

## **CONSTRUCTION DOCUMENTS DELIVERABLES**

Documentation at this stage includes drawings, specifications and details which comply with the requirements of Schematic and Design Development Phases, with special attention given to the following:

The construction documents should be a refinement of the design development documents. No substantive changes from the approved design development documents shall be made without prior consultation and approval of the Owner. All portions of the documents should be fully detailed and all elements that relate to constructability defined. The more detail included with the plans ensures the best project in terms of quality and will result in accurate pricing and a lower number of request for interpretation (RFI) and changes to the contract.

The required information should be assembled into a complete package with full size drawing sheets supplemented with a booklet and submitted to the Owner's Representative with the minimum acceptable level of information as follows:

### **GENERAL**

1. All drawing sheets shall contain the official project title, project number, drawing revision date, scale information and indicate drawing orientation.
2. Final Basis of Design document with an executive summary of any changes to the previous submission.
3. Final code analysis with an executive summary of changes to the previous submission.
4. Final space program information with an executive summary of any changes to the previous submission.
5. Final Interior Finish Color Board/s.
6. Statement of coordination verifying that all ductwork, piping, conduit, lighting, cable tray, bus duct, and other above ceiling facilities will fit at the stated height above the finished floor.
7. Final cost estimate with an executive summary of any variance to the previous submission and to the Owner's original construction cost estimate. Include separate estimates for any construction alternates, allowances, or unit prices not included in the base bid.
8. Updated project schedule, include plan (if necessary) for meeting the Owner's milestone dates. Schedule should also include the anticipated construction schedule by phase and critical path and key milestones dates identified for the major components of the construction.
9. Copy of the signed and sealed Energy Code Statement of Review Form (if required because of the Project location, size and type).
10. Detailed area calculation and summary table.

### **CIVIL**

1. Final grading plan for entire site. Site cut and fill details for entire site.
2. If drilled piers are required, specifications should state whether pier spoils may be used as fill elsewhere on site.
3. Show all utility routing and tie-ins to municipal lines. Show locations of all required devices such as fire hydrants, valves, meters, transformers and vaults.
4. Details for curbs, inlets, manholes, pipe connections, valving. Show all permanent and non-permanent structures such as check dams, rock berms, and siltation fence or other best-

management soil and water pollution prevention practices during construction.

## **LANDSCAPE**

1. Demolition plan.
2. Landscape general arrangement drawing with dimensional hard landscape and soft landscape information and details.
3. Planting plan with specification of all plant material. Show shading projections of requested by Owner. Show hardscape such as footpaths, pavers. Specify materials and installation.
4. Show all permanent landscape fixtures including benches, arbors, trellises, playscapes, fences, etc.
5. Full irrigation drawings including routing, locations and detail for valving, sprinkler heads, electrical service and controls.

## **ARCHITECTURAL**

1. Complete life safety plan.
2. Complete floor plans for every level wall partitions dimensioned from the grid or column reference system. All rooms should be shown with correct room number and label.
3. Complete roof plans incorporating all perimeters, roof penetrations, primary and overflow drainage devices, walkways, equipment, access points, valley and ridge lines, slopes, taper insulation, and roof attachment enhancement zones at perimeter and corner areas. Detail drawings shall be provided showing the roof assembly cross section(s), attachment details, and flashing details for all perimeters, penetrations, and primary and overflow drainage devices. Equipment locations and configurations of flashing details shall be carefully coordinated with the mechanical, electrical, and communication drawings and details.
4. Complete ADA plan and drawings, including but not limited to, dimensions for clearances, mounting heights for fixtures and devices and specified door hardware for path of travel. Create an ADA "Punch List" to address outstanding ADA issues.
5. Complete interior elevations for typical areas and unique situations. Elevations should include furniture, fixtures, millwork, computers, plumbing fixtures, electrical outlets, nurse call, medical gas outlets and all new and existing Contractor and Owner furnished equipment.
6. Final casework floor plan complete elevations and details.
7. Final equipment plans and schedules. Coordinate equipment locations and utility connection information with all disciplines.
8. Final furniture layout, include selected vendor's furniture layout. Coordinate layout with power, lighting, and communication drawings. Include pathways and electrical circuits for powering freestanding panels and workstations where required.
9. Typical wall type sections showing wall composition, materials and fire ratings with UL test numbers.
10. Details of all intersections of surfaces and connections of dissimilar materials.
11. Complete door and frame schedule. Include elevations with required undercut and frame/door clearances, and details for all head and jamb conditions.
12. Complete window schedule, include glazing, frame type and finish. Include elevations and details for all head, jamb and sill conditions.
13. Complete finish drawing/s showing colors and material selections for walls, flooring, base and ceiling. Include decorative flooring & ceiling patterns/ elements.
14. Major equipment schedule shall be provided. Clearly define items to be furnished by the Owner

and items to be provided by the Contractor.

15. Complete reflected ceiling plan showing ceiling heights, bulkheads, soffits, light fixtures, diffusers, grills, access panels, control joints, patient lifts, cubical curtain track and all devices that penetrate or are mounted in/upon finished ceiling. Coordinate reflected ceiling plan with the mechanical and electrical drawings.
16. Interior signage locations shall be shown on the floor plan complete with standard details and message schedules.
17. Detailed locations of graphics, wayfinding and regulatory required signage. This includes site signage, as well as signage on and in all buildings.
18. Equipment setting plan (to scale) for permanent equipment to be provided by others, major moveable equipment, furniture, and small wares. If plumbing / electrical connection requirements are known, these should be indicated and coordinated on the equipment setting plan. Provide equipment schedule showing: Device description; Furnished by; Installed by; Final connections & testing by.
19. Sequencing narrative if required by Owner operations.

## **STRUCTURAL**

1. Exterior and interior details and elevations.
2. Structural Details including drilled piers (casing as required), plinths, column details, structural members and sizes, connections, etc.
3. Expansion joint locations, details & covers.
4. Roof plans and details.

## **MECHANICAL / PLUMBING**

1. Complete mechanical room layouts with equipment locations with required maintenance clearances shown.
2. Complete duct and pipe sizing layouts.
3. Complete riser diagram for plumbing, domestic water, steam, and medical gasses with point of connection information.
4. Complete equipment schedules.
5. Final section drawings for areas with a potential for coordination problems such as corridor, mechanical rooms, operating rooms. Show both new and existing utility placements with dimensions. Include structural members, architectural features, all new trade work and existing utilities.
6. Complete roof plans showing roof perimeters, all proposed rooftop equipment and penetrations, primary and overflow drainage devices, stacks, plumbing vents, rooftop piping, and piping supports. Clearances shall be noted for all equipment and piping. Detail drawings shall be provided for all roof curbs, roof drains, overflow drains, rooftop equipment, and rooftop supports, and shall be carefully coordinated with the Architectural Drawings. Unique details or areas with complex coordination needs explained on the drawings through elevations, sections and notes.
7. Complete temperature control zone drawings showing thermostat and TAB locations.
8. Complete ventilation schedule.
9. Complete smoke damper schedule showing related smoke zones and matrix showing responsibility for power wiring, control wiring, step-down transformer placement and zoning and who provides and installs the dampers.

10. Complete control schematic, point listing and sequence of operation.

**ELECTRICAL**

1. Complete one line diagram of the electrical power distribution system
2. Final locations of primary distributions switchgear, transfer switches, emergency generators, transformers, disconnects and other electrical equipment.
3. Complete electrical floor plans clearly identify circuiting and other requirements for outlets, equipment, step-down transformers, dampers and signal systems.
4. Complete roof plans showing roof perimeters, all rooftop electrical equipment, roof penetrations, rooftop conduits, raceways and cable trays, and support systems. Clearances shall be noted for all equipment and rooftop conduits, raceways, and cable trays. Detail drawings shall be provided for all rooftop equipment, roof penetrations, and rooftop supports, and shall be carefully coordinated with the Architectural Drawings.
5. Complete lighting and power panel schedules.
6. Lightning protection plans (if required) with required UL testing information identified.
7. Sequence of operation of system.

**SPECIFICATIONS** must be fully developed including General Conditions section of the Project Manual, and a clear, detailed list of required submittals.

*End of document*