

# PROCESS

THE CREATIVE JOURNEY





Getting from here . . .



WV Mixed-Use Project, Manhattan Beach, California Photo by Gregg Segal

to here.



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## Introduction:

## What is the Architectural Process?

Poon Design Inc. is often asked “how do we get from the beginning to the end?” Though each project is unique, this booklet outlines the six typical phases that we explore with each client.

1. Planning
2. Schematic Design
3. Design Development
4. Construction Documents
5. Plan Check and Bidding
6. Construction Administration

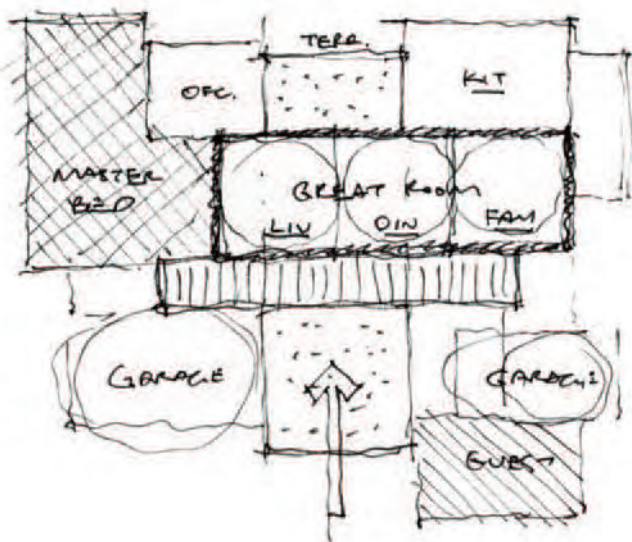
The following pages briefly describe each phase. After the descriptions, we include images that depict Poon Design's creative process, the collaboration, and some of our tools and methods.

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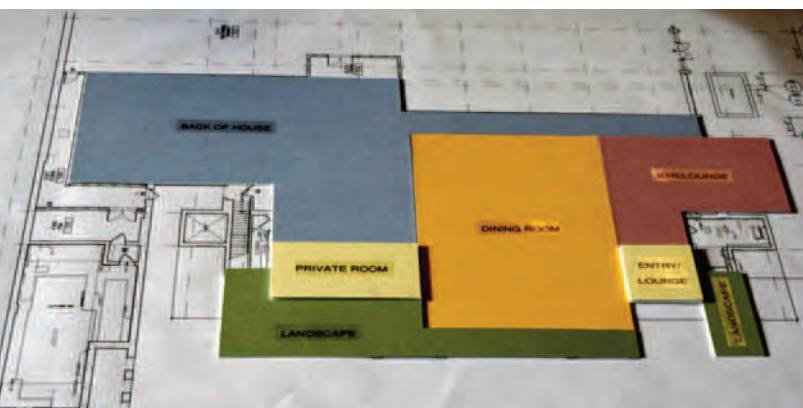
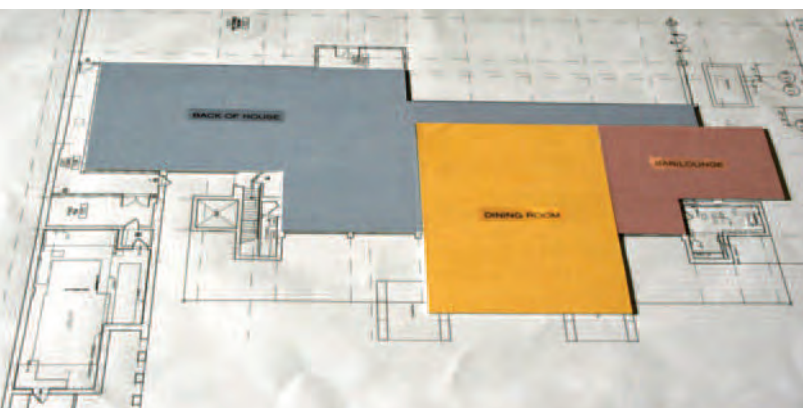
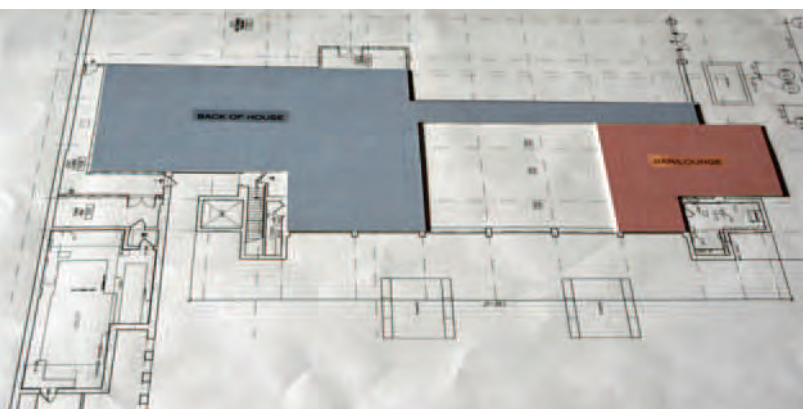
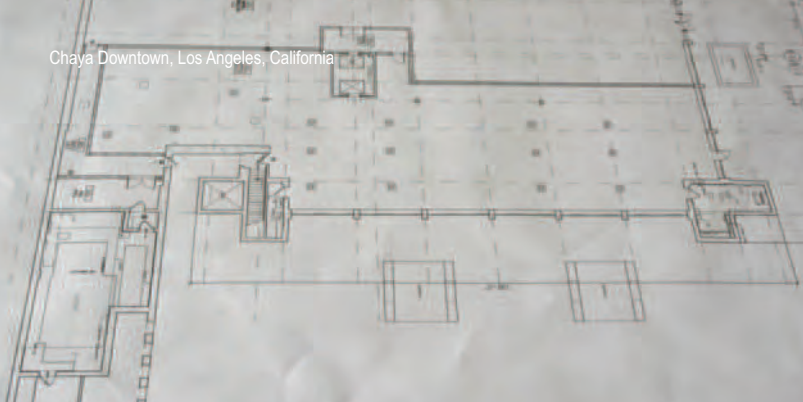


## Phase 1 of 6: Planning

Known also as “pre-design,” this phase outlines the programmatic goals of the client’s project. If a house, we ask: how many bedrooms, pets, home theater, etc.? If a school, we ask: how many students, teaching methods, multi-story, etc.? We learn who you are, and build a strategy for your vision becoming a reality.



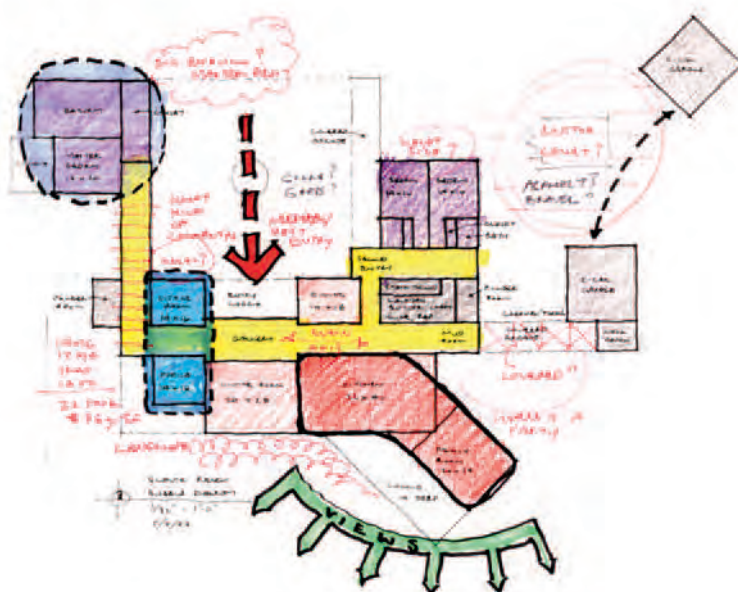




# PRELIMINARY PROGRAM A: CONVENTIONAL

360 to 420 Student Capacity (Add 120 for Specialized Classrooms)

PROGRAM	No. of People	NSF/ Person	NSF/ Space	No. of Spaces	Proposed NSF	Previous NSF	Comments
1.0 General Classrooms							
1.1 Classroom	15	45.00	675	21	14,175	12,000	4 classrooms per cluster
1.2 Language Lab	15	66.67	1,000	0	0	2,400	clusters
1.3 Restroom: Male & Female			500	4	2,000	1,000	
Subtotal					16,175	15,400	
2.0 Science							
2.1 Science Labs	15	66.67	1,000	7	7,000	9,600	
2.2 Science Prep Room			250	7	1,750	0	
Subtotal					8,750	9,600	
3.0 Art							
3.1 Art Room	15	66.66	1,000	1	1,000	1,000	
3.2 Art Room Storage			150	1	150	200	
3.3 Ceramics Lab	15	66.66	1,000	1	1,000	0	
3.4 Kiln Room			150	1	150	0	
3.5 Multimedia Lab	15	66.66	1,000	1	1,000	1,500	Graphic Arts, Photography To be evaluated
3.6 Photography Dark Room			350	1	350	0	
Subtotal					3,650	2,700	
4.0 Technology Center							
4.1 Technology Center	15	66.66	1,000	1	1,000	5,000	
4.2 Process Lab	15	55.00	825	1	825	0	
4.3 Life Skills Lab	15	55.00	825	1	825	0	
Subtotal					2,650	5,000	
5.0 Library/Media Center							
5.1 Librarian's Office			180	1	180	300	
5.2 Circulation Desk/Reception			200	1	200	500	
5.3 Work Room/Processing			250	1	250	300	
5.4 Media Equipment Room			250	1	250	1,000	
5.5 Reading Area	150	22.50	3,375	1	3,375	10,000	Accommodates 150 Students
5.6 Stack Area			685	1	685	0	1,200 LF = 8,500 volume
5.7 Study Room	8	25.00	200	2	400	500	
5.8 Restrooms: Men & Women			75	2	150	200	
5.9 Storage					0	500	
Subtotal					5,490	13,300	Previously 6,850 NSF
6.0 Music							
6.1 Choir/Vocal Room	15	80.00	1,200	1	1,200	0	
6.2 Instrumental Room	15	125.00	1,875	1	1,875	0	
6.3 Instrument Storage			200	1	200	0	
6.4 Small Music Practice Room	2	40.00	80	1	80	0	
6.5 Large Music Practice Room	4	40.00	160	1	160	0	
Subtotal					3,515	0	



## Phase 2 of 6: Schematic Design

Here, we launch the creative process. We explore design ideas, sketching conceptual options for the goals of your building. Collaboratively with the client, Poon Design balances the artistic character and expression with a preliminary budget and schedule. Through a roll-up-your-sleeves process, we define the Big Picture.

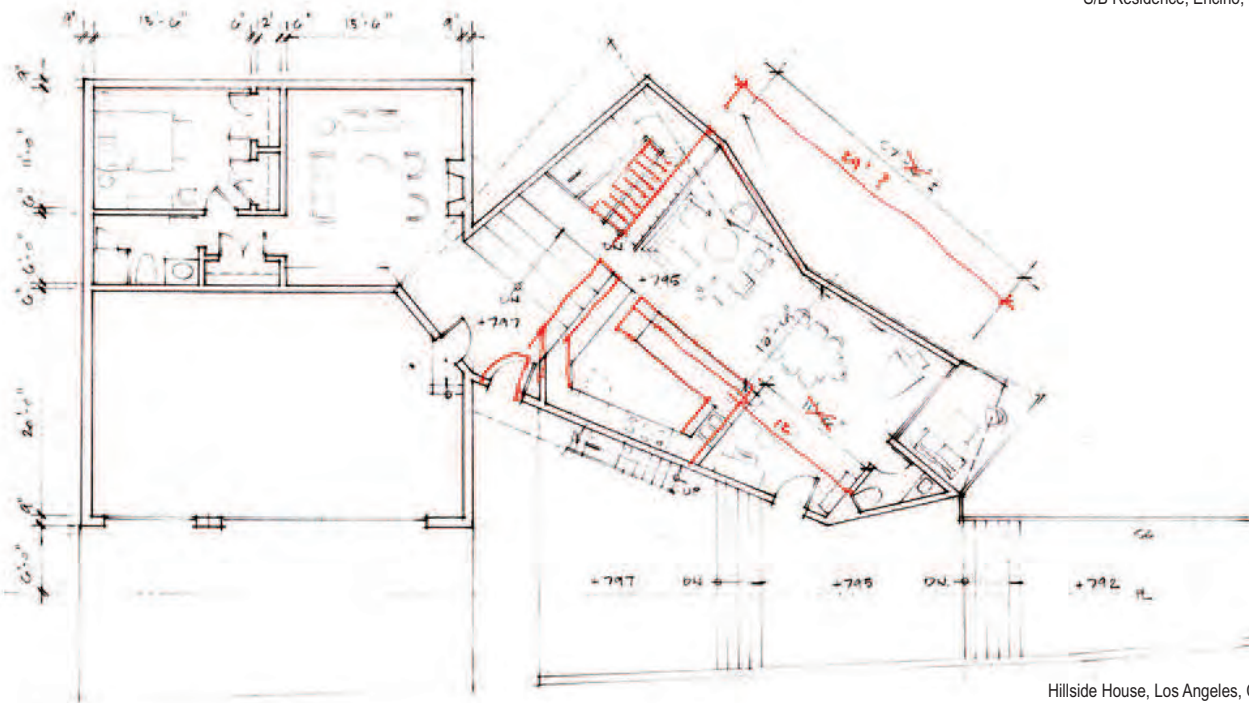
CAP Mixed-Use Project, Los Angeles, California





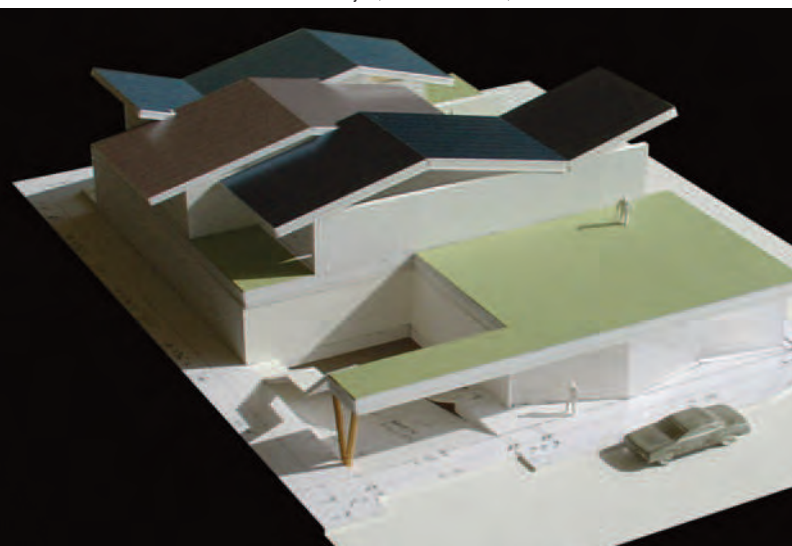


S/B Residence, Encino, California



Hillside House, Los Angeles, California

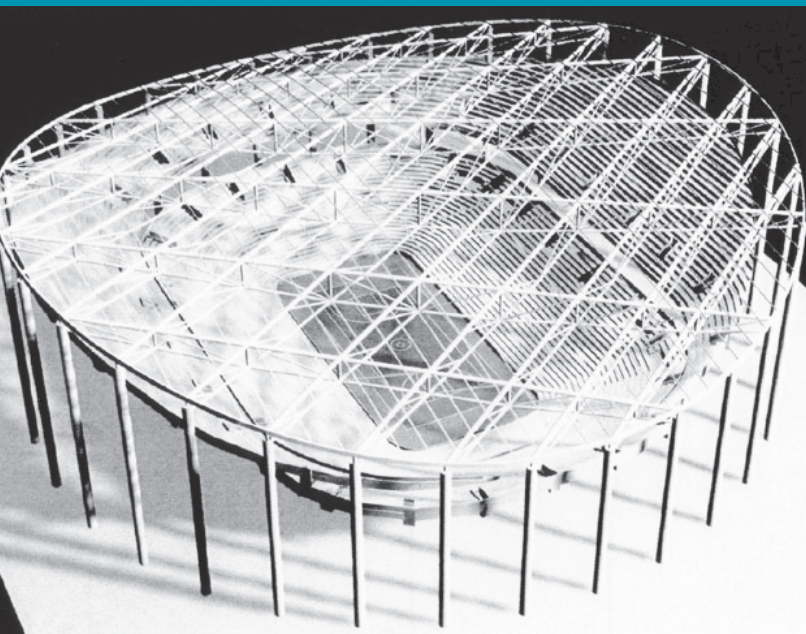
WV Mixed-Use Project, Manhattan Beach, California



### Phase 3 of 6: Design Development

We then develop and refine. We study forms, shapes, square footages and details. With consultants such as structural and mechanical engineers, we coordinate the technical aspects of the client's design, ensuring that the project is in accordance with agency codes, as well as budget and schedule.

Taegu Arena, Taegu, Korea, by Anthony Poon while w/ NBBJ







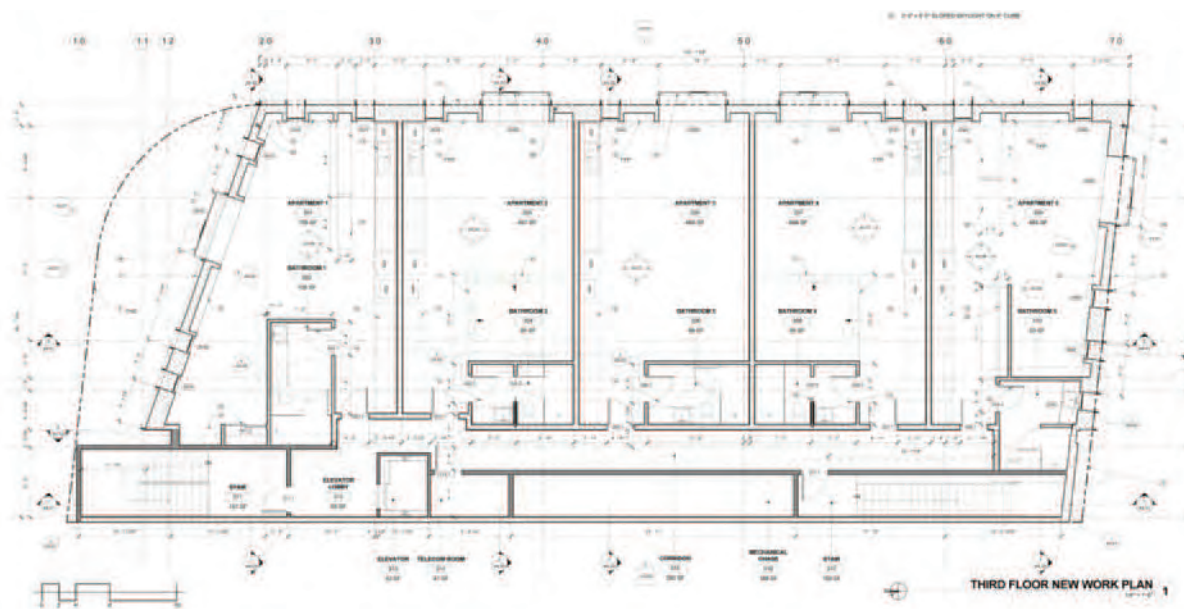
Bel Air Presbyterian Preschool, Bel Air, California Rendering by Mike Amaya



Hollywood House, Los Angeles, California



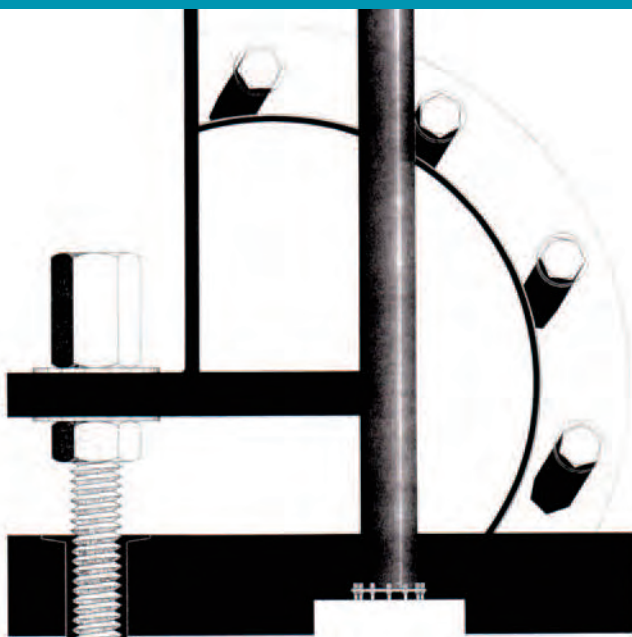
Chaya Downtown, Los Angeles, California



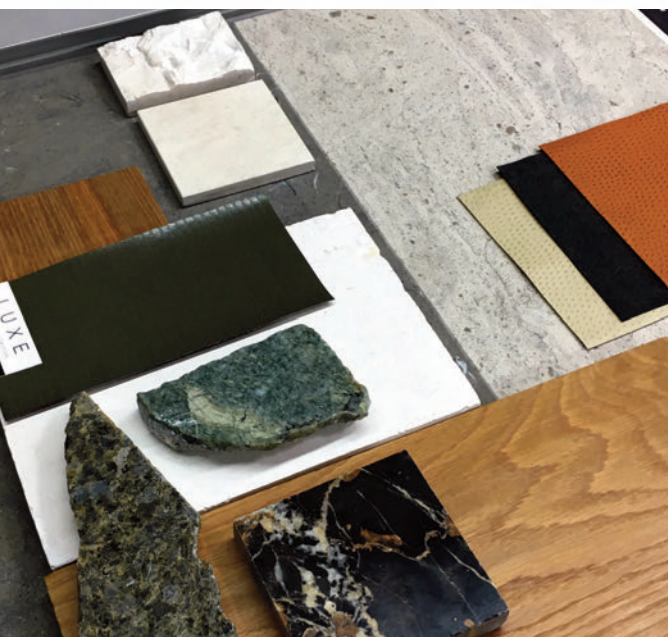
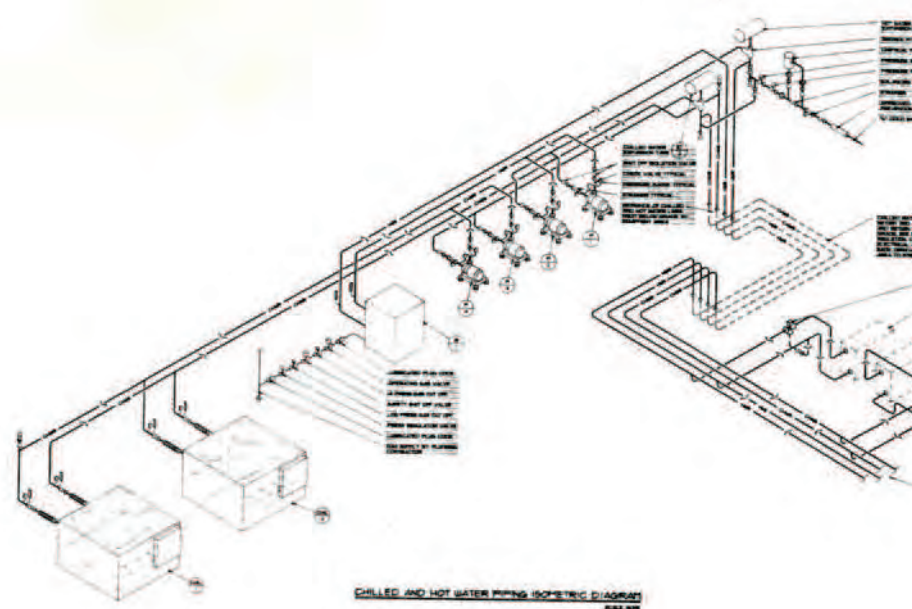
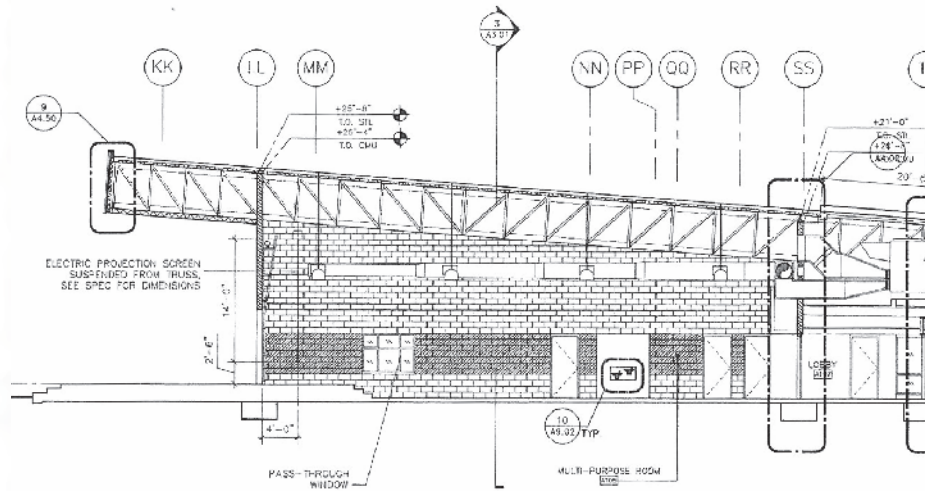
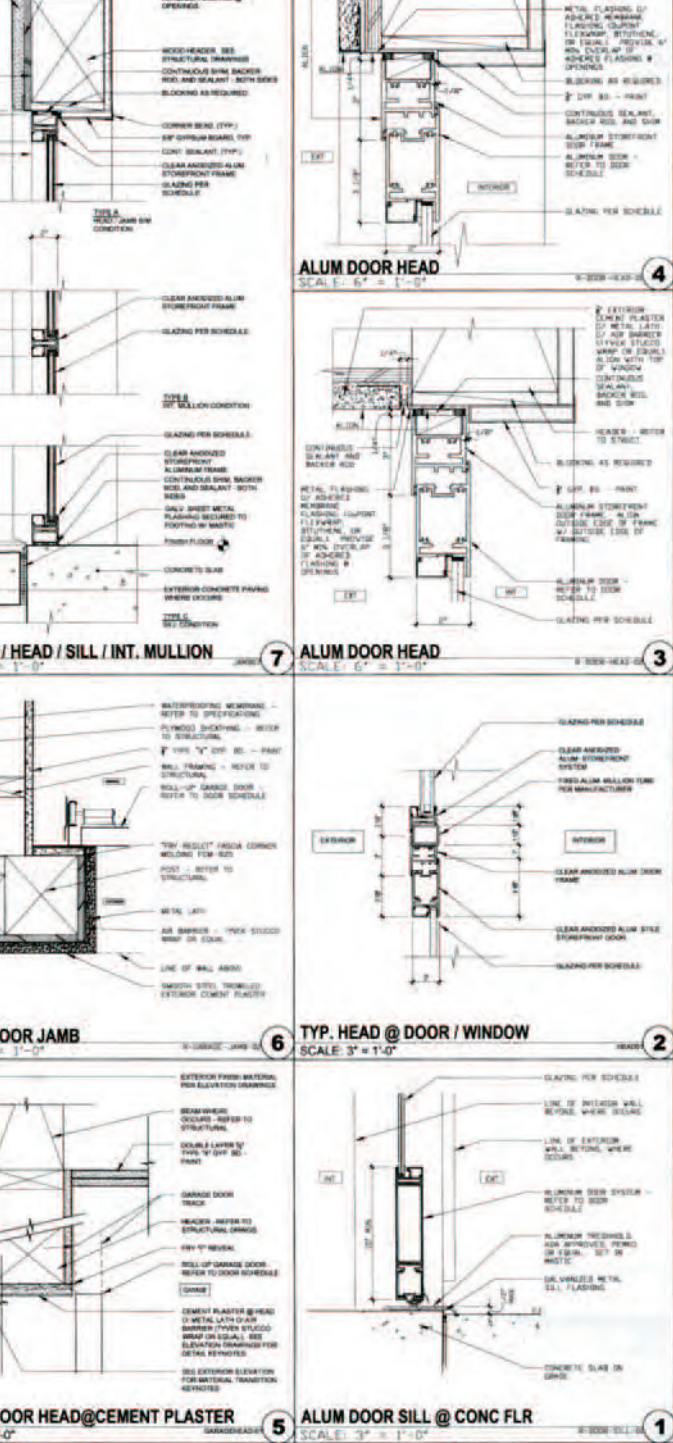
CAP Mixed-Use Project, Los Angeles, California

## Phase 4 of 6: Construction Documents

In conjunction with the engineers and consultants, Poon Design produces the Construction Documents, a detailed set of drawings that demonstrates to the city and your general contractor how your project will be executed. Also used to apply for the client's building permit, our drawings explain many aspects of the building: dimensions, roof drainage, window details, wood stains, and lighting layout—just to name a few.







## Phase 5 of 6: Plan Check and Bidding

One half of this phase is Plan Check, where the Construction Documents are submitted to the relevant city agencies for approvals.

The other half of this phase is bidding, where the Construction Documents are provided to potential general contractors to submit competitive bids of construction costs. Poon Design assists you in reviewing bids--ensuring the bids meet the design intent, combining creative expectations with the realities of a budget.

A. Food Service		Allowance	\$400,000
B. Theater		Allowance	\$800,000
C. Gymnasium		Allowance	\$50,000
D. Aquatic Center		Allowance	\$50,000
<b>Subtotal</b>			<b>\$900,000</b>

<b>Subtotal Construction Costs</b>		<b>\$25,670,000</b>
Contractor's General Conditions, Overhead & Profit	12%	\$3,080,400
Design Contingency	12%	\$3,456,048
Escalation to August 2005 @ 4% per year, compounded	4%	\$2,637,867
<b>Total Construction August 2005 Costs</b>		<b>\$34,828,005</b>

### Section 2: OTHER PROJECT COSTS (Soft Costs)

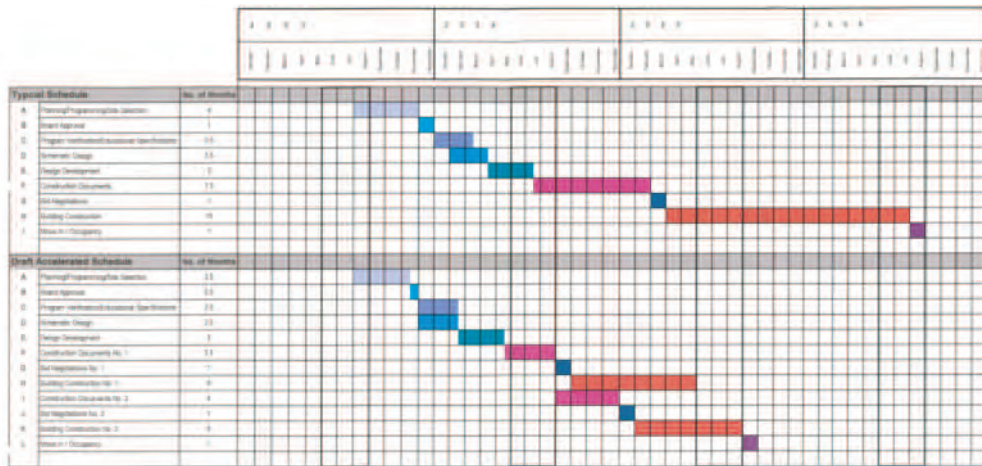
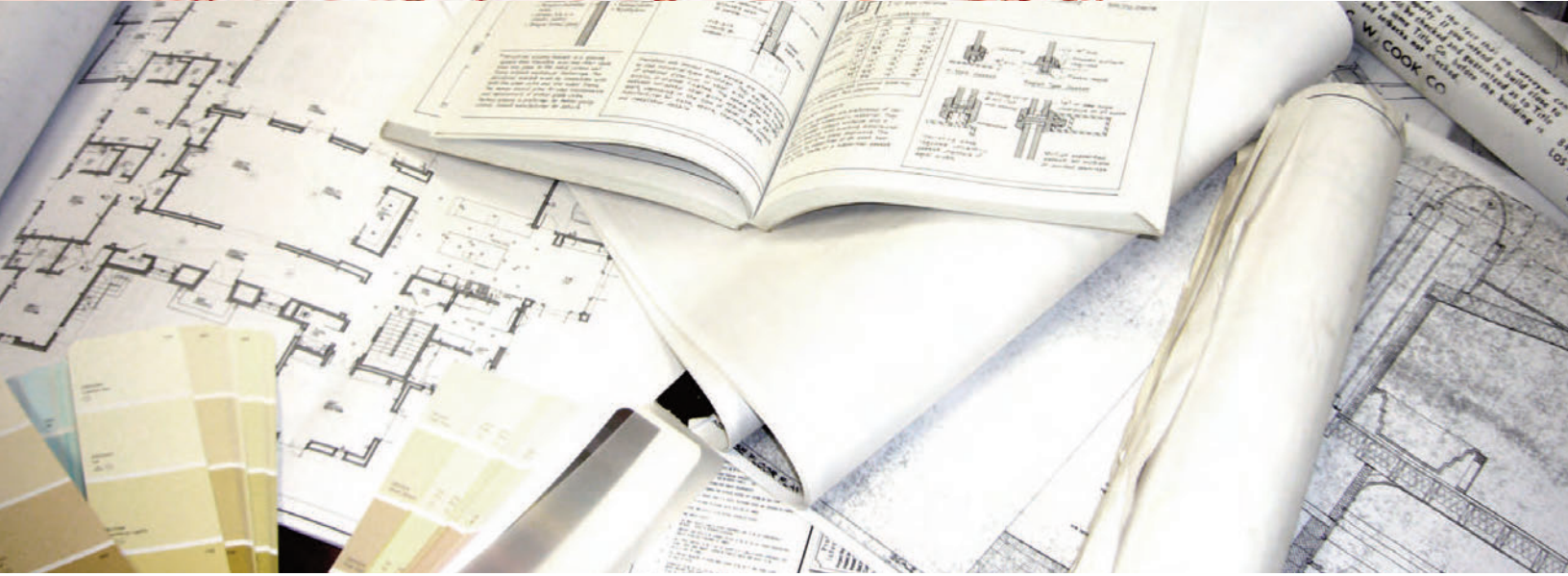
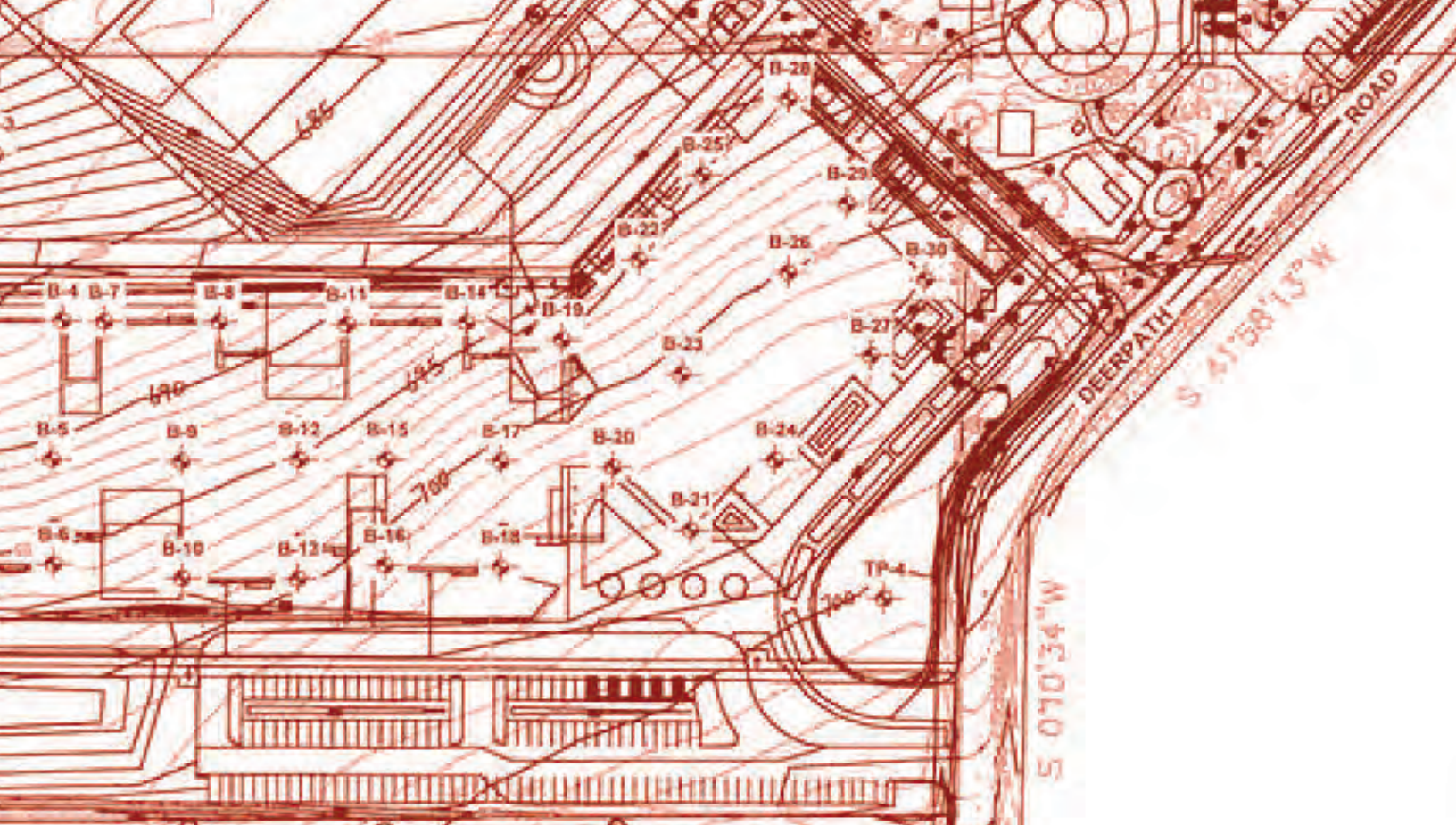
OTHER PROJECT COSTS	Unit	Unit Cost	Subtotal
A. Furniture	\$1,000	\$12.00	\$900,000
B. Fixtures and Equipment	\$60,000	\$3.00	\$240,000
C. Technology: Computers, etc.		Allowance	\$100,000
D. Movable Equipment	\$40,000	\$3.00	\$240,000
E. Signage		Allowance	\$100,000
<b>Subtotal</b>			<b>\$1,640,000</b>
Escalation to August 2005 @ 4% per year, compounded	4%		\$133,834
<b>Total August 2005 Dollars</b>			<b>\$1,773,834</b>

<b>Professional Fees</b>			
A. Architecture & Engineering	10%		\$3,482,800
B. Special Consultants: Acoustics, Theater, Technology, etc.	2%		\$696,560
C. Interior/FF & E Design	10%		\$177,382
D. Reimbursable Expenses	4%		\$348,539
<b>Subtotal</b>			<b>\$4,705,282</b>

<b>Owner's Administrative Costs</b>			
A. Construction Manager Fee, typically 6%	6%		\$0
B. Construction Contingency/Change Orders/Unforeseen Conditions	10%		\$4,730,711







COMPONENT BUDGETS				Quantity	Unit	Rate	Total
<b>II. Heating, Ventilation &amp; Air Conditioning</b>							
Heat generation and chiller equipment							
Chillers	500	Tons	\$75.00				\$37,500
Cooling towers	300	Tons	200.00				\$60,000
Boilers	8,500	MBH	10.00				\$85,000
Chemical water treatment	1	LB	15,000.00				\$15,000
Thermal expansion compensation and circulation							
Piping, fittings, valves and insulation	110,000	LF	\$0.25				\$27,500
Air handling equipment							
15,000 cfm	1	EA	\$50,000.00				\$50,000
Sound attenuators	100,000	CFM	\$0.30				\$30,000
Fan coil units, modulator coils	1	EA	15,000.00				\$15,000
Kitchen make-up	1,000	CFM	2.50				\$2,500
VAV boxes, terminal units (1,000 CFM)	120	EA	750.00				\$90,000
Air distribution and return							
Galvanized sheetmetal ductwork	110,000	LB	\$0.05				\$5,500
Galvanized galvanized ductwork	5,000	LB	\$0.50				\$2,500
FF go. Flexible	4,000	LB	7.50				\$30,000
Flexibly ductwork							
Dampers	800	EA	\$5.00				\$4,000
Trunks	1	EA	\$5,000.00				\$5,000
Fire smoke	25,000	CFM	\$0.30				\$7,500
Insulation							
Diffusers, registers and grilles	110,000	EA	\$0.25				\$27,500
Building management controls							
Timing and balancing	100	HR	\$5.00				\$5,000
VAV ventilation							
General exhaust fans	1	EA	\$7,500.00				\$7,500
Kitchen exhaust fans	1	EA	\$5,000.00				\$5,000

\$1,084,100



## Phase 6 of 6: Construction Administration

With your general contractor on board, construction begins. Poon Design visits the project on a regular basis to determine if the work meets the design intent of the Construction Documents. We are also available from the office to answer clarifications and review submittals like material samples and substitutions. We observe construction through the completion and final “walk-through” of your project.

Horizon Residence, Palm Springs, California







Chaya Downtown, Los Angeles, California



Bliss Residence, Los Angeles, California, by Martin/Poon Architects



Orradre Library, Santa Clara University, California, by Anthony Poon while w/ HHPA

# COMPLETION

W-V Mixed-Use Project, Manhattan Beach, California Photo by Gregg Segal











## Photo Index

Cover: Chaya Downtown, Los Angeles, California (photo by Gregg Segal)

Previous Page, top to bottom, left to right:

University Library, The American University in Cairo, Egypt, by Anthony Poon while with HHPA  
(photo by Michael Moran)

Din Tai Fung, Costa Mesa, California (photo by Gregg Segal)

Memphis Cafe, Manhattan Beach, California (photo by Within A Dream)

Escena Residence Palm Springs, California (photo by Imagine Imagery)

Greenman Elementary School, Aurora, Illinois, by Anthony Poon, A4E (photo by Mark Ballogg)

8-fish, Los Angeles, California

WV Mixed-Use Project, Manhattan Beach, California (photo by Gregg Segal)

Herget Middle School, Aurora, Illinois, by Anthony Poon while, A4E (photo by Mark Ballogg)

Vosges Haut-Chocolat, Beverly Hills, California (photo by Gregg Segal)

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