



KOREA NATIONAL POLICE UNIVERSITY

경찰대학 아산캠퍼스 신축공사 건설사업관리용역



SHINHWA

SHINHWA
ENGINEERING / ARCHITECTURE

CONTENTS

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01. Project Overview

02. Design Phase

03. Construction Phase

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ENGINEERING | ARCHITECTURE

01. Overview

Site Plan
Facilities



Overview

Location : Asan City, Chungcheongnam-do

Lot Area : 785,010 m²

Building Area : 35,757 m²

Total Floor Area : 88,727 m²

Construction Budget : 220 Billion KRW

Project Schedule : 47mth

- Design 10mth
- Construction 34mth
- OM 3mth

Overview | Site Plan



Overview | Facilities



Lab & Classroom



Auditorium



Dormitory



Indoor Gymnasium



Martial arts Gym



Swimming Pool



honor guard/symphony orchestra



Indoor Shooting Range



Traffic Safety Educational
Facility for Children

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02. Design Phase

Design Review
Detail Design VE
BIM
Green Building



Design | Pre-Design Review



Pre-Design Review	by CM	395
	by Advisory Committee	47



✓ Amending Site Plan

✓ Increasing Area +446 m²

Pre-Design



Design



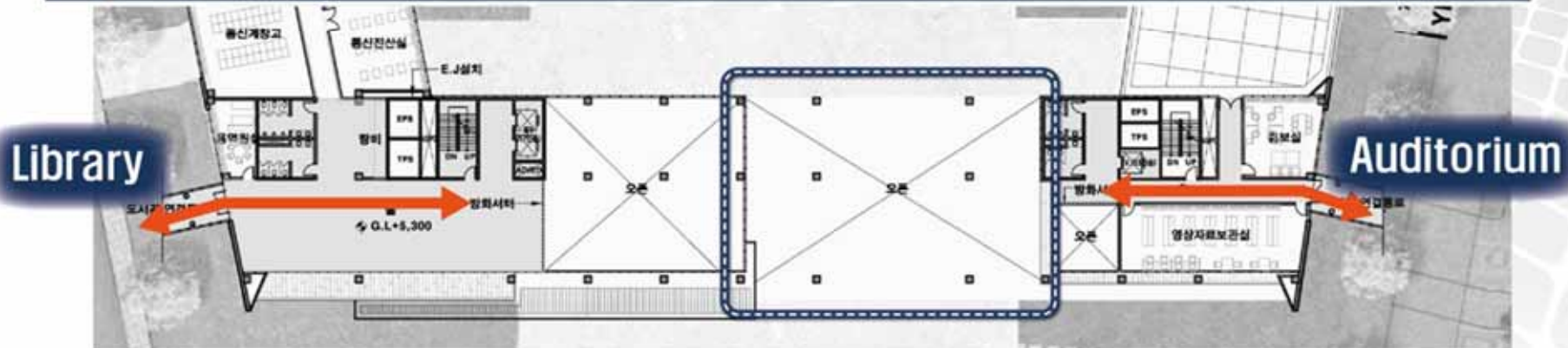
Design | Pre-Design Review



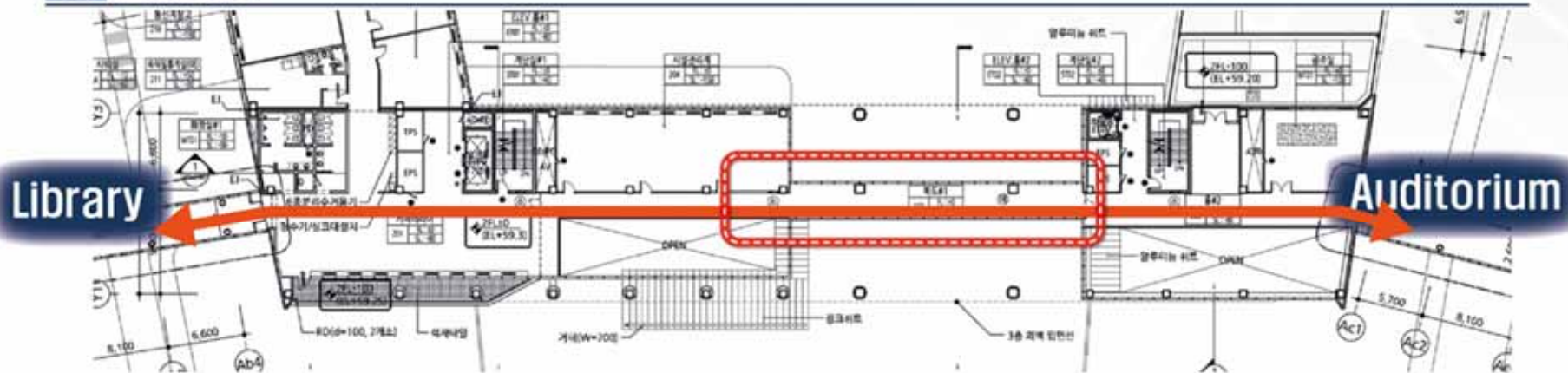
Design | Pre-Design Review



Pre-Design



Design

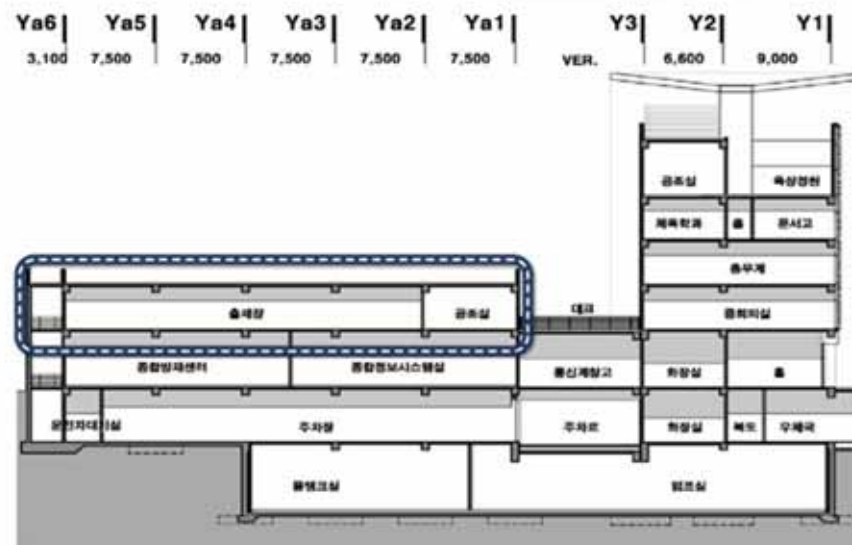


- Establishing human traffic connection from library to auditorium

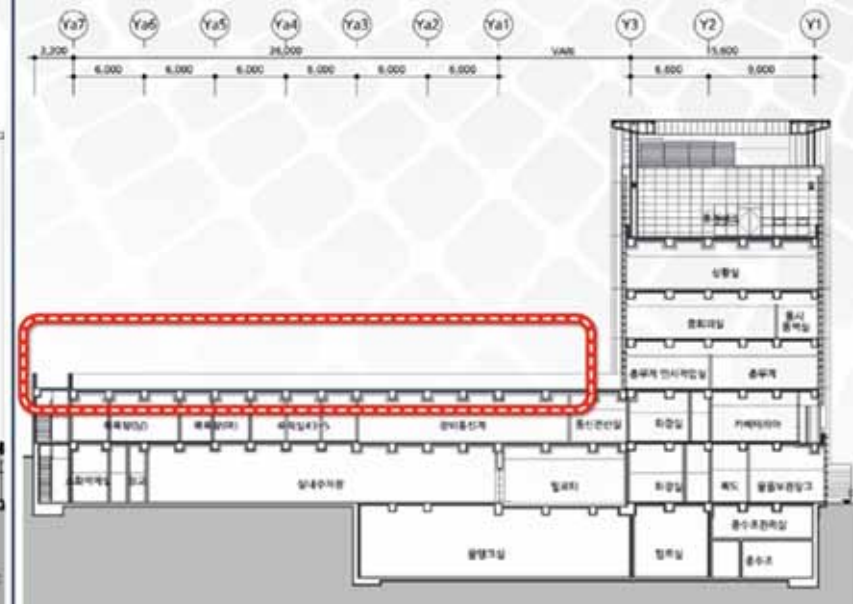
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ENGINEERING | ARCHITECTURE
02 Design | Pre-Design Review



Pre-Design



Design



- Relocation of the organizing examination facility to the Police Science Institute for the purpose & security reason

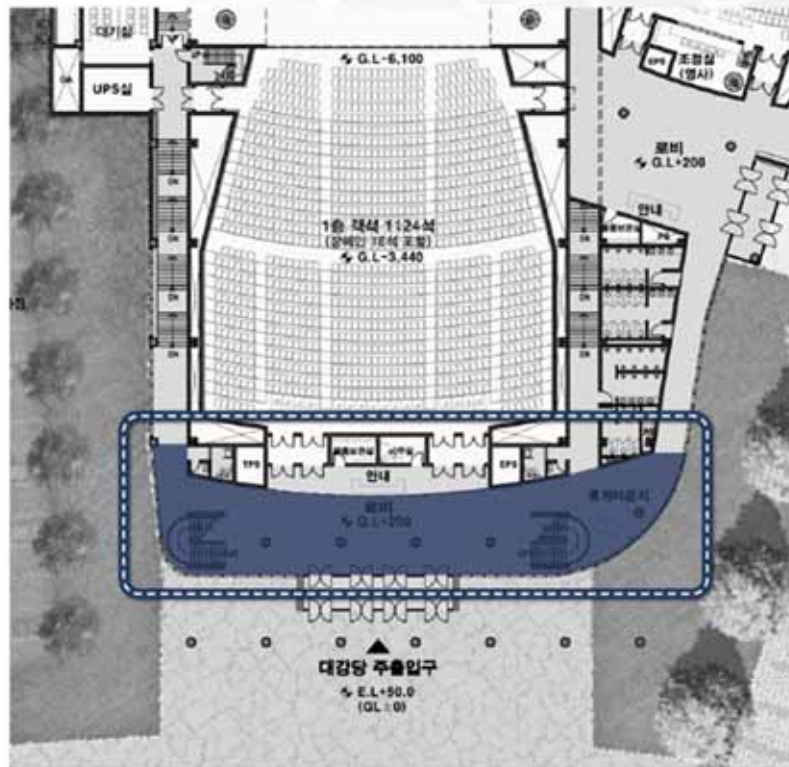
Design | Pre-Design Review



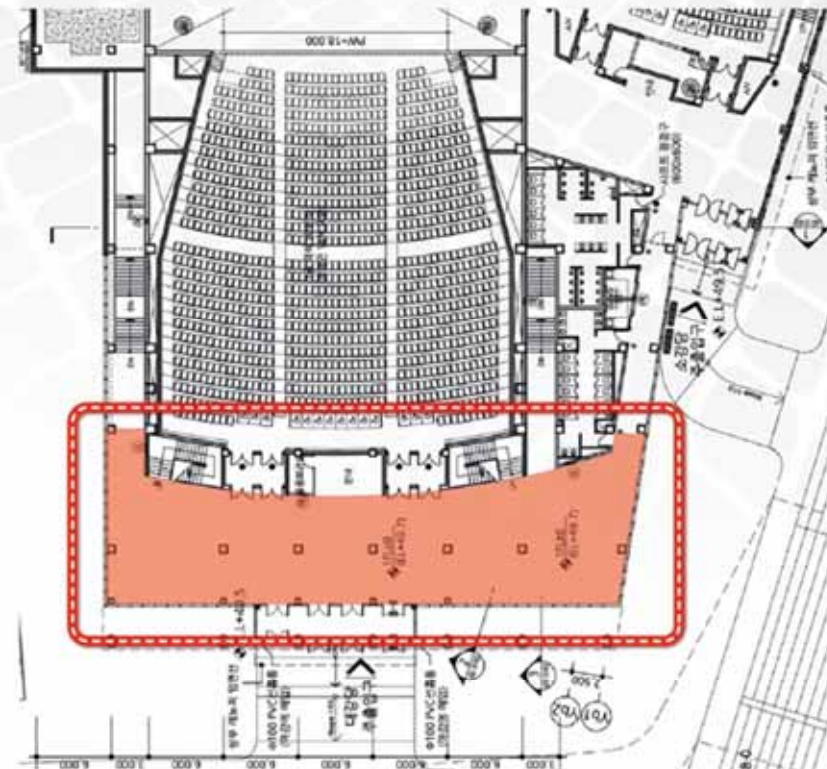
Design | Pre-Design Review



Pre-Design



Design

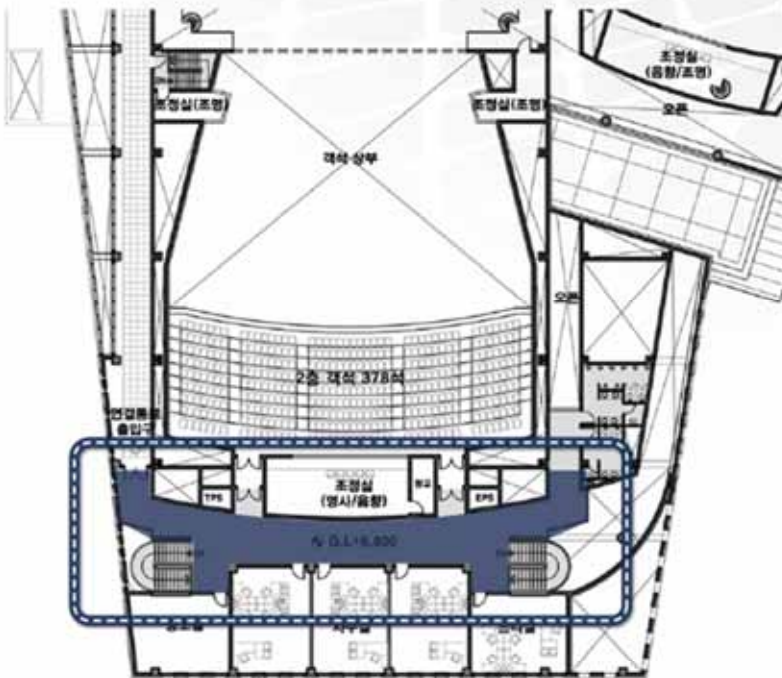


- Expanding the Lobby for maximizing the waiting area and user convenience

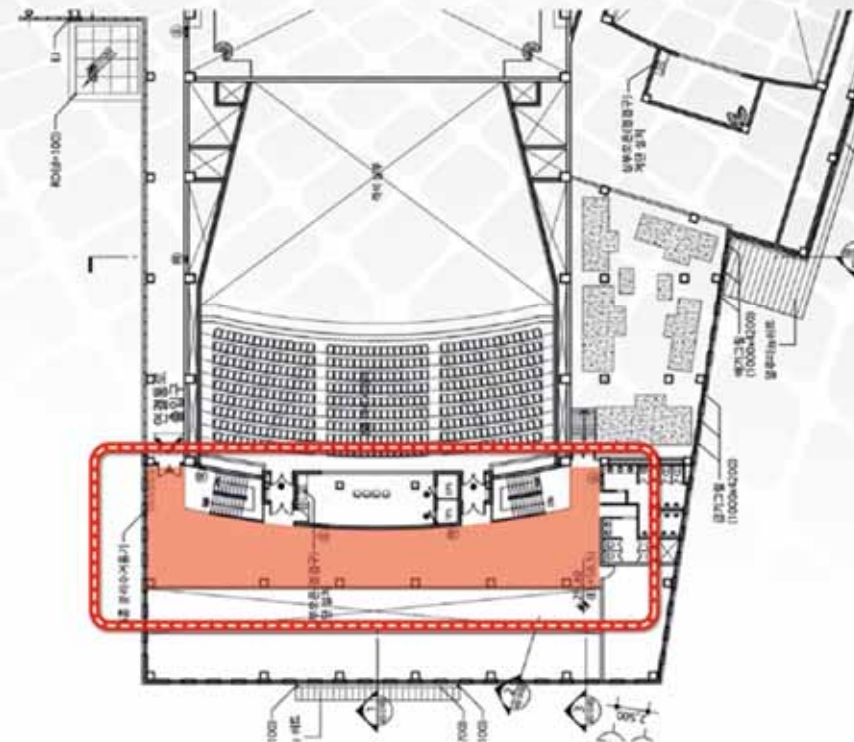
Design | Pre-Design Review



Pre-Design



Design



- Expanding 2nd fl. lobby for user convenience and setting lounge atmosphere

Design | Pre-Design Review



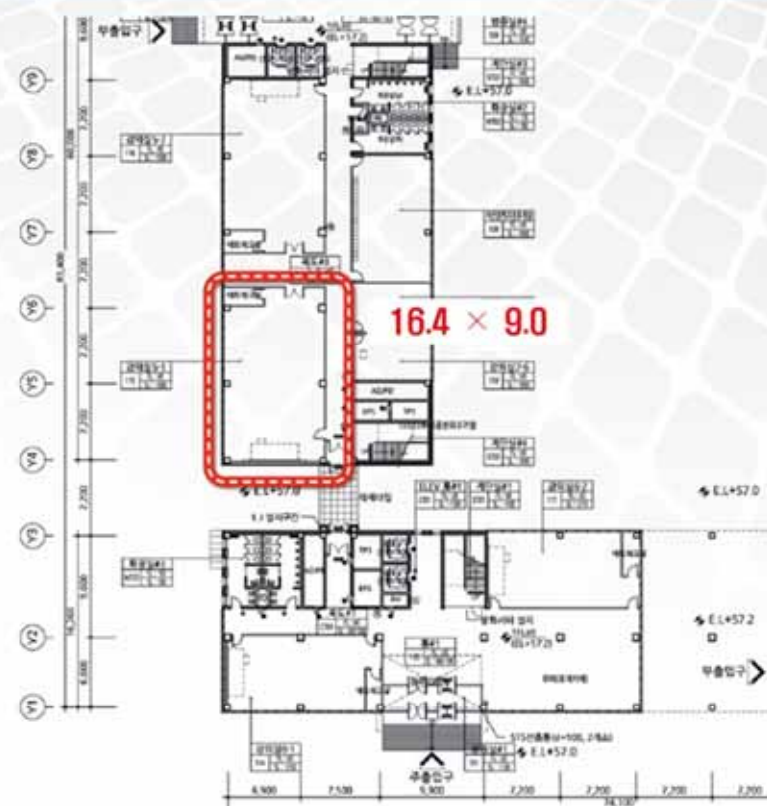
Design | Pre-Design Review



Pre-Design



Design

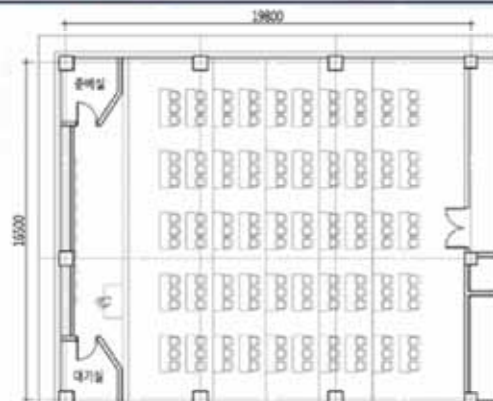


- Structural module change for increasing space efficiency of grand lecture hall

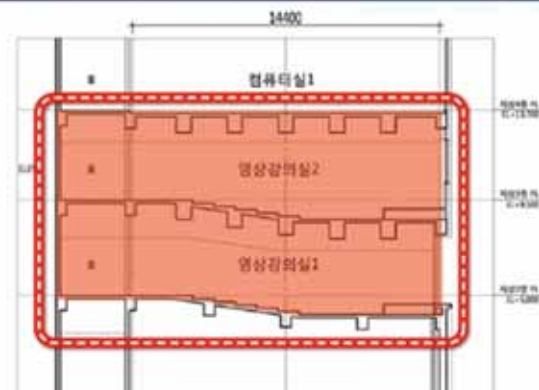
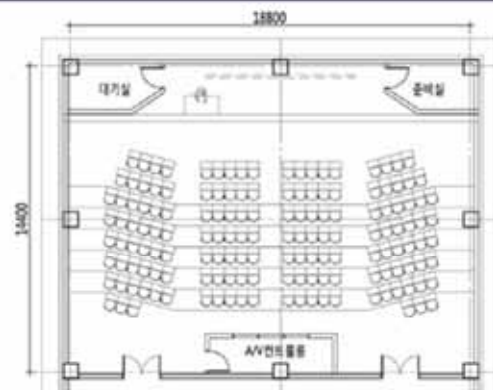
Design | Pre-Design Review



Pre-Design



Design



· Acoustical design change for educational improvement of lecture hall 1,2

Design | Pre-Design Review



Design | Pre-Design Review



Pre-Design



Design



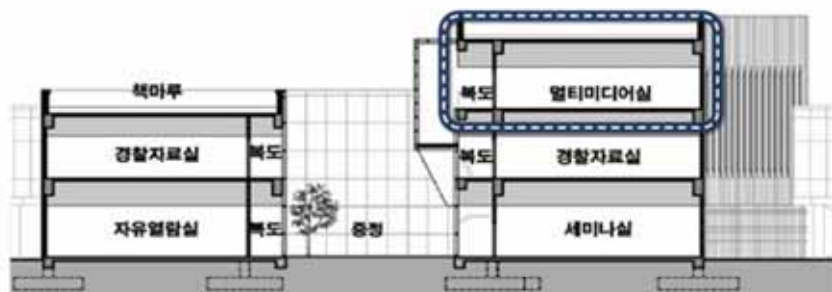
- Aggregating the library for increasing efficiency of book management & user convenience

Design | Pre-Design Review

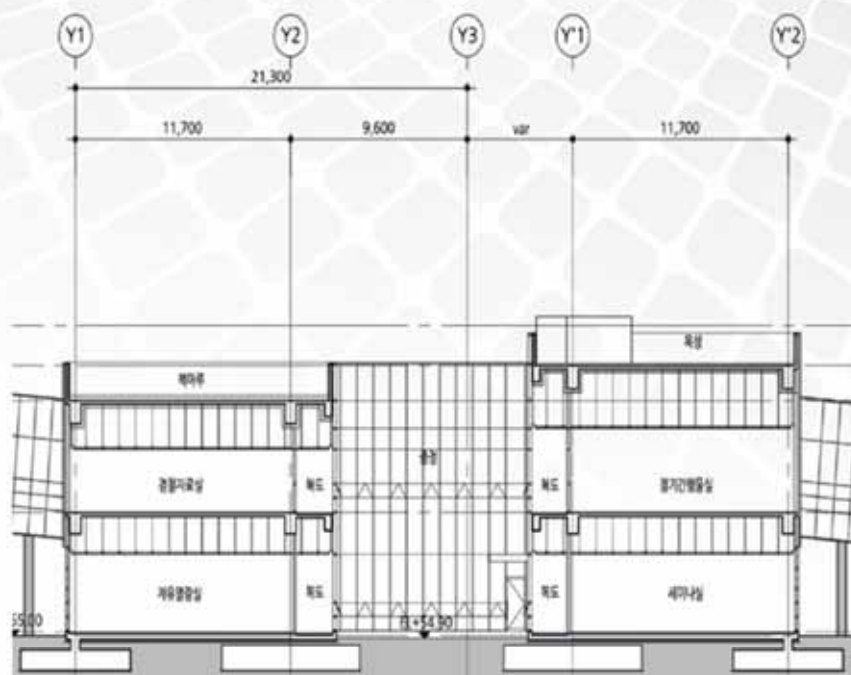


Pre-Design

Y1 12,000 | Y2 8,100 | Y3 VAR. | Y'1 12,000 | Y'2



Design



- Improving user accessibility by combining 3 floors to 2 floors

Design | Pre-Design Review

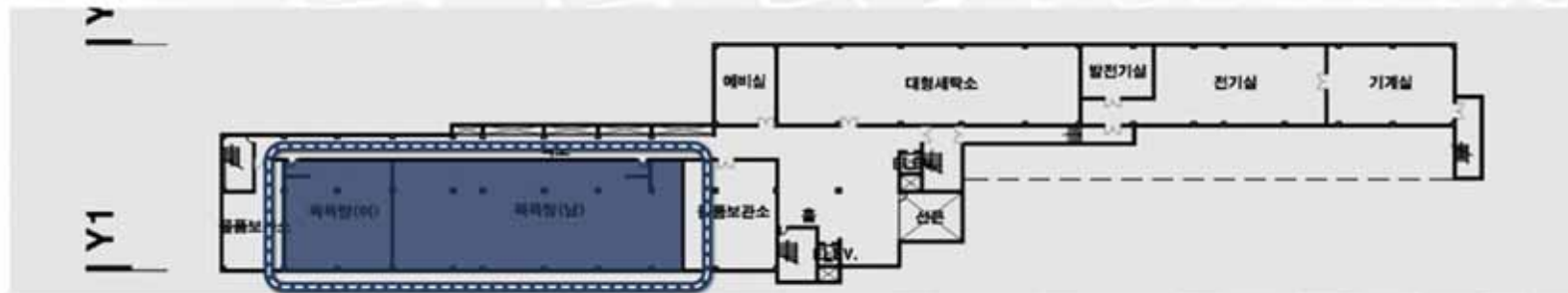


Dormitory
(faculty)

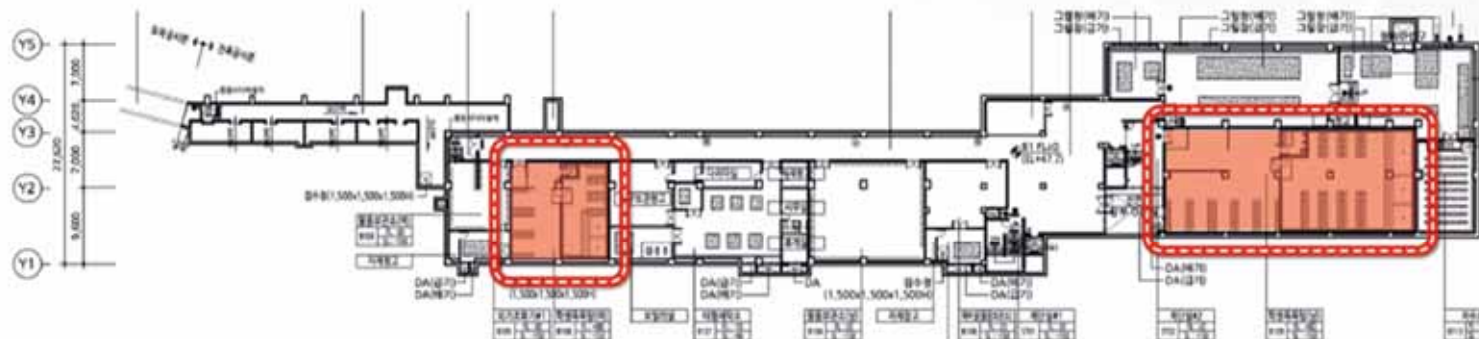
Dormitory
(Student)



Pre-Design



Design



- Relocating female shower room to increase privacy

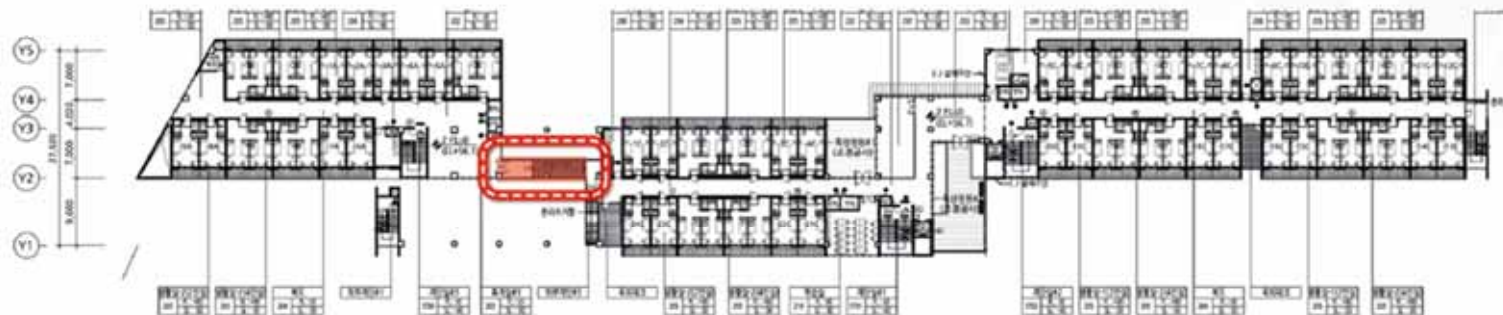
Design | Pre-Design Review



Pre-Design



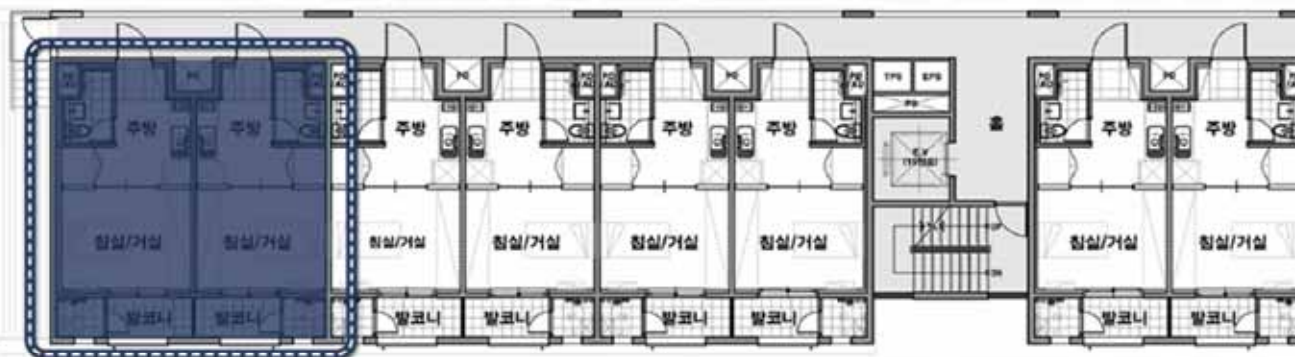
Design



- Planning for bridge between student dormitories estimating increasing female students



Pre-Design



Design



- Creating guest house on top floor of faculty dormitory

Design | Pre-Design Review



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[illegible]

- Relocating organizing examination facility to 2nd fl of Police Science Institute



Pre-Design



Design



- Merging kitchen & Pretreatment room with 2 service entrances to 1 for space efficiency improvement



Pre-Design



Design



- Setting staircase for 2nd floor users' accessibilities to shower rooms



Advisory Committee



Site survey



Benchmarking



Accounting
User opinions

Design Review
– 73 suggestions

**Construction
Cost Saving**

₩ 27.6
billion

LCC Improvement

₩ 63.7
billion

Cost
saving

56.8%

43.1%

**Value
Improvement**

26.9%

**Efficiency
Improvement**



Design review

✓ Securing space Sufficiency

Quantity Surveing

✓ Economical Construction Bedge
Management

Design Computation

✓ Maximizing Accuracy & Precision

Building Energy Simulation

✓ Maximizing Efficiency

Improvement

82

Design
Interface
found

24



Examination



Development

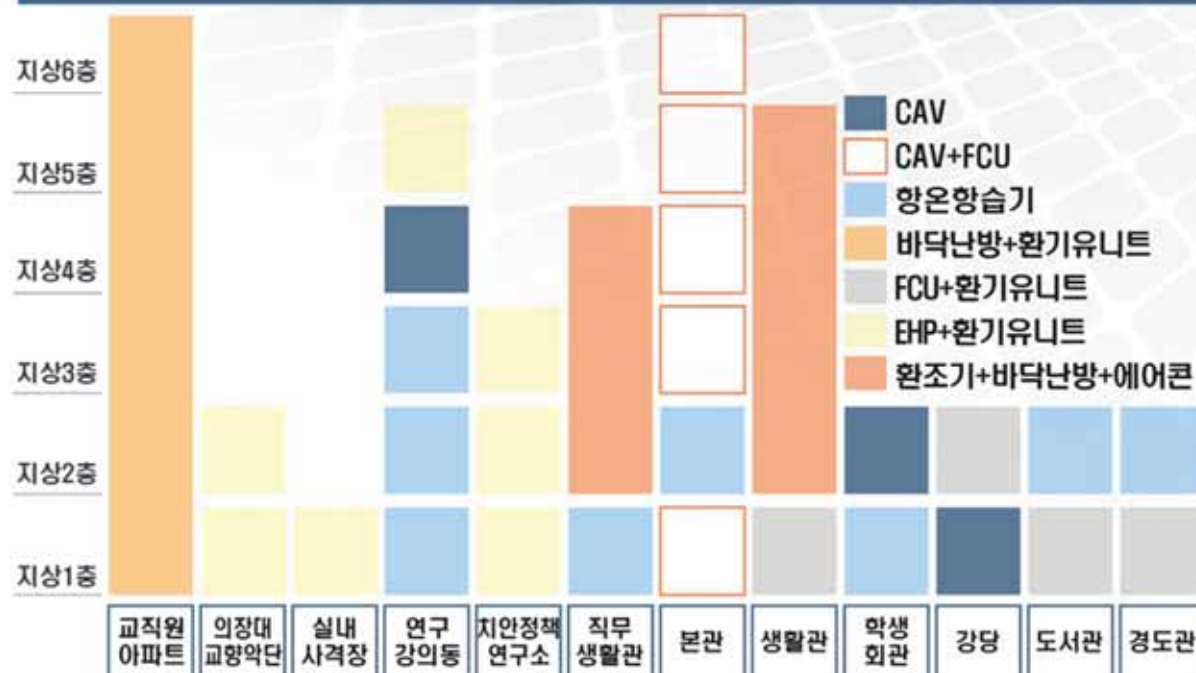


Location & type of Window change

Design | Green Building



SEMS(School Energy management System)



41.7% performance improvement relative to the Lv1 of Building Energy Efficiency certification

Adopting renewable energy 75% of cooling during summer season

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03. Construction Phase

Construction Plan



Construction phase



A ZONE

B ZONE

Main Road



Site division

Improving Management Efficiency

Ascon road on the site after cutting and banking earthwork

Shorten the construction period

Construction phase



HR Management



✓ BAC Test

✓ Korean Language Test

✓ New Con. Worker Management



~ 2W



2W~4W



4W~8W

Site work Experience

Safety Management

SORA

(주)대림산업

[Safety Operation Module & Risk Assessment]

실질적 안전 Process 이행



지적활동 및 조치



Input correction

Alarm to the contractor

Report correction



Thank you!!