

**1. Programming Phase**

- A. Owner establishes agreement with Architect.
- B. Site analysis.
- C. Written program describing each space with square footage including circulation areas.
- D. Establish pro-forma budget including soft costs and construction.
- E. Establish overall schedule for project including preconstruction services, major milestones (submit for permits, DOT entry access, OCRM, DHEC, EPA, construction starts, move-in)
- F. Define price and quality expectations.

**2. Owner and Architect select Contractor**

**3. Team meets to review Outline for Preconstruction services and checklist**

- A. Confirm responsibilities for each team member.
- B. Establish milestone dates for completion of each phase of design.
- C. Establish dates that each estimate will be done for the different phases.
- D. Review Plan Checklist to confirm what will be included in the drawings.
- E. Agree on other meeting dates that may be important to discuss means and methods of the construction with the complete team.

**4. Schematic Design Phase**

- A. Client Responsibilities
  - i. Provide Survey
  - ii. Provide preliminary geotechnical review.
  - iii. Approve schematic design, budget estimate for schematics, and overall construction duration.
- B. Architect Responsibilities
  - i. Meeting with Building and Code officials for project specific issues.
  - ii. Refine soft cost budget with client.
  - iii. Assist Owner with contract selection for preconstruction services.
  - iv. Consult with Contractor and discuss concerns over materials, methods, cost and constructability.
  - v. Complete schematic design on schedule per attached Plan Checklist.
  - vi. Update overall project schedule and include deadlines for preconstruction phases.
- C. Contractor Responsibilities
  - i. Contractor meets with Architect prior to meeting with Owner to review scope of work and related pricing.
  - ii. Review overall schedule and provide feedback with approximate overall timeline for construction.
  - iii. Provide input on materials, methods, cost and constructability.
  - iv. Provide budget estimate for schematics. Budget is preliminary utilizing basic quantity surveying, historical cost data and approximate pricing anticipated for final project. Schematic estimate will be grouped in CSI Master Format.

## **5. Design Development (DD-65% Complete)**

### A. Client Responsibility

- i. Provide geotechnical survey.
- ii. Approve design development plans, budget estimate for design development, and preliminary CPM Schedule.
- iii. Make timely decisions.
- iv. Determined method of financing.
- v. Review life cycle cost vs. construction costs.
- vi. Identify if other areas of work exist which will be procured under separate contract.

### B. Architect Responsibility

- i. Identify and address code issues.
- ii. Identify and address new areas of development in the design.
- iii. Work with Contractor to determine appropriate mechanical and electrical systems.
- iv. Provide outline specifications or performance specifications (particularly if design/build method of delivery).
- v. Consult with Contractor to discuss concerns over materials, methods, cost and constructability.
- vi. Engage structural engineer.
- vii. Complete design development on schedule per attached Plan Checklist.
- viii. Update overall project schedule.

### C. Contractor Responsibilities

- i. Provide budget for design development in CSI format utilizing quality survey of board categories, historical cost data, published cost data, allowances, and preliminary subcontractor/supplier bids.
- ii. Provide report of scope of work and estimate evaluation from each subcontractor/supplier engaged.
- iii. Provide preliminary CPM schedule for construction.
- iv. Consult with subcontractors.
- v. Identify areas of risk
- vi. Identify contingency line items and their purpose.
- vii. Discuss logistics and construction means.
- viii. Discuss variances in costs from schematics estimate.
- ix. Discuss terms and conditions of general contract with Owner.

## **6. Construction Documents (95% Complete)**

### A. Client Responsibilities

- i. Confirm financing source.
- ii. Closely review drawings and specifications.
- iii. Closely review budget and schedule.
- iv. Make timely decision to support construction start.
- v. Approve construction documents, budget estimate for construction documents, and CPM schedule.

B. Architect Responsibilities

- i. Resolve code and old issues.
- ii. Consult with contractor to identify and discuss final scope and plans.
- iii. Review and improve MEP systems.
- iv. Coordinate architectural drawings with structural, landscaping, mechanical, electrical, and civil design.
- v. Complete construction documents on schedule per attached plan checklist.
- vi. Submit to Building Department/Code officials for review and approval.

C. Contractor Responsibilities

- i. Provide budget estimate for construction documents in narrow CSI format detail utilizing man-hour cost, materials, and equipment pricing, and at least (2) quotes from subcontractor/supplies on all applicable divisions.
- ii. Provide CPM construction schedule.
- iii. Provide explanation of changes to budget or schedule from design development stage.
- iv. Review overall project for areas of potential change orders, final value engineering ideas, and budget appropriate contingency costs.

**7. Permit Insurance**

A. Client Responsibilities

- i. Finalize financing and secure letter of verification for contractor.
- ii. Authorize ordering of long lead items, permits, and initiate submittal process.
- iii. Execute contract with contractor for construction of project. (Award other contracts if identified earlier).
- iv. Review entire project and identify/communicate any changes desired.

B. Architect Responsibilities

- i. Respond to jurisdiction comments.
- ii. Track and obtain building permits
- iii. Update drawings with all building department/code official changes.
- iv. Cloud all changes to drawings and issue drawings stamped "For Construction."
- v. Assist clients with awarding on contracts and long dead items.

C. Contractor Responsibilities

- i. Provide review of overall project searching for unanswered questions, missing details, gaps in plans, and plan coordination issues.
- ii. Request authorization for ordering long dead items and submittal process (Release contracts for subcontractors if design build method used).

- iii. Provide GMP or lump sum by updating budget estimate for construction drawing with changes including those from Owner, Building Department, updated bids, etc.
- iv. Provide Form of Agreement for execution.
- v. Review and finalize CPM construction schedule to be attached as contract schedule.
- vi. Provide explanation of changes to budget and schedule.

## 8. Plan Checklist

### A. Architectural

- i. Site Plan indicating general layout
  - a. Parking Log Layout
  - b. Building Layout
  - c. Sidewalk Layout
- ii. Floor Plans 1/8" scale
  - a. General layout (may include furniture)
  - b. Grids with overall dimensions
  - c. Room names and room numbers
- iii. Elevations
  - a. Presentation quality
- iv. Building Sections
- v. Schematic Specifications
  - a. Major component description or project checklist
  - b. Structural
    - 1. Structural section indicating options
    - 2. Hand sketched bay sizes and general layout of each system.
  - c. Civil
    - 1. General information of existing conditions
    - 2. Conceptual description
  - d. Mechanical
    - 1. Location of major mechanical equipment (HVAC, plumbing, fire sprinkler)
  - e. Electrical
    - 1. Location of electrical panels

### B. Design Development Phase (65% Complete)

- i. Architectural
  - a. Title Sheet
    - 1. Index Sheet
  - b. Code Data Sheet

- c. Site Plan indicating general layout with dimensions
  - 1. Parking Lot Layout
  - 2. Building Layout
  - 3. Sideway Layout
  - 4. Decks, patios, and driveways shown
  - 5. Landscaping areas
- d. Demo plans (if needed)
- e. Floor plans
  - 1. Final floor plan
  - 2. Grids with overall dimensions
  - 3. Room names and room number
- f. Roof plans
  - 1. Slope of roof indicated
  - 2. Location of roof drains
- g. Reflected ceiling plans with grids
- h. Elevations
  - 1. Elevations indicating materials with grid
  - 2. Building Sections
- i. Room Finish Schedule
- j. Outline Specifications
- ii. Civil
  - a. Site Survey
  - b. Grading Plan with utilities
  - c. Geotechnical Report
- iii. Structural
  - a. Structural floor plans with major elements indicated
  - b. Foundation plan
  - c. Sizes of all structural elements
- iv. Mechanical
  - a. Conceptual performance specifications
    - 1. HVAC-Single Line Diagram
    - 2. Plumbing-Single Line Diagram
    - 3. Fire Sprinkler
- v. Electrical
  - a. Conceptual performance specifications
    - 1. Special fixtures and equipment loads
    - 2. Alarm requirements
    - 3. Pre-wire requirements

- C. Construction Document Phase (95% Complete)
  - i. Architectural
    - a. Title Sheet
      - 1. Index
      - 2. Vicinity Map
    - b. Code Data Sheet
      - 1. All information need by the Building Department
      - 2. Existing Plan
    - c. Site Plan
      - 1. Parking lot layout
      - 2. Building layout
      - 3. Sideway layout with dimensions
      - 4. Decks, patios, and driveways shown and detailed
      - 5. Contractor's layout area
      - 6. Site details
      - 7. Complete landscape plan
    - d. Demo Plan (if needed)
    - e. Phasing Plan (if needed)
    - f. Floor Plans
      - 1. Final floor plans with dimensions
      - 2. Wall types indicated
      - 3. Room names and room numbers
      - 4. Details and elevation indicated
      - 5. Exit lights indicated
    - g. Roof Plans
      - 1. Slope of roof indicated
      - 2. Location of roof drains
      - 3. Details and section cut indicated
      - 4. Location with dimensions of all mechanical units
      - 5. Location of all skylights and roof penetrations
    - h. Reflected ceiling plan with grids
      - 1. All mechanical and electrical fixtures indicated
    - i. Elevations
      - 1. Elevations indicating materials with grids
      - 2. Window types indicated
      - 3. Building and wall sections indicated
    - j. Room finish schedule and door details
    - k. Building sections and exterior details

- l. Wall sections
- m. Stair and elevator plans and sections
- n. Enlarged plans and interior elevations
- o. Interior furniture layout and equipment (if required)
- p. Final specifications
- ii. Civil
  - a. Site details
  - b. Complete utility plans
  - c. Staking, grading, and paving plan
  - d. Demo plan (if needed)
- iii. Structural
  - a. Structural floor plans with major elements indicated
  - b. Foundation plan
  - c. Sizes of all structural elements
  - d. Structural details
- iv. Mechanical
  - a. Location of mechanical units
  - b. Floor plans with duct sizes
  - c. Location with all diffusers on reflected ceiling plan
  - d. Plumbing plans
  - e. Fixtures schedules
  - f. Mechanical details
  - g. Fire Sprinkler details
  - h. Riser location
  - i. Head location
- v. Electrical
  - a. Location of electrical panels
  - b. Location of light fixtures, alarms, telephone, and TV
  - c. Fixture schedule

