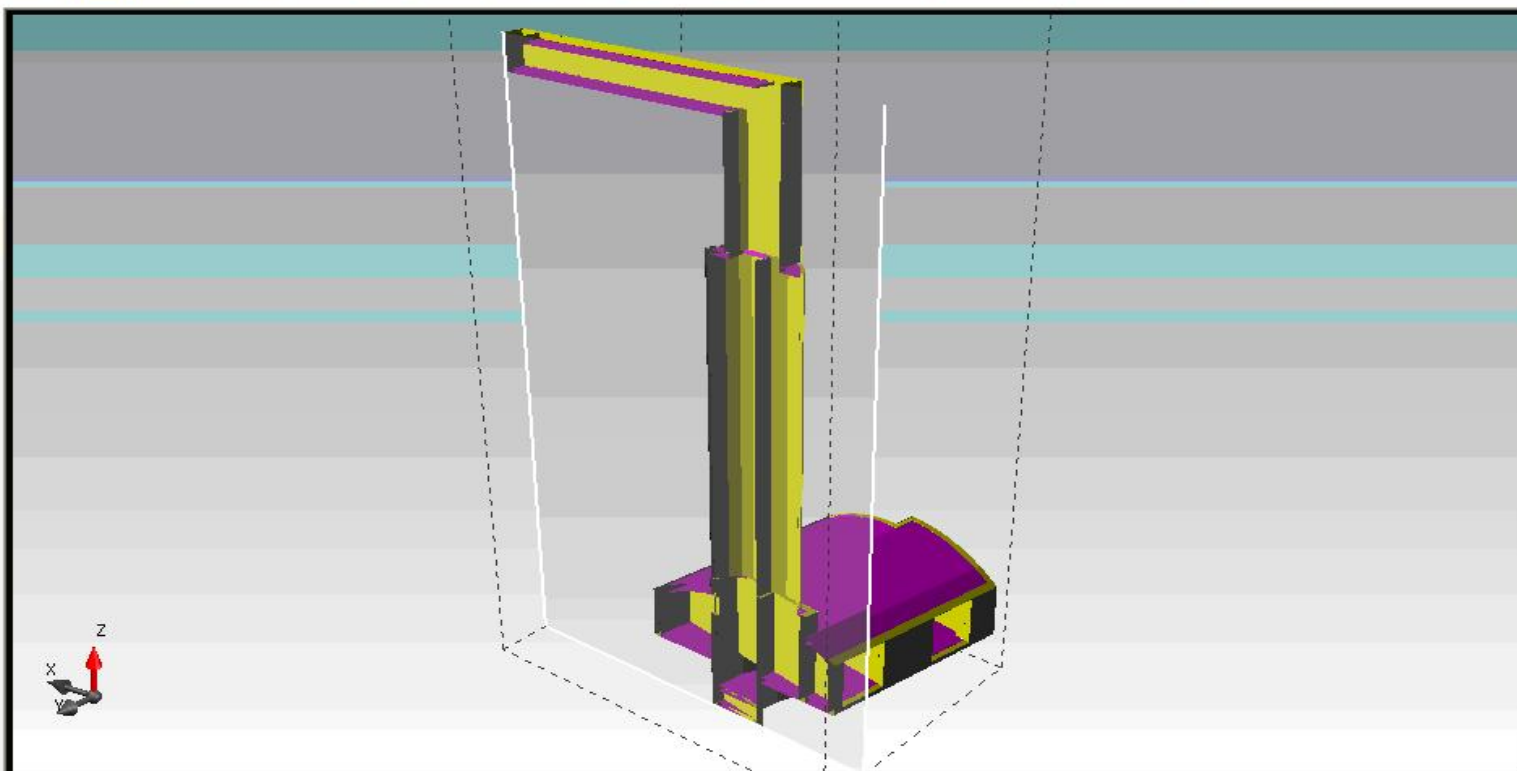


Batch Model Viewer Report

Logon user:

irsadmdv

Navigation toolbar: Zoom, Hide, Show All, Locate, View, Clipping Plane, 1000, Dummy, Show, Hide, Configuration



Batch : 1007

Structure : NOP

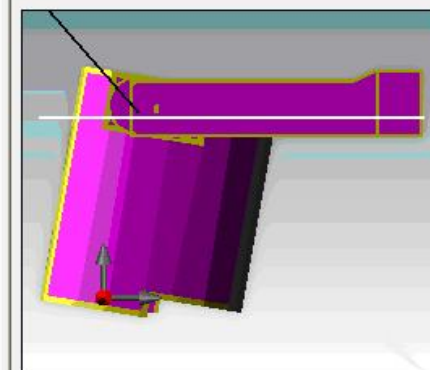
Sec. Structure : ALL

Level : ALL

Level : ALL
Vent Shaft N

Load

Save the View Load defined View



Element

Name

Input field for element name.

<

>

Defect Info

Floor Plan: S200_CONCOURSE_RETAIL

Graphics

View Scale: 1 : 100

Scale Value: 1: 100

Display Model: Normal

Detail Level: Medium

Visibility/Graphics Overrides: Edit...

Visual Style: Shaded with Edges

Graphic Display Options: Edit...

Underlay: None

Underlay Orientation: Plan

Orientation: Project North

Wall Join Display: Clean all wall joins

Discipline: Architectural

Color Scheme Location: Background

Color Scheme: Department

Analysis Display Style: None

Sun Path: []

Identity Data

View Name: S200_CONCOURSE_RETAIL

Dependency: Independent

Title on Sheet: []

Referencing Sheet: []

Referencing Detail: []

Default View Template: None

Workset: View "Floor Plan: S200_CONC..."

Edited by: DSKFUNG

Extents

Crop View: []

Crop Region Visible: []

Annotation Crop: [x]

View Range: [] Edit...

Properties help

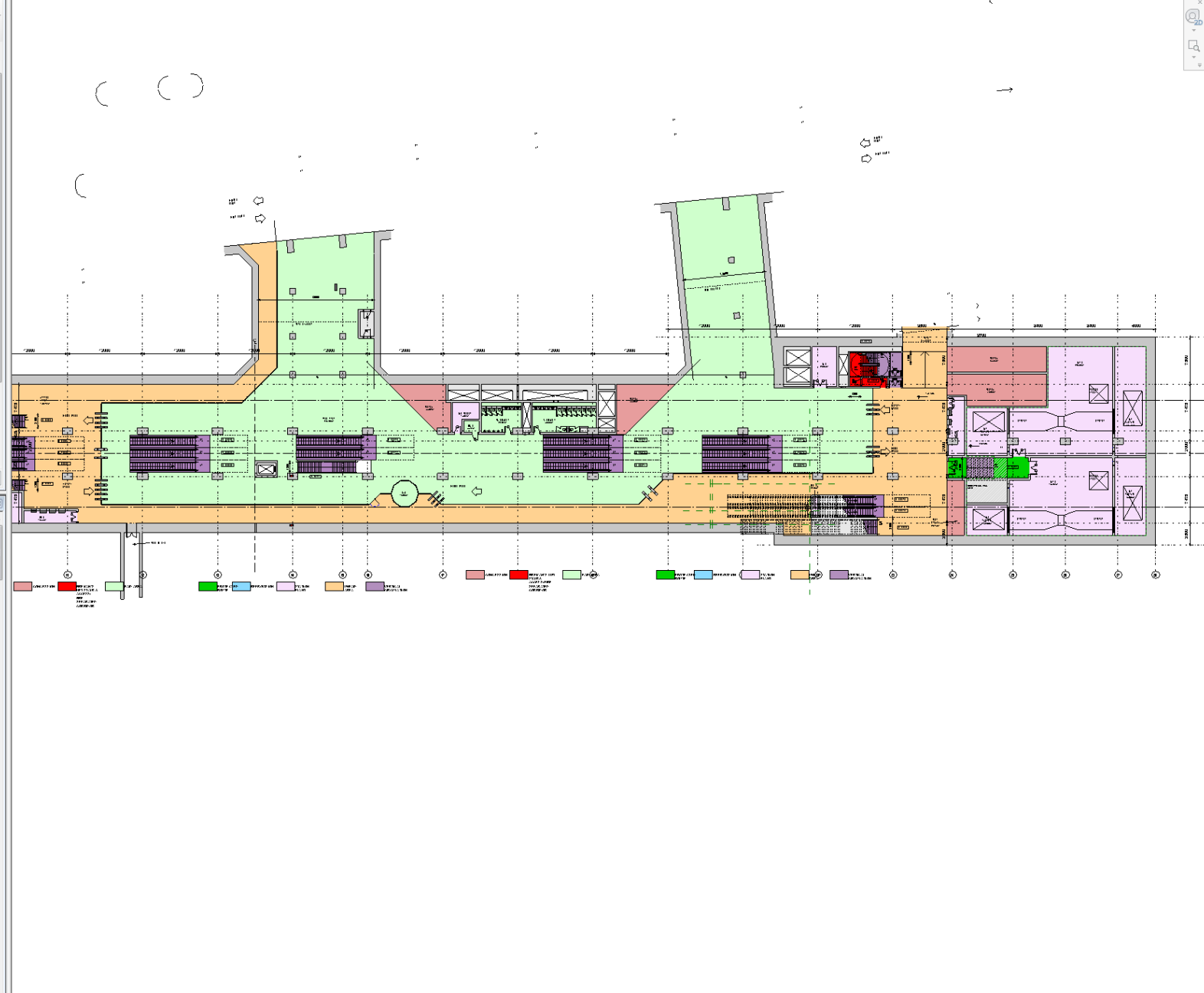
Apply

\$SCL_DIH_ARC.rvt - Project Browser

Views (all)

Floor Plans

- 24HR ACCESS @ ROOF LEVEL
- CONCOURSE LEVEL (+1.77mPD)
- DHS AIR INTAKE EAST
- DHS AIR INTAKE EAST UPPER LEVEL
- DHS AIR INTAKE WEST
- DHS AIR INTAKE WEST UPPER LEVEL
- KTL-DIH STATION PLATFORM LEVEL (-3.43mPD)
- LOCATION PLAN
- OVERALL STATION & DHS
- ROOF LEVEL
- S200_CONCOURSE
 - L_CONCOURSE
 - M_CONCOURSE
 - R_CONCOURSE
- S200_CONCOURSE_RETAIL**
- S200_MEZZ LEVEL
 - L_MEZZ LEVEL
 - M_MEZZ LEVEL
 - R_MEZZ LEVEL
- S200_PLATFORM LEVEL
 - L_PLATFORM LEVEL
 - M_PLATFORM LEVEL
 - R_PLATFORM LEVEL
- S200_ROAD LEVEL PLAN
- S200_ROOF LEVEL
- S200_SITE PLAN
 - 24HR ACCESS_SITE PLAN
 - L SITE PLAN
 - M SITE PLAN
 - R SITE PLAN
- S200_UPPER MEZZ LEVEL
 - L_S200_UPPER MEZZ LEVEL**
 - L_KTL-DIH STATION PLATFORM LEVEL
 - R_KTL-DIH STATION PLATFORM LEVEL
- SCL-DIH AHU EXHAUST



Properties

Schedule: Kiosk Provision

Graphics

Visibility/Graphics Overrides

Identity Data

View Name: Kiosk Provision

Dependency: Independent

Default View Template: None

Workset: View "Schedule: Kiosk Provision"

Edited by: DSKFUNG

Phasing

Phase: New Construction

Other

Fields: Edit...

Filter: Edit...

Sorting/Grouping: Edit...

Formatting: Edit...

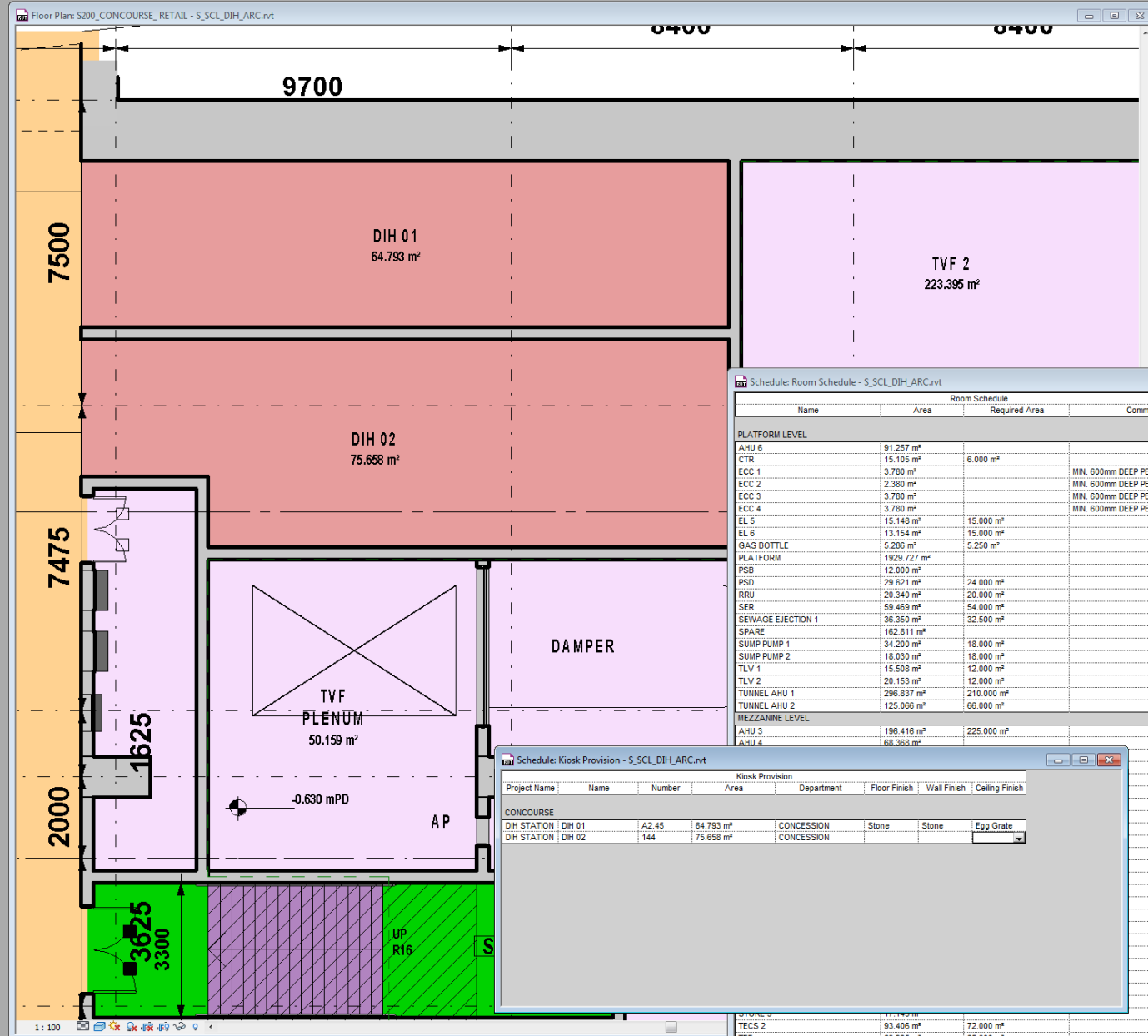
Appearance: Edit...

Properties help

Apply

S_SCL_DIH_ARC.rvt - Project Browser

- Area Plans (Gross Building)
 - STREET LEVEL WEST
- Area Plans (Rentable)
 - Legends
- Schedules/Quantities
 - Area Schedule (Rentable)
 - Drawing List
 - Kiosk Provision
 - Room Schedule
- Sheets (all)
 - 6.1.11 - SCHEDULE OF ACCOMMODATION - SCL
 - 10.001 - LOCATION PLAN
 - Floor Plan: LOCATION PLAN
 - 10.002 - SITE PLAN
 - Floor Plan: SITE PLAN
 - 10.003 - ROOF LEVEL PLAN
 - 10.004 - CONCOURSE PLAN
 - Floor Plan: CONCOURSE LEVEL (+1.77mPD)
 - 10.005 - MEZZANINE LEVEL AND PLATFORM LEVEL PLANS FOR
 - Floor Plan: KTL-DIH STATION PLATFORM LEVEL (-3.43mPD)
 - Floor Plan: SCL-DIH STATION MEZZANINE LEVEL (-8.72mPD)
 - Floor Plan: SCL-DIH STATION PLATFORM LEVEL (-15.92mPD)
 - 10.006 - SCL - DIH STATION BOTTOM LEVEL PLAN
 - 10.007 - SITE PLAN (SHEET 1 OF 3)
 - Floor Plan: 24HR ACCESS SITE PLAN
 - Floor Plan: L SITE PLAN
 - 10.008 - SITE PLAN (SHEET 2 OF 3)
 - 10.009 - SITE PLAN (SHEET 3 OF 3)
 - 10.010 - ROAD LEVEL PLAN (SHEET 1 OF 3)
 - 10.011 - ROAD LEVEL PLAN (SHEET 2 OF 3)
 - 10.012 - ROAD LEVEL PLAN (SHEET 3 OF 3)
 - 10.013 - ROOF LEVEL PLAN (SHEET 1 OF 3)
 - 10.014 - ROOF LEVEL PLAN (SHEET 2 OF 3)
 - 10.015 - ROOF LEVEL PLAN (SHEET 3 OF 3)
 - 10.016 - CONCOURSE LEVEL PLAN (SHEET 1 OF 3)
 - Floor Plan: L_CONCOURSE
 - Legend: HIGH LEVEL DUCT



Schedule: Room Schedule - S_SCL_DIH_ARC.rvt

Name	Area	Required Area	Comments
PLATFORM LEVEL			
AHU 6	91.257 m²		
CTR	15.105 m²	6.000 m²	
ECC 1	3.780 m²		MIN. 600mm DEEP PER ESC
ECC 2	2.380 m²		MIN. 600mm DEEP PER ESC
ECC 3	3.780 m²		MIN. 600mm DEEP PER ESC
ECC 4	3.780 m²		MIN. 600mm DEEP PER ESC
EL 5	15.140 m²	15.000 m²	
EL 6	13.154 m²	15.000 m²	
GAS BOTTLE	5.286 m²	5.250 m²	
PLATFORM	1929.727 m²		
PSB	12.000 m²		
PSD	29.621 m²	24.000 m²	
RRU	20.340 m²	20.000 m²	
SER	59.469 m²	54.000 m²	
SEWAGE EJECTION 1	36.350 m²	32.500 m²	
SPARE	162.811 m²		
SUMP PUMP 1	34.200 m²	18.000 m²	
SUMP PUMP 2	18.030 m²	18.000 m²	
TLV 1	15.508 m²	12.000 m²	
TLV 2	20.153 m²	12.000 m²	
TUNNEL AHU 1	296.837 m²	210.000 m²	
TUNNEL AHU 2	125.066 m²	66.000 m²	
MEZZANINE LEVEL			
AHU 3	196.416 m²	225.000 m²	
AHU 4	68.368 m²		

Schedule: Kiosk Provision - S_SCL_DIH_ARC.rvt

Project Name	Name	Number	Area	Department	Floor Finish	Wall Finish	Ceiling Finish
CONCOURSE							
	DIH STATION	DIH 01	A2.45	64.793 m²	CONCESSION	Stone	Stone
	DIH STATION	DIH 02	144	75.658 m²	CONCESSION	Stone	Egg Grate

TECS 2	93.406 m²	72.000 m²	
TEF	83.935 m²	65.000 m²	
TER	74.800 m²	108.000 m²	
TRAIN STAFF CONTROL	45.494 m²	45.000 m²	
TRAIN STAFF F LOCKER	11.550 m²	10.000 m²	
TRAIN STAFF INTERVIEW	16.113 m²	12.000 m²	

Properties

Floor Plan: S200_CONCOURSE_RETAIL

Edit Type

Graphics

View Scale: 1:100

Scale Value: 100

Display Model: Normal

Detail Level: Medium

Visibility/Graphics Overrides: Edit...

Visual Style: Shaded with Edges

Graphic Display Options: Edit...

Underlay: None

Underlay Orientation: Plan

Orientation: Project North

Wall Join Display: Clean all wall joins

Discipline: Architectural

Color Scheme Location: Background

Color Scheme: Department

Analysis Display Style: None

Sun Path: ☐

Identity Data

View Name: S200_CONCOURSE_RETAIL

Dependency: Independent

Title on Sheet:

Referencing Sheet:

Referencing Detail:

Default View Template: None

Workset: View "Floor Plan: S200_CONC..."

Edited by: DSKFUNG

Extents

Crop View: ☐

Crop Region Visible: ☐

Annotation Crop: ☒

View Range: Edit...

Properties help

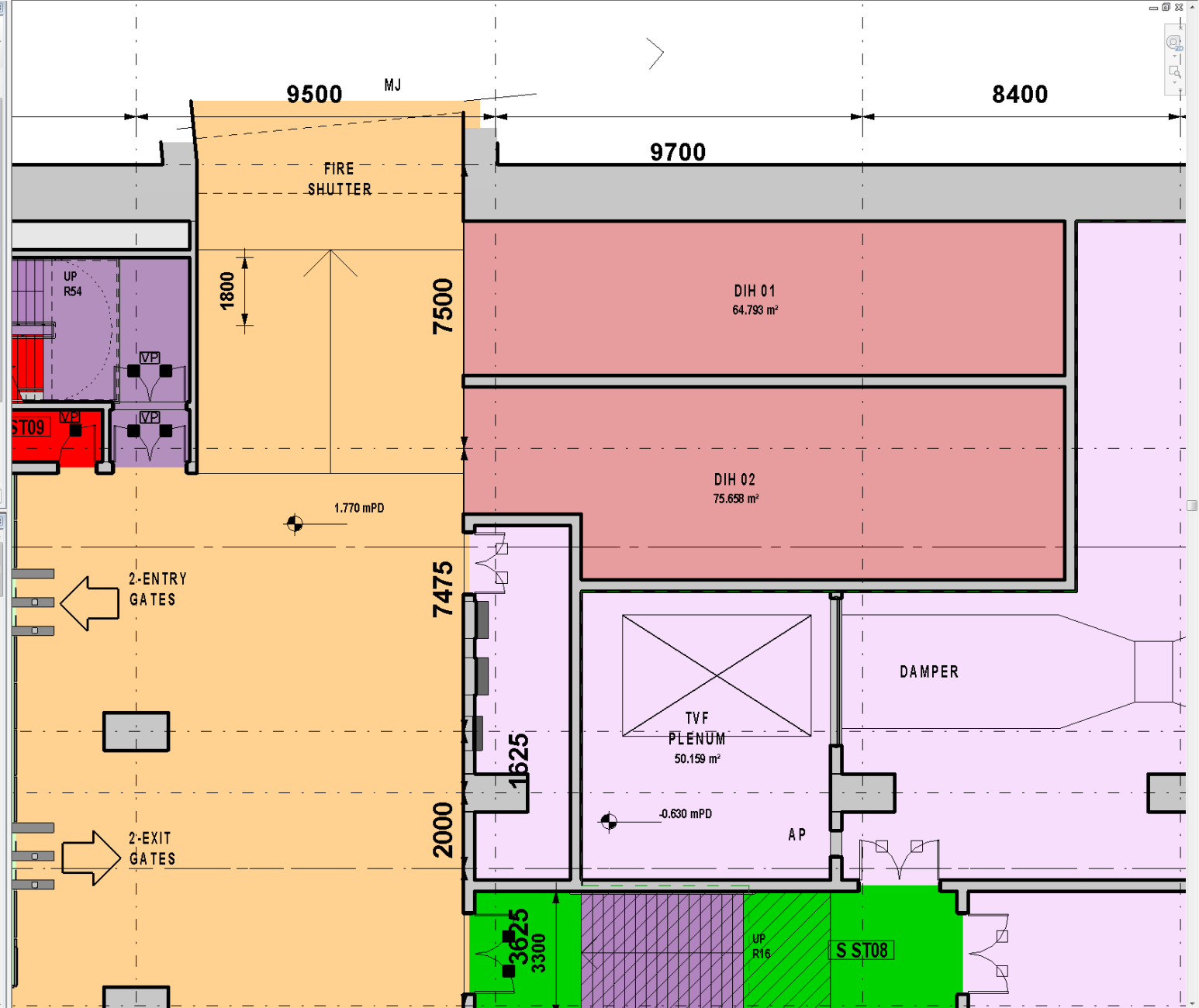
Apply

S_SCL_DIH_ARC.rvt - Project Browser

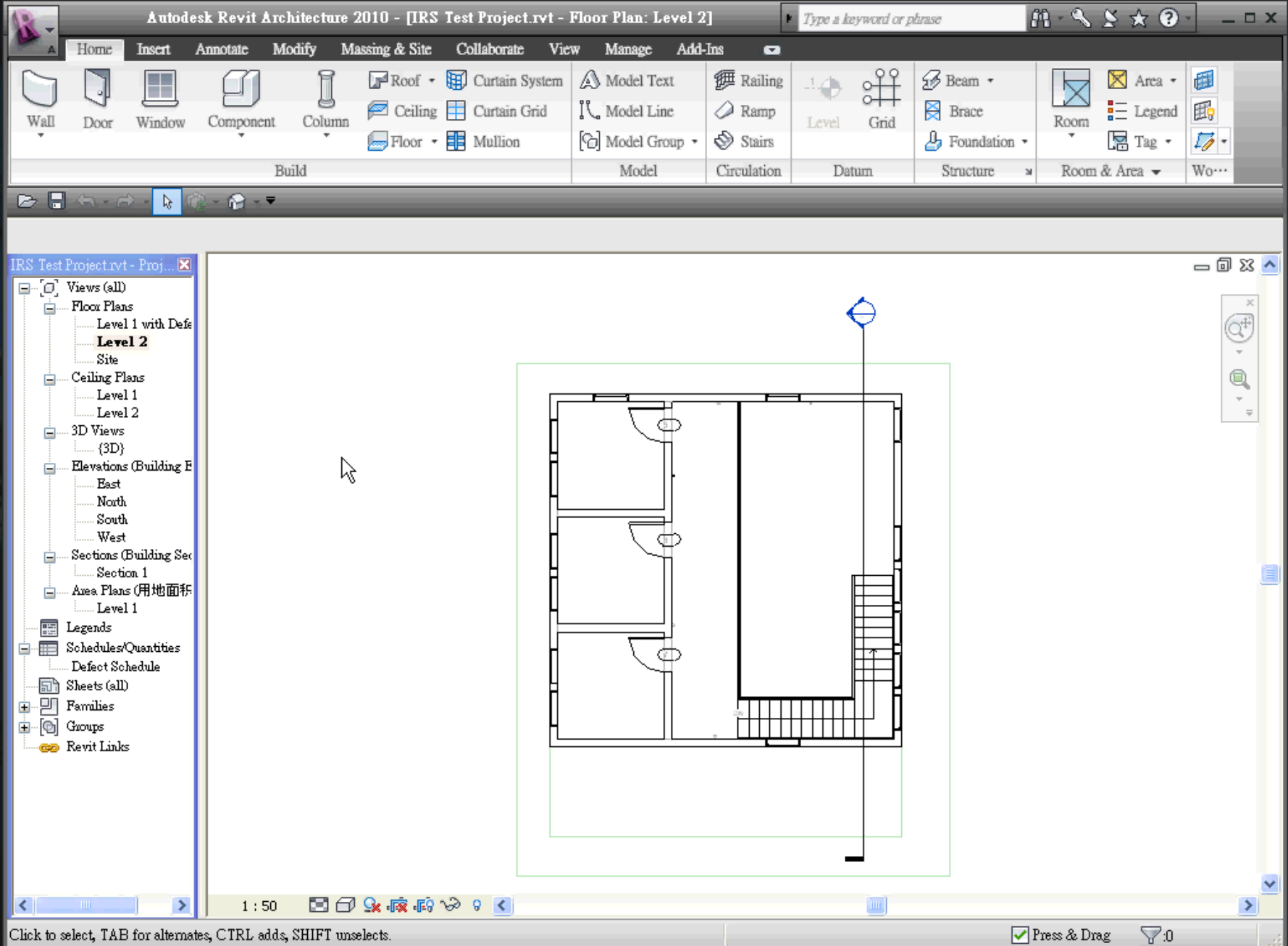
Views (all)

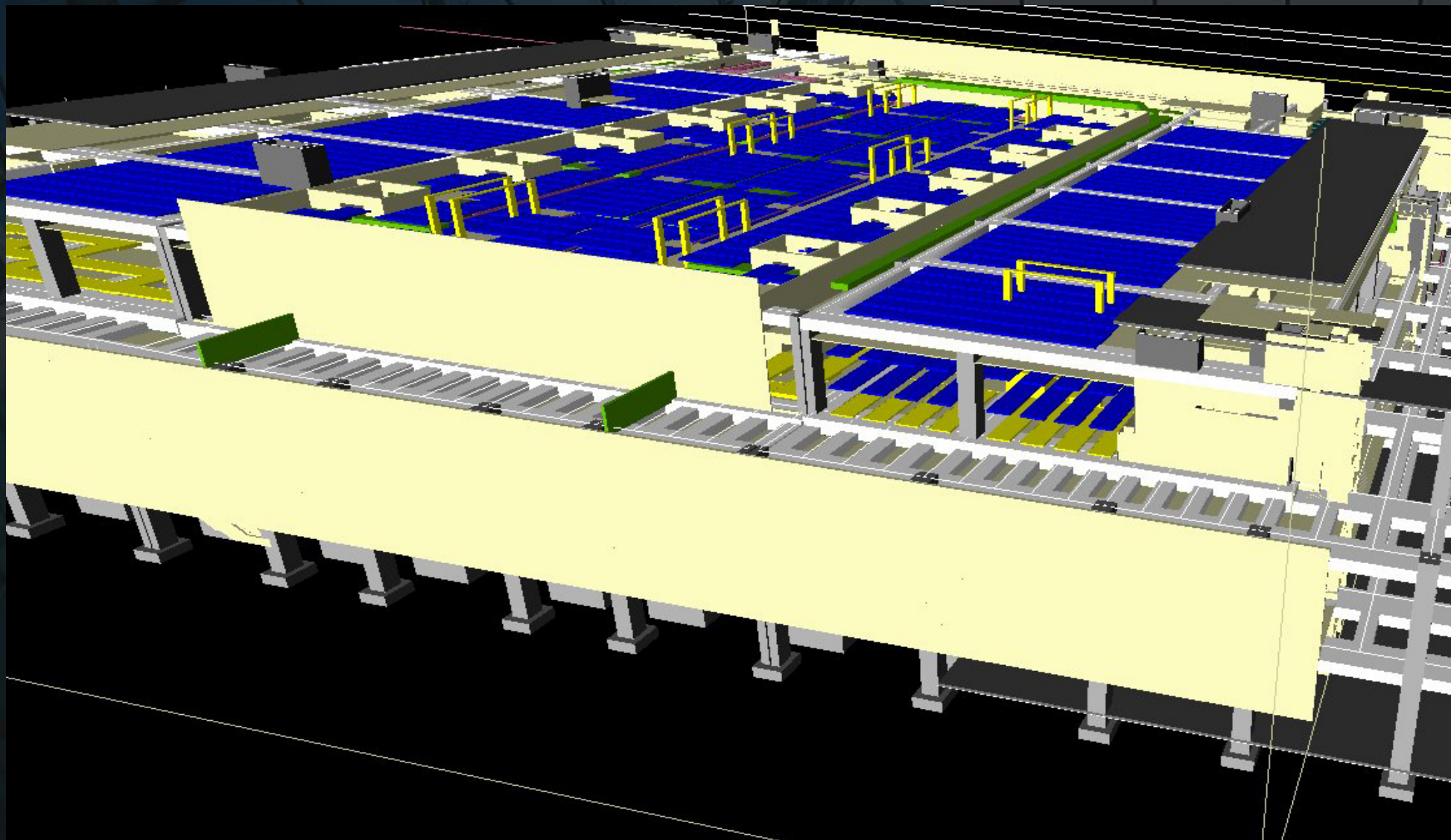
Floor Plans

- 24HR ACCESS @ ROOF LEVEL
- CONCOURSE LEVEL (+1.77mPD)
- DHS AIR INTAKE EAST
- DHS AIR INTAKE EAST UPPER LEVEL
- DHS AIR INTAKE WEST
- DHS AIR INTAKE WEST UPPER LEVEL
- KTL-DIH STATION PLATFORM LEVEL (-3.43mPD)
- LOCATION PLAN
- OVERALL STATION & DHS
- ROOF LEVEL
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 - R_CONCOURSE
- S200_CONCOURSE_RETAIL
 - S200_MEZZ LEVEL
 - L_MEZZ LEVEL
 - M_MEZZ LEVEL
 - R_MEZZ LEVEL
 - S200_PLATFORM LEVEL
 - L_PLATFORM LEVEL
 - M_PLATFORM LEVEL
 - R_PLATFORM LEVEL
 - S200_ROAD LEVEL PLAN
 - S200_ROOF LEVEL
 - S200_SITE PLAN
 - 24HR ACCESS_SITE PLAN
 - L_SITE PLAN
 - M_SITE PLAN
 - R_SITE PLAN
 - S200_UPPER MEZZ LEVEL
 - L_S200_UPPER MEZZ LEVEL
 - L_KTL-DIH STATION PLATFORM LEVEL
 - R_KTL-DIH STATION PLATFORM LEVEL
- SCL-DIH AHU EXHAUST

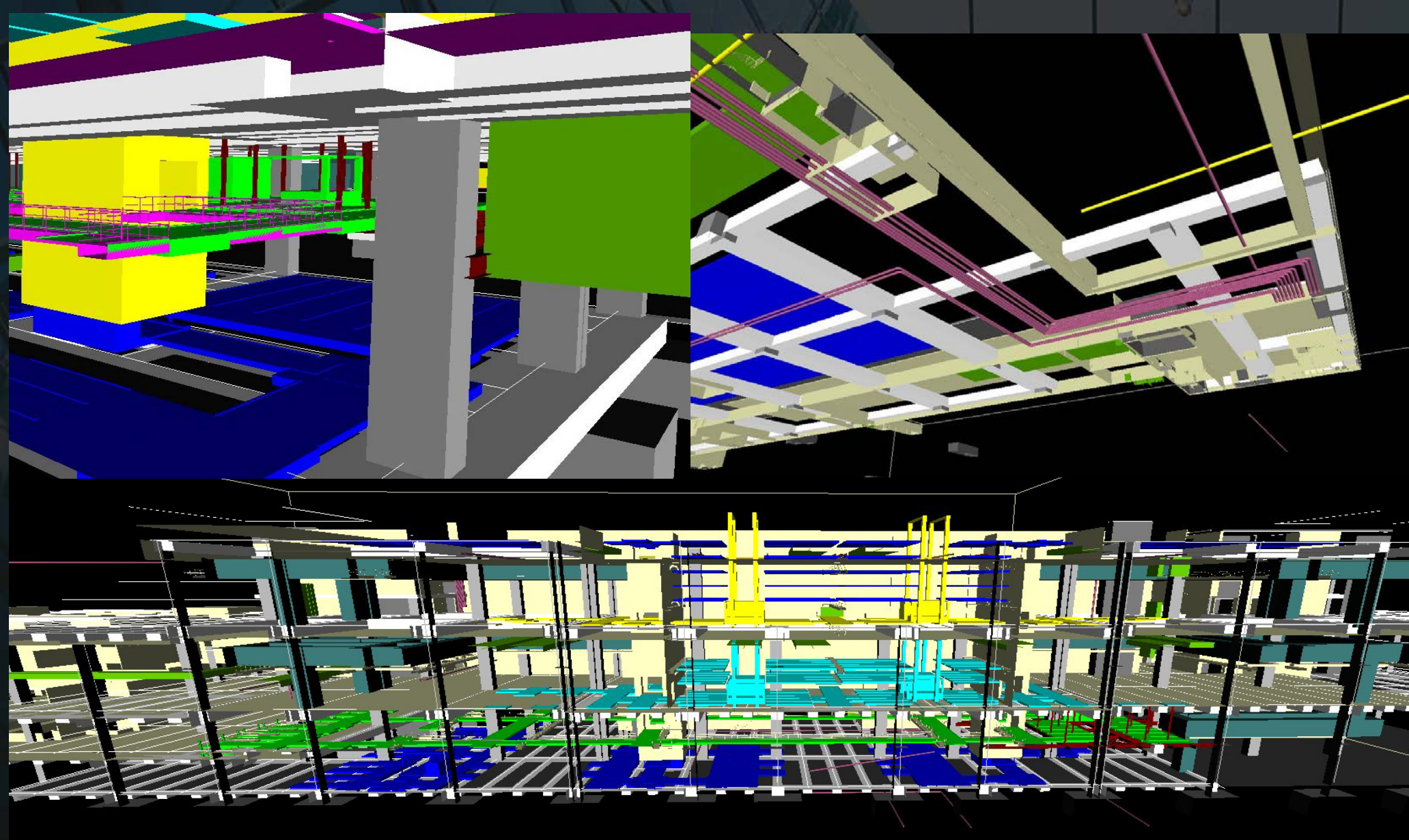


	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
6	Station	Shop No.	Shop Name	STA No.	Shop Detail														
7					Location (Paid / Unpaid / External)	Approx. Usable Floor Area (m2)	Type of Shop	Toilet inside Shop	No. of TV Point(s)	Telephone Outlet	Roller Shutter								
8											Fire				Security				
9											No.	Operation, Fire Rating	A/V unit	Intercom	No.	CS - Clear Sliding CR - Clear Roller MS - Metal Roller P - Perforation	Power Supply	Hole dia. of perforation (mm)	per
58	TSY	TSY 1	Hang Seng - Mini Bank	NA	Unpaid	65	Bank	No											
59	TSY	TSY 2	7-Eleven	NA	Unpaid	86	Retail	No											
60	TSY	TSY 3	Maxim's Cakes	NA	Unpaid	49	Retail	No											
61	TSY	TSY 4	Okashi Land	NA	Unpaid	41	Retail	No											
62	TSY	TSY 5	Sanrio Gift Gate	NA	Unpaid	70	Retail	No				N/A		Nil		CR with P	No		
71	TSY	TSY 6	DR 美 健 集	NA	Unpaid	76	Retail	No				N/A		Nil		CR with P	No		
72	TSY	TSY 7	Wacoal	NA	Unpaid	81	Retail	No				N/A		Nil		CR with P	No		
73	TSY	TSY 12	Poon Yuk Lan Bone Setting Center 潘玉蘭跌打診所	NA	Unpaid	21	Retail	No											
74	TSY	TSY 13	Tsing Yi Chinese Medicine & Holistic Health Center	NA	Unpaid	23	Retail	No											
75	TSY	TSY 14	Tsing Yi Chinese Medicine & Holistic Health Center	NA	Unpaid	21	Retail	No											
76	TSY	TSY 15	Tsing Yi Chinese Medicine & Holistic Health Center	NA	Unpaid	37	Retail	No											
77	TSY	TSY 16	Tsing Yi Chinese Medicine & Holistic Health Center	NA	Unpaid	30	Retail	No											
78	TSY	TSY 18a / 18b	Reserved for Mega SCO	NA	Unpaid	40	Retail	No											
79	TSY	TSY 19a / 19b	Reserved for Mega SCO	NA	Unpaid	74	Retail	No											
80	TSY	TSY 20	Reserved for Mega SCO	NA	Unpaid	99	Retail	No											
81	TSY	TSY 21	Reserved for Mega SCO	NA	Unpaid	29	Retail	No											
82	TSY	TSY 22	Reserved for Mega SCO	NA	Unpaid	55	Retail	No											
83	TSY	TSY 24	Reserved for Mega SCO	NA	Unpaid	50	Retail	No											
84	TSY	TSY 25	Reserved for Mega SCO	NA	Unpaid	50	Retail	No											
85	TSY	TSY 26 / 27	Reserved for Mega SCO	NA	Unpaid	100	Retail	No											
86	TSY	TSY 28	Reserved for Mega SCO	NA	Unpaid	32	Retail	No											
87	TSY	TSY 29	Reserved for Mega SCO	NA	Unpaid	72	Retail	No											
88	TSY	TSY 30	ans	NA	Unpaid	32.4	Retail	No				N/A		Nil		CR with P	No		
89	TSY	TSY 31	IP Zone	NA	Unpaid	29	Retail	No				N/A		Nil		CR with P	No		
90	TSY	TSY 32	Pre-let to Samuel & Kevin	NA	Unpaid	35.2	Retail	No				N/A		Nil		CR with P	No		
91	TSY	TSY 33	MUK	NA	Unpaid	32.6	Retail	No				N/A		Nil		CR with P	No		
92	TSY	TSY 34	Rich Honour Optical	NA	Unpaid	69	Retail	No				N/A		Nil		CR with P	No		





Application 4

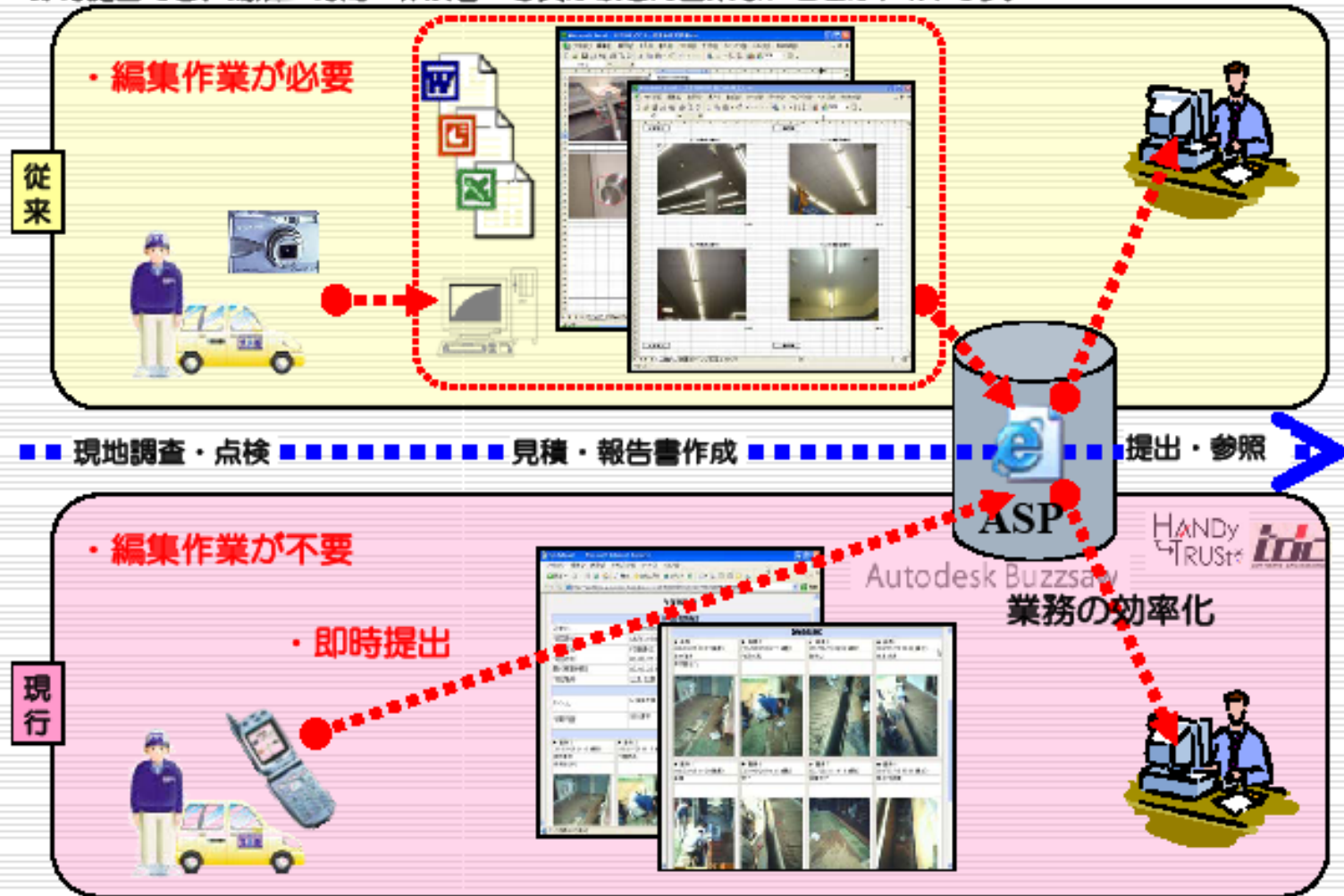


CO-ORDINATIONS

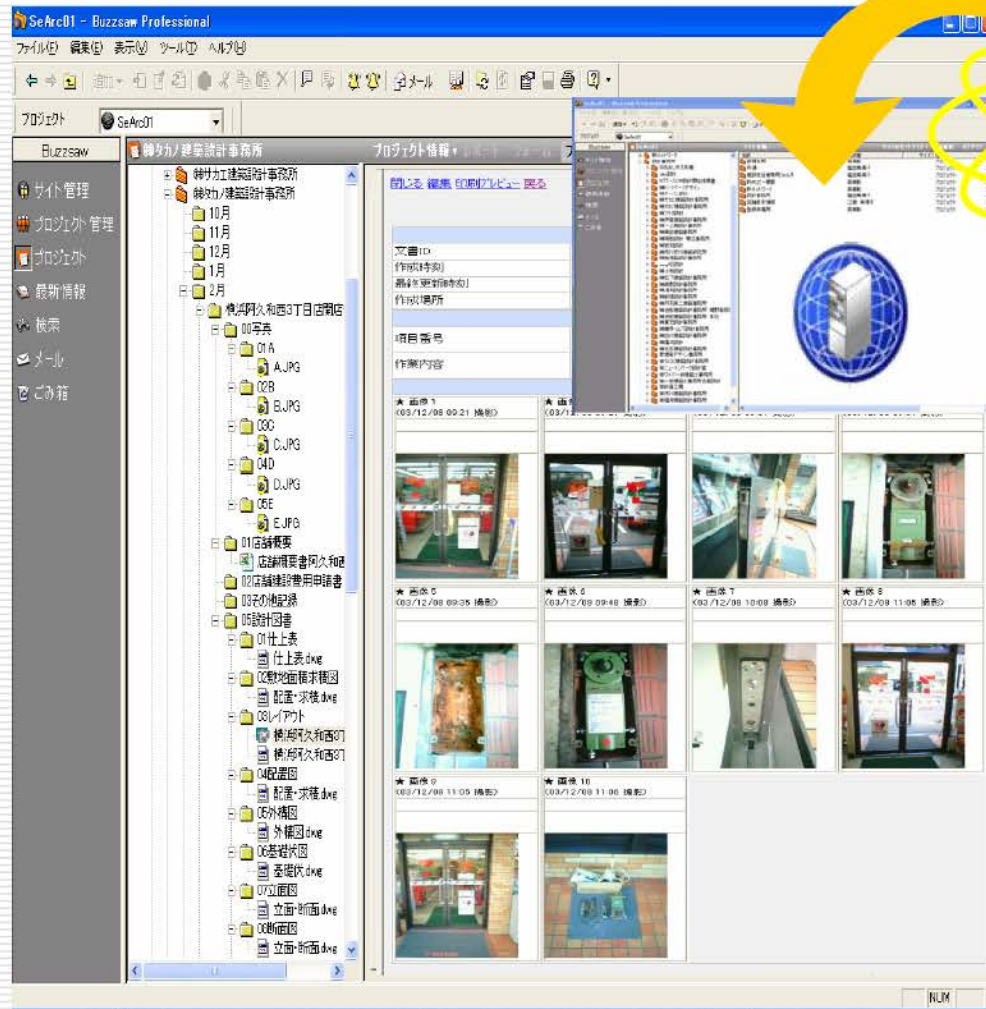
HandyBuz (Handy Trust + Buzzsaw)

Modelling

従来の見直し作業のため、加付携帯携帯電話を用いて報告書を作成する仕組みで、作業現場から簡単な操作で即時提出でき、場所・時間・作成者・写真が改ざん出来ないことがポイントです。



HandyBuz (Handy Trust + Buzzsaw)



携帯による撮影

お問い合わせは

株式会社 JM

システム管理グループ

〒102-0083 東京都千代田区麹町5-4 KY麹町ビル5F

TEL: 03-5276-5185

FAX: 03-5276-5321

システム担当 岩松 まで

BLM (Building Lifecycle Management system) ライフサイクル マネジメントシステム

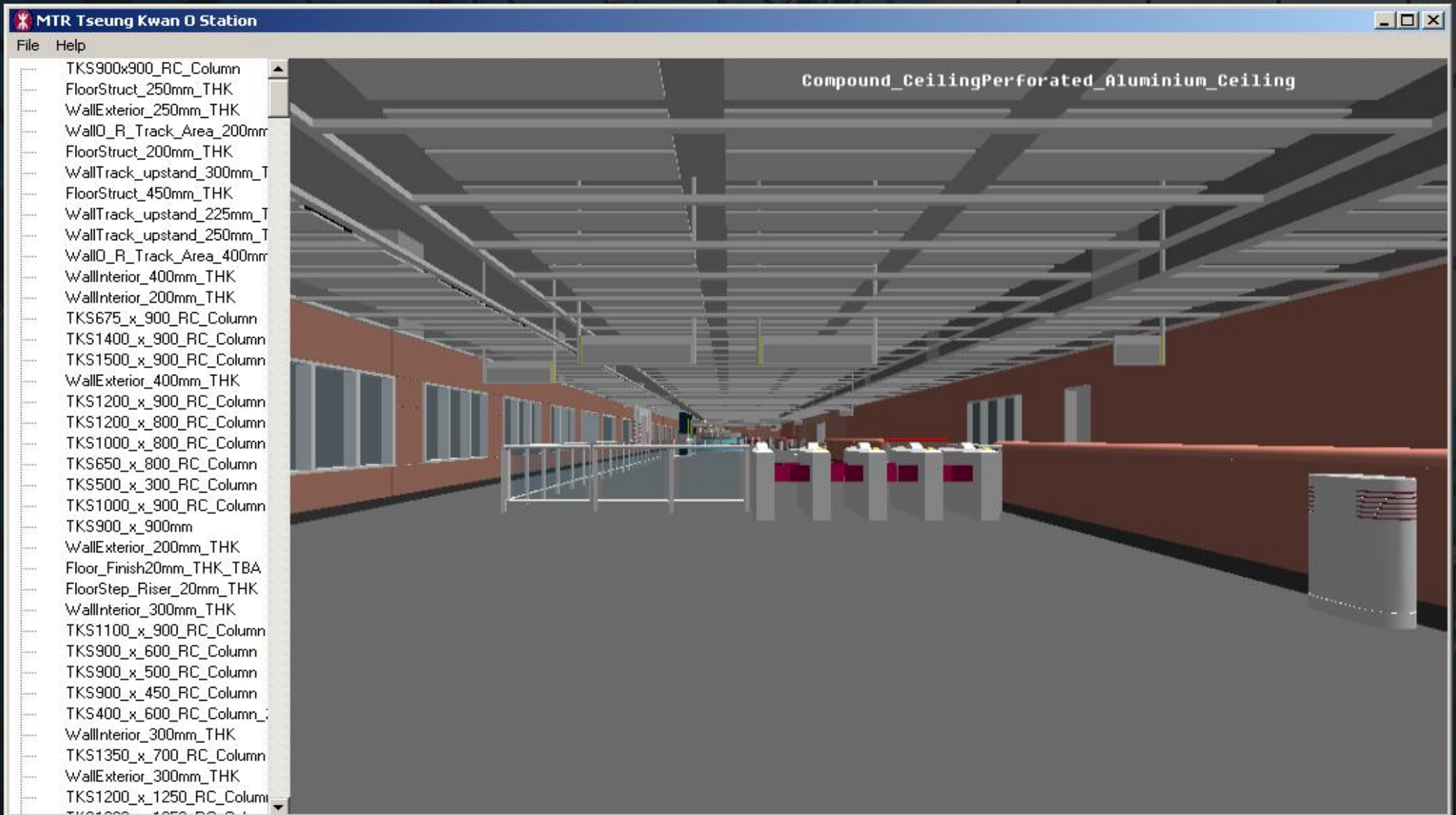
施設に関わる計画からメンテナンス・解体までの新しい建築方式

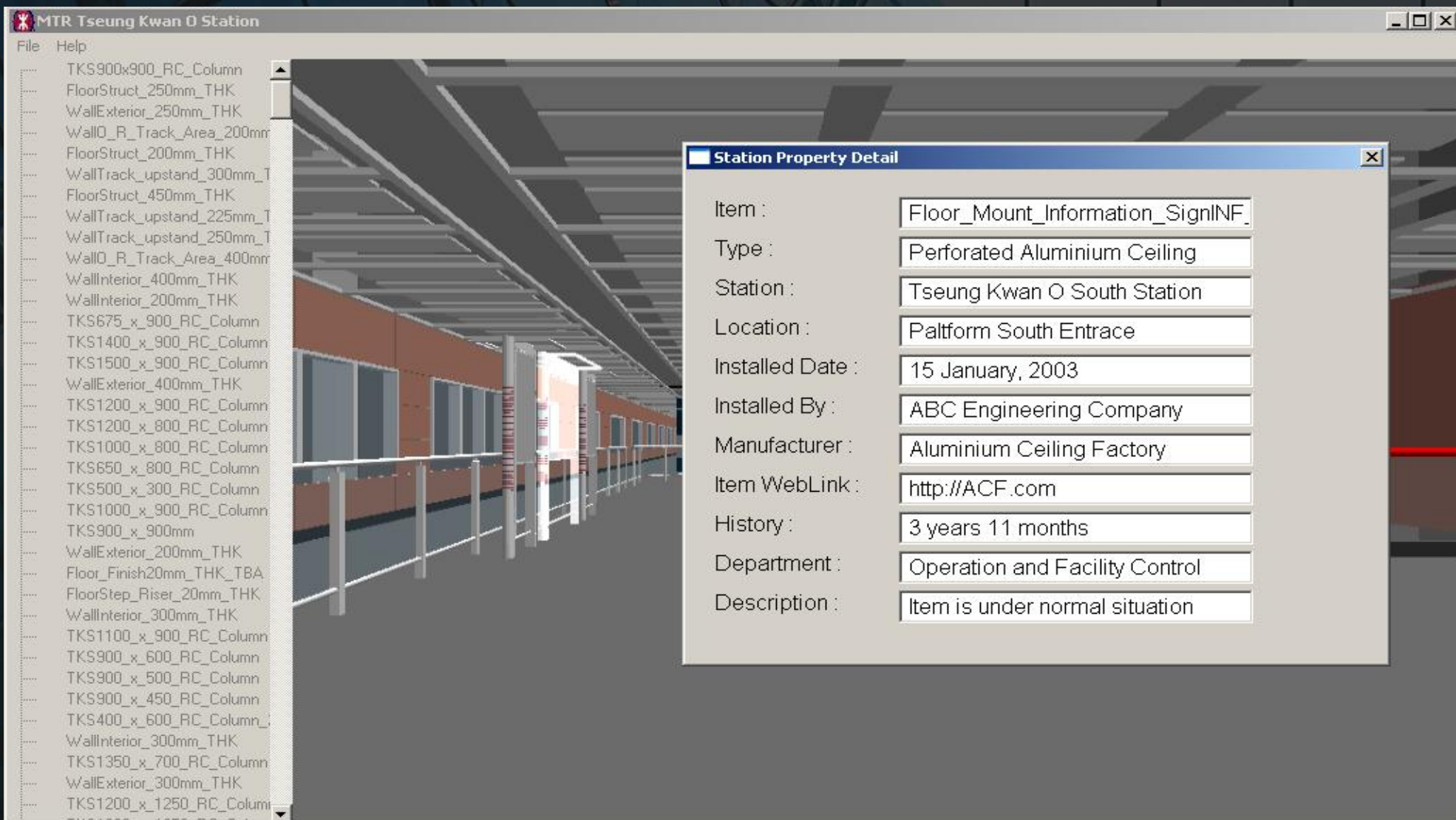




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BIM Applications for Marketing

- Centralized Data Base with visual applications
- Analysis (Efficiency/ Trend)
- Maintenance (similar to 7-11 Case)
- Maintenance Schedule – WS251, F2 etc.
- Asset Management (Payphone/ ATM)
- Advertisement/ Signage Management
- Visual Impact Assessment (e.g. Crystal display at HOK)
& ease approval process
- Improve customer service