

PRE-DESIGN – PROGRAM OF REQUIREMENTS CHECKLIST

Check off each item that is included within the submitted Program of Requirements. Provide a written explanation for any omissions.

EXECUTIVE SUMMARY

- Project name
- Departmental Participant List
- Executive Approvals
- Project Description/Narrative
- Project Justification

PROJECT VISION & GOALS

- Aspirations of the Project

SITE DEVELOPMENT

- Site Introduction (including relationship to campus masterplan)
- Site Location/Orientation
- Site Circulation/Connectivity
- Site Utility Locations, Tie-in Information & Related Infrastructure Improvements
- Storm Water Management
- Parking – Impacts to Existing Parking or Project Special Needs

DESIGN PARAMETERS

- UH Design Guidelines
- UH Master Specifications
- Owner's Project Requirements

SPACE REQUIREMENTS

- Building Summary Space List
- Total Assignable and Gross Square Footage
- Efficiency Factors Used
- THECB Efficiency and Space Inventory Code Requirements
- University Required Non-assignable Spaces
- Food Services Spaces – Auxiliary Services Space Approval, if Applicable
- Adjacency Diagrams
- Building Stacking Diagrams
- Room Data Sheets
- Test Fits for Non-typical or Specialty Spaces

BUILDING INFORMATION

- Construction Materials and Percentages Used to Develop Cost Estimate
- Building Massing
- Mandatory or Recommended Infrastructure Improvements

PRELIMINARY COST ESTIMATE IN CSI FORMAT

- Construction Cost Limitation (CCL) Provided by 3rd Party Estimator
- Soft Costs (Percentage Provided by UH System FP&C)
- FF&E Allowance (Provided by UH System FP&C)
- Escalation to Mid-point of Anticipated Construction
- Total Project Cost (TPC)

PRELIMINARY PROJECT SCHEDULE

- Anticipated Project Schedule/Occupancy Date

VARIANCE MANAGEMENT

- Proposed Variances, if any, Identified and Submitted

I confirm that the above minimum requirements are provided within the Program of Requirements, or that I have provided an explanation for any omissions.

Signature

Date

Printed Name

- END OF PRE-DESIGN PROGRAM OF REQUIREMENTS CHECKLIST -

PRE-DESIGN – PROGRAM VERIFICATION CHECKLIST

Check off each item that is included within the submitted Program Verification checklist.
Provide a written explanation for any omissions.

EXECUTIVE SUMMARY

- Project name
- Departmental Participant List
- Executive Approvals
- Project Description/Narrative
- Project Justification

PROJECT VISION & GOALS

- Aspirations of the Project

SITE DEVELOPMENT

- Site Introduction (including relationship to campus masterplan)
- Site Location/Orientation
- Site Circulation/Connectivity
- Site Utility Locations, Tie-in Information & Related Infrastructure Improvements
- Storm Water Management
- Parking – Impacts to Existing Parking or Project Special Needs

DESIGN PARAMETERS

- UH Design Guidelines
- UH CAD Standards
- UH Master Specifications
- Owner's Project Requirements

SPACE REQUIREMENTS

- Building Summary Space List
- Total Assignable and Gross Square Footage
- Efficiency Factors Used
- THECB Efficiency and Space Inventory Code Requirements
- University Required Non-assignable Spaces
- Food Services Spaces – Auxiliary Services Space Approval
- Adjacency Diagrams
- Building Stacking Diagrams
- Room Data Sheets
- Test Fits for Non-typical or Specialty Spaces

PRELIMINARY COST ESTIMATE IN CSI FORMAT

- Construction Cost Limitation (CCL) Provided by 3rd Party Estimator
- Soft Costs (Percentage Provided by UH)
- FF&E Allowance (Provided by UH)
- Escalation to Mid-point of Anticipated Construction
- Total Project Cost (TPC)

PRELIMINARY PROJECT SCHEDULE

- Anticipated Project Schedule/Occupancy Date

VARIANCE MANAGEMENT

- Proposed Variances, if any, Identified and Submitted

I confirm that the above minimum requirements are provided within the Program Verification submittal, or that I have provided an explanation for any omissions.

Signature

Date

Printed Name

- END OF PRE-DESIGN PROGRAM VERIFICATION CHECKLIST -

SCHEMATIC DESIGN REVIEW PACKAGE CHECKLIST

Check off each item that is included within the submitted Schematic Design checklist. Provide a written explanation for any omissions.

CIVIL

- Design Narrative – Scope & Character of Civil Site Development
 - Design Parameters
 - Flood Plan Elevations
 - Site Grading
 - Drainage Concepts
 - Storm Water Management
 - Availability of and Connection to Site Utilities
 - Proposed Roads
 - Parking
 - Pedestrian Walks
- Owner's Geotechnical Report
- Owner's Survey
- Verify Survey & Existing Conditions Information Provided by the University is Sufficient
- Schematic Site Plan
 - Reflect Campus Master Plan and Program Requirements
 - Identify Site Features with a Focus on Hardscape, Including Roads, Sidewalks and Parking
 - Include Preliminary Site Grading
 - Include Preliminary Storm Water Management and Detention Plan
 - Verify Site Utilities; Include Underground Utilities Plan
 - Coordinate Site Plan with Architect, Landscape Architect and MEP/FP Engineers
- Proposed Variances, if any, Identified and Submitted
- Cost Estimate of Site Work

LANDSCAPE

- Design Narrative – Scope & Character of Landscape Development, both Hardscape & Softscape
- Verify Survey and Existing Conditions Information Provided by the University is Sufficient
- Schematic Site Plan
 - Reflect Campus Master Plan and Facility Program Requirements
 - Show Areas Proposed to be Planted & Irrigated
 - Show Location of Water Source for Irrigation
 - Include Major Space Defining Elements Such as, Trees, Walls, Fences, etc. to Convey Overall Site Design Concept
 - Include Vehicular and Pedestrian Circulation
 - Coordinate Site Plan with Architect and Civil Engineer
- Tree Protection Plan

- Identify Trees to be Protected
- Provide Preliminary Tree Mitigation Spreadsheet Showing Caliper Inches to be Removed and Caliper Inches to be Planted
- Proposed Variances, if any, Identified and Submitted

STRUCTURE

- Design Narrative
 - Determine Structural System
 - Summarize Evaluation of Alternative Systems
 - Provide Descriptive Information Sufficient for Schematic Design Pricing
- Plans
 - Foundation Defined; Unique Foundation Conditions Addressed
 - Columns Sized and Located; Lateral Design Defined
 - Major Slab Openings on Typical Floors Shown
 - Major Beams and Spandrel Beams Sized
- Outline Specification
 - Brief Descriptions of Proposed Systems and Material in CSI Master Format
- Proposed Variances, if any, Identified and Submitted

ARCHITECTURE + INTERIORS

- General Drawings
 - Building Code Analysis – IBC, NFPA 101 and TAS/ADA
 - Partition Types – Representative Partition Types and Acoustical Ratings Defined
 - Space (SF) Analysis by Room, by Floor Level and by Overall Project – Assignable & Gross with Efficiency Calculations
- Site Plan
 - Schematic Project Location with Building Foot
 - Adjacent Structures
 - Access (Pedestrian, Vehicular and Fire)
 - Proposed Site Improvements
- Floor Plans
 - Room Layouts with Room Names, Proposed Room Number and ASF
 - Enlarge Plans of Selected, Critical Areas, as Defined by Owner
 - UH Required Non-ASF Spaces Properly Sized and Located
 - Typical Elevator and Stair Plans with Preliminary Sections
 - Renovation Projects to Include Plans of Existing Building, Building Structural System and Areas Requiring Demolition
- Roof Plan (Final Agreed Scheme)
- Exterior Elevations (Final Agreed Scheme)
 - Building Profile Section Showing Floor to Floor Elevation
 - Ground Floor Elevation to Mean Sea Level (MSL) and 500-Year Flood Plain Elevation
 - Primary Materials Identified
 - Primary Building Elevation and Other Significant Facades

- Sections
 - At Least Two Building Sections Showing Floor-to-Floor Dimensions
 - Representative Wall Sections Showing Typical Construction
- Renderings and Models
 - Two Perspective Renderings
 - A Physical Model, if Authorized by Owner
- Outline Specifications
 - Brief Project Description and Narrative Descriptions of Proposed Component Systems, Materials and Equipment in CSI Master Format
- LEED Checklist
 - Annotated Checklist to Identify Status of Each Credit and Parties Responsible for Compliance. Required for All Projects, both “Design and Certify to LEED” and “Design to LEED”
- Third Party Cost Estimate
 - Opinion of Probable Construction Costs Based on (at a minimum) Square Footage Costs for Building Spaces and Systems (Typical for Building Type and Project Location)
 - CSI Master Format or Unifomat Assemblies Approach
- Proposed Variances, if any, Identified and Submitted

FURNITURE

- Engagement of FP&C Furniture Planner

ELEVATORS

- Typical Elevator Plans with Preliminary Sections
- Outline Specifications or Design Narrative in Compliance with UH Division 14 Master Specs; No Machine-less Products
- Proposed Variances, if any, Identified and Submitted

FIRE PROTECTION

- Design Narrative Describing Requirements for Fire Protection and Identifying State Fire Marshal Codes and Standards and Current UH Master Specifications
- Overall Fire Protection Site Plan, Including Hydrants and Connections

MECHANICAL

- Design Narrative Outlining Project Design Parameters (Indoor and Outdoor Conditions)
- Compliance with Energy Codes and UH Specifications
- Description of Energy Conservation and LEED Strategies
- Define Space Ventilation Requirements
- Preliminary Site Plan Indicating Source of Utility Service
- Describe Water-Side or Air-Side HVAC System Design
- Design of Special Systems (if any)
- Preliminary Site Plan Showing Source of Utility Services

- Proposed Variances, if any, Identified and Submitted

ELECTRICAL

- Design Narrative Outlining Project Design Parameters and Preliminary Electrical Load Analysis
- Preliminary Site Plan Showing Source and Voltage of Electrical Service
- Preliminary Single Line Diagram
- Compliance with Energy Codes and UH Specifications
- Description of Energy Conservation and LEED Strategies
- Description of Fire Alarm System and Required Coordination with Security, Communications and Control Systems
- Description of any Special Systems (if any)
- Proposed Variances, if any, Identified and Submitted

PLUMBING

- Design Narrative Outlining Project Parameters
- Compliance with Codes and UH Specifications
- Description of Water Conservation and LEED Strategies
- Site Plan Identifying Source(s) of Utility Services
- Proposed Variances, if any, Identified and Submitted

BUILDING MANAGEMENT SYSTEMS

- Design Narrative Describing the Building Management System, Including Temperature Controls, Energy Management, Reporting Systems and Energy Conservation Strategies
- Proposed Variances, if any, Identified and Submitted

TELECOM-IT

- BDF and IDF Rooms Located, Stacked and Sized per UH Standards
- Telecom Site Plan Showing Location of IT Service
- Design Narrative Describing Communications Systems and Data Network
- Proposed Variances, if any, Identified and Submitted

AUDIO VISUAL

- AV Closets Located and Sized
- Design Narrative Identifying AV Systems and Products
- Proposed Variances, if any, Identified and Submitted

SECURITY

- EAC/Security Closets Located and Sized
- Design Narrative Identifying Camera and Emergency Call Box Products
- Proposed Variances, if any, Identified and Submitted

ELECTRONIC ACCESS CONTROL

- EAC/Security Closets Located and Sized
- Design Narrative Describing Access Control System, Functions and Products

I confirm that the above minimum requirements are provided within the Schematic Review Package, or that I have provided an explanation for any omissions.

Signature

Date

Printed Name

- END OF SCHEMATIC DESIGN REVIEW PACKAGE CHECKLIST -

DESIGN DEVELOPMENT REVIEW PACKAGE CHECKLIST

Check off each item that is included within the submitted Design Development checklist.
Provide a written explanation for any omissions.

CIVIL

- SD Comments Incorporated into DD Drawings
- Site Plans
 - Site Plan Graphically Fixed and Site Geometry Fixed
 - All Site Elements Defined (Vehicular and Pedestrian Circulation, Storm Water Detention, etc.)
 - Demolition Plan (Paving, Utilities, etc.)
 - Utility Connections Shown (campus Utility Tunnel, Campus Chilled Water and Steam Piping, Campus Medium Voltage Duct Bank. Coordination with Gas Co. Ongoing)
 - Domestic and Fire Water Services Shown (Including Connections, Vaults, Meters, Backflow Prevention. Coordination with Water Company Ongoing.)
 - Temporary Power and Water Sources Identified
 - Site Detailing Initiated
 - Site Plan and Utility Connections Coordinated with Architect, Landscape Architect and MEP/FP Engineers
- Draft Specifications
 - Division 31 Earthwork
 - Division 32 Paving
 - Division 33 Site, Utilities, Including UH Master Specifications
- Proposed Variances, if any, Identified and Submitted
- Cost Estimate of Site Work

LANDSCAPE

- SD Phase Comments Incorporated into DD Drawings
- Site Plans
 - Site Plan Graphically Fixed and Site Geometry Fixed
 - All Site Elements Defined (Vehicular and Pedestrian Circulation, Storm Water Detention, etc.)
 - Grading and Drainage Finalized
 - Site Detaining Initiated
 - Site Plan and Utility Connections Coordinated with Architect, Landscape Architect and MEP/FP Engineers
- Hardscape Plan
 - Paving Patterns, Materials, Paving Details and Site Lighting Delineated
 - Site Furnishings Shown (Including Seating, Trash Receptacles, Tables, Tree Grates, Drinking Fountains, etc.)
- Planting Plan
 - Planting Hierarchy Shown, Plant Schedule Complete

- Irrigation Plan
 - Scope Determined
 - Irrigation Zones Diagramed and Types of Components Identified
- Tree Protection Plan
 - Trees to be Protected Identified, Tree Protection Details Included
 - Tree Mitigation Spreadsheet Updated Showing Caliper Inches to be Removed and Caliper Inches to be Planted
- Outline Specifications
 - Tree Protection
 - Planting
 - Irrigation
 - Site Furnishings
- Proposed Variances, if any, Identified and Submitted
 - Determine Structural System

STRUCTURE

- SD Comments Incorporated into DD Drawings
- Plans
 - Structural Design Criteria Updated as Needed
 - Plans Generally Complete (Columns, Beams, Slabs, Lateral Design Elements Scheduled and Detailed)
 - All Column Sizes and Lateral Design Structural Elements Fixed and Included in Architectural Drawings
 - All Floor Framing Plans Drawn with Slab Thicknesses, Beams and Major Slab Openings
 - Foundation Design Complete
 - Wind Loading and/or Seismic Design Complete
 - Framing Diagrams Complete for all Miscellaneous Framing Assemblies
 - Scope of all Miscellaneous Structural Items Identified
 - Slab Depressions and Balcony Conditions Addressed
- Details
 - General CMU Reinforcing Design and Loose Lintels Shown
 - Typical Masonry Design and/or Other Cladding Interfaces Reflected in Typical Details
 - Structural/Architectural/MEP Coordination Ongoing
- Draft Specification
 - Draft Structural Sections in CSI Master Spec Format
 - UH Master Specifications Included in UH Format
- Proposed Variances, if any, Identified and Submitted

ARCHITECTURE + INTERIORS

- Pending Issues Report (Copy of Spreadsheet Tracking Open Design and Coordination Issues)
- SD Comments Incorporated into DD Drawings

- CFPC Presentation Complete
- General Drawings
 - Building Code Analysis (IBC, NFPA 101 and TAS/ADA)
 - Fire and Life Safety (Including Construction Type, Fire Exposure Analysis, Occupancy Type, Required Egress, Means of Egress, Transportation Systems, Required Fire and Smoke Barriers, Fire Suppression, Emergency Notification, Smoke Control, Stair Pressurization, Vertical Openings, Emergency Lighting, etc.)
 - All Partition Types and Acoustical Performance Criteria Identified
 - Space (SF) Analysis Updated
 - Written Review of Drawings by Acoustical Consultant to Include MEP Acoustical Isolation, Architectural Partitions, Floor and Deck Details and Prepares Acoustical Isolation Specifications
- Site Plan
 - Project Location with Building Footprint
 - Adjacent Structures
 - Access (Pedestrian, Vehicular and Fire)
 - Site Demolition Plan
 - Site Lighting Foot Candle Analysis
- Floor Plans
 - Room Layouts with Room Names, Room Numbers and Program ASF and Actual NSF
 - Interior and Exterior Dimension Stringers
 - Updated Furniture Layouts
 - Partition Types and Door Types Tagged
 - Enlarged Floor Plans (Restrooms, Typical Labs, Student Rooms, Classrooms, Kitchens, Other Specialty Areas, etc.)
 - Door/Frame/Hardware Schedules and Typical Door Details
 - Elevators, Elevator Cabs and Stairs Fully Dimensioned and Coordinated in Plan and Section
 - Demolition Plans for Renovation Projects
- Roof Plan
 - Drainage, Overflow and Materials Identified
 - Roof Penetrations Coordinated
 - Tie-offs, Walk Mats and Parapets Shown
- Reflected Ceiling Plans
 - All Typical and Major Areas Drawn with Light Fixtures and Diffusers Indicated
 - Structure and MEP/FP Coordination Underway
 - Representative Ceiling Details Drawn for Scope and Cost
 - Primary Building Elevation and Other Significant Facades
- Interiors
 - Preliminary Finish Plans and Schedules
 - Preliminary Finish Presentation to FP&C Complete
 - Representative Elevations with Dimensions, Notes and Sections Referenced
 - Typical Interior Details

- Finish Design of Lobbies, Amenities and Other Finish Spaces Initiated
- Proposed Donor Wall Shown, if any
- Restrooms, Kitchens, Laboratories and Other Spaces Blocked Out with Casework and Built-in Fixtures, Equipment and Appliances
- All Special Equipment Described and Scheduled
- Drawings by Laboratory, Food Service, AV, IT Security and other Specialty Consultants Included
- Exterior Elevations
 - All Major Exterior Elevations with Floor-to-Floor Dimensions
 - Ground Floor Elevation to Mean Sea Level (MSL) and 500-Year Flood Plain Elevation with Primary Materials Identified
 - All Building Sections and Wall Sections Called Out
 - Window Schedule Included
- Building Sections
 - Sections Complete and Coordinated with Structure
 - MEP/FP/IT Horizontal Collection and Distribution Zones Addressed in Building Sections
- Typical Wall Sections
 - Wall Sections at 1/2" or 3/4" Scale that Show Typical Construction with Notes and Dimensions
 - Representative Larger Scale Section Details at 1-1/2" or 3" Scale
 - Review of Typical Wall Sections and Details Submitted by Envelope Consultant
 - Foundation Sections Complete
- Renderings
 - Updated Perspective Renderings in Color
- LEED Checklist
 - Updated Annotated Checklist Required for All Projects, both "Design and Certify to LEED" and "Design to LEED"
- SECO Compliance
 - Draft Worksheets Demonstrating Compliance with SECO Building Envelope Standards
- Draft Specifications
 - Draft Sections in CSI Master Spec Format for all Component Systems, Materials and Equipment
 - UH Master Specifications Included in UH Format
- Building Maintenance Review
 - Building Maintenance, Including Window Washing, Roof Safety, and Trash Collection, reviewed in page-turn session with Facilities
- Third Party Cost Estimate
 - Opinion of Probable Construction Costs Based on Detailed Quantities and Unit Costs for all Materials, Labor, Equipment, Building Systems, General Conditions, Fees and Contingencies

- CSI Master Format
- Bid Alternates
 - Identified and Estimated
- Proposed Variances, if any, Identified and Submitted

FURNITURE

- Furniture Planner to Review Furniture Layout and Power, AV and IT Connections

ELEVATORS

- Elevator and Elevator Cabs Fully Dimensioned and Coordinated in Plan and Section
- Interior Cab Elevations with Finishes Called Out
- Power Requirements and Sequence of Control Shown for Elevator Recall System
- Sump Included in Elevator Pit
- Emergency Circuit for Sump Pump and Control/Alarm Conduit Provided to BMS Panel
- GFCI Outlet Shown in Pit and Near Elevator Controller
- A/C Provided for Elevator Shaft and Machine Room; Machine Room A/C Shown on Emergency Power if Elevator is on Emergency Power
- Security System Included for Floor Access, if Required
- Shunt Trip Provided for Elevator Power
- Surge Suppressor Provide to Protect Elevator Controller
- Fire Sprinkler System Shown in Machine Room and Shaft
- Fire Alarm Devices Included
- Draft UH Division 14 Master Spec(s) included in UH Format Maintained
- Proposed Variances, if any, Identified and Submitted

FIRE PROTECTION

- SD Comments Incorporated into DD Drawings
- Perform Fire Hydrant Flow Tests to Determine if Fire Pump and Break Tank are required
- Fire Pump Sized and Shown, if Required
- Fire Protection System Zoned and Hazard Classifications Defined
- Special Fire Protection System Areas Shown (Dry, Pre-action, Chemical, etc.)
- Coordination with MEP and IT Systems Underway
- Fire Protection Riser Diagram
- Hydraulic Calculations
- Typical Fire Protection Details, Control Valves, Flow Switches, etc.
- Proposed Variances, if any, Identified and Submitted

MECHANICAL

- SD Comments Incorporated into DD Drawings
- Preliminary Demolition Plan
- Preliminary Site Plan Showing Source of Utility Services
- Preliminary HVAC Floor Plans with Ductwork Sizes and Types Labeled, Terminal Units (e.g. Fan Powered Boxes, VAV Terminal Boxes) and Associated Thermostats Called Out and

- Supply/Return Air Grilles with Sizes and Types Labeled
- Preliminary Plan Diagram with HVAC Zoning
- Preliminary Piping Floor Plans showing Pipe Sizes and Types and Units Using Chilled water/Hot Water
- Enlarged Mechanical Room and Mechanical Yard Plans, Showing All HVAC Equipment (Pumps, Fans, AHUs, Chiller, Boiler, etc.)
- Lab Ventilation Systems
- Fire/Smoke Dampers in Fire Rated Walls
- Preliminary Equipment Schedules
- Preliminary Air and Chilled/Hot Water Flow Diagrams
- Typical Mechanical Details
- Draft Specifications in UH Master Specification Format
- Proposed Variances, if any, Identified and Submitted

ELECTRICAL

- SD Comments Incorporated into DD Drawings
- Electrical Demolition Plan
- Site Plan Showing Incoming Service and Feeders and Exterior Equipment Locations
- Site Lighting Layout with Submitted Photometric Analysis to Demonstrate Compliance with UH and IENSA Standards
- Grounding System Plan and Riser Diagram, Including Lightning Protection and Grounding Details
- Single Line Diagram with Load Analysis, Main Feeder and Branch Sizing – All Conductors Must Be Copper
- Interior Lighting Plans with Photometric Analysis
- Typical Lighting Details
- Basis of Design Fixture Selection (DLC, Lighting Facts, Energy Star) and Preliminary Fixture Schedule
- Lighting Control Plans
- Floor Plans Showing Power Service and Distribution, Mechanical Equipment (Including Elevator) Requiring Power (Including Roof) and all Device Layouts (Receptacles, Switches, Data Outlets, Fire Alarm, etc.)
- Electrical Equipment Floor Plans
- Enlarged Electrical Room Plans Showing Equipment Locations and Clearances. Include Basis of Design Information for Short Circuit Rating of Equipment.
- Special Systems (UPS, Batteries, etc.), if any
- Emergency Distribution System Including Generator Location; Generator Sized for Life Safety Loads and Optional Loads Approved by UH
- Preliminary Panel Schedules
- Fire Alarm Riser and Plan
- Draft Specifications in UH Master Specification Format
- Proposed Variances, if any, Identified and Submitted

PLUMBING

- SD Comments Incorporated into DD Drawings
- Preliminary Demolition Plan
- Preliminary Site Plan with Utility Services and Mains Shown
- Preliminary Floor Plans with Preliminary Pipe Sizes, Floor Drains, Equipment (Pumps, Softeners, Mixing Valves, Elevator pit Sump Pumps, Heaters, Backflows, etc.) and Service Access Shown
- Roof Plan with Preliminary Drains and Overflow Drains or Scuppers, Vent Stacks and Equipment Shown
- Preliminary Plumbing Fixtures Schedule
- Preliminary Plumbing Equipment Schedules
- Typical Plumbing Details
- Natural Gas, etc.
- Equipment and Mains for Gas and Compressed Air
- Draft Specifications in UH Master Specification Format
- Proposed Variances, if any, Identified and Submitted

BUILDING MANAGEMENT SYSTEMS

- SD Comments Incorporated into DD Drawings
- Instrumentation and Controls General Information
- Preliminary Control Diagrams with a list of Control Points and Sequence of Operations
- Draft Specifications per UH Division 25 Master Specifications Included in UH Format
- Proposed Variances, if any, Identified and Submitted

TELECOM-IT

- SD Comments Incorporated into DD Drawings
- Scope Matrix Showing Division of Responsibilities among General Contractor, IT Contractor and Owner
- Telecom Site Plan Showing Location of IT Service
- Telecom Riser Diagram
- Floor Plans and Reflected Ceiling Plans with Distribution Pathways and Device Layouts (Wireless, Data Drops, Security Cameras, EAC and AV)
- Enlarged BDF, IDF Rooms and Communications Backboards
- Typical Rough-in Details
- Coordination with Architecture, MEP/FP, AV, Security, EAC and Furniture Underway
- Draft Specifications in UH Master Specification Format, Identifying Proposed Products
- Proposed Variances, if any, Identified and Submitted

AUDIO VISUAL

- SD Comments Incorporated into DD Drawings
- Scope Matrix Showing Division of Responsibilities among General Contractor, IT Contractor and Owner
- Floor Plans and Reflected Ceiling Plans Showing AV Equipment and AV Closets

- Typical Rough-in Details
- Enlarged Plans for Key AV Spaces, such as Lecture Halls and Auditoriums
- Coordination with Architecture, Furniture, Power and Communications Underway
- Draft Specifications in UH Master Specification Format, Identifying Proposed Products
- Proposed Variances, if any, Identified and Submitted

SECURITY

- SD Comments Incorporated into DD Drawings
- Scope Matrix Showing Division of Responsibilities among General Contractor, Security Contractor and Owner
- Site Plan Showing Security Cameras and Coverage and Emergency Call Boxes
- Typical Pole-Mounted and Building-Mounted Camera Details
- Floor Plans Showing Security Closets and Panels
- Coordination with Architecture, Power, Lighting, and Communications Underway
- "Points-of-Connection" for Power and Data Noted
- Draft Specifications in UH Master Specification Format, Identifying Proposed Products
- Proposed Variances, if any, Identified and Submitted

ELECTRONIC ACCESS CONTROL

- SD Comments Incorporated into DD Drawings
- Scope Matrix Showing Division of Responsibilities among General Contractor, EAC Contractor, Door Hardware Contractor and Owner
- Plans Showing Access Control Zones, Location of Controlled Doors and Other Wall Openings and Locations of EAC/Security Closets
- Elevations of Doors Showing Typical Locations of EAC Equipment and Other Hardware
- Elevations of EAC Equipment Back boards
- Coordination with Door and Hardware Schedule Underway
- "Points-of-Connection" for Power and Data Noted
- "Sequence of Operations" Diagrams for Each EAC Function with Status Matrix Shown
- Draft Specifications in UH Master Specification Format, Listing Specific Functions for Each Controlled Opening and Identifying Proposed Products

I confirm that the above minimum requirements are provided within the Design Development Review Package, or that I have provided an explanation for any omissions.

Signature

Date

Printed Name

- END OF DESIGN DEVELOPMENT REVIEW PACKAGE CHECKLIST -

CONSTRUCTION DOCUMENTATION REVIEW PACKAGE CHECKLIST

Check off each item that is included within the submitted Construction Documentation checklist. Provide a written explanation for any omissions.

CIVIL

- DD Phase Comments Incorporated into CD Drawings
- Final Plans Documented, Including Site Details
- SWPP Plan
- Construction Logistics, Including Construction Fence, Project Limits and Staging Areas
- Final Specifications
 - Division 31 Earthwork
 - Division 32 Paving
 - Division 33 Site Utilities
 - UH Master Specifications in UH Format
- Proposed Variances, if any, Identified and Submitted
- Cost Estimate of Site Work

LANDSCAPE

- DD Phase Comments Incorporated into CD Drawings
- Final Plans Documented, Including Site Details
- Full Specifications
 - Tree Protection
 - Planting
 - Irrigation
 - Site Furnishings
 - UH Master Specifications in UH Format
- Proposed Variances, if any, Identified and Submitted
 - Determine Structural System

STRUCTURE

- DD Comments Incorporated into CD Drawings
- Final Plans and Details Documented
 - Final Clash Detection of Architecture, Structure and MEP Systems Completed
- Final Specifications
 - Final Sections in CSI Master Spec Format
 - UH Master Specifications in UH Format
- Proposed Variances, if any, Identified and Submitted

ARCHITECTURE + INTERIORS

- Pending Issues Report (Copy of Spreadsheet Tracking Open Design and Coordination Issues)
- DD Comments Incorporated into CD Drawings

- General Drawings Complete
- Site Plan Complete
 - Site Lighting Foot Candle Analysis Submitted for Review
- Floor Plans and Details Complete
- Interiors Complete
 - Final Finish Plans and Schedules
 - Final Interior Finishes Presentation to FP&C Complete
 - Final Specifications
 - UH Master Specifications in UH Format
 - Final Elevations with Dimensions, Notes and Sections Referenced
 - Final Interior Details
 - Final Furniture Plans, with Power, IT and AV Coordinated
 - Casework and Built-in Fixtures, Equipment and Appliances Included
 - All Special Equipment Described and Scheduled
 - Drawings by Laboratory, Food Service, AV, IT Security and other Specialty Consultants Included
- Exterior Elevations, Window Schedule and Details Complete
 - Final Exterior Materials Presentation to FP&C Complete
- Building Sections Complete
- Wall Sections and Details Complete
 - Reviews of Wall Sections and Details Submitted by Envelope Consultant
- Design Coordination
 - Final Clash Detection of Architecture, Structure, MEP/FP and IT Systems Complete
- Renderings Updated and in Color
- LEED Checklist
 - Final Annotated Checklist Required for All Projects, both “Design and Certify to LEED” and “Design to LEED”
- SECO Compliance
 - Final Worksheets Demonstrating Compliance with SECO Building Envelope Standards
 - FP&C to Review Documentation Prior to Submittal to SECO
- Final Specifications Complete
 - Final Sections in CSI Master Spec Format for all Component Systems, Materials and Equipment
 - UH Master Specifications in UH Format
- Building Maintenance Review
 - Final Maintenance Review with Facilities Services
- Third Party Cost Estimate
 - Updated and Final
- Bid Alternates
 - Identified and Estimated
- Proposed Variances, if any, Identified and Submitted

FURNITURE

- Furniture Planner to Review Furniture Selection and Fabrics for Compliance with UH Standards
- Final Specifications and Bidding Documents Complete

ELEVATORS

- Final Enlarged Plans, Sections and Elevations
- Fully Coordinated with Power, Plumbing, Fire Protection, Mechanical and Security
- Final UH Division 14 Master Spec(s) included in UH Format
- Proposed Variances, if any, Identified and Submitted

FIRE PROTECTION

- DD Comments Incorporated into CD Drawings
- Fire Pump and Break Tank are Sized and Shown, if Required
- Fire Protection System Zoned and Hazard Classifications Defined
- Special Fire Protection System Areas Shown (Dry, Pre-action, Chemical, etc.)
- Clash Detection performed with Structure, MEP and IT Systems
- Final Fire Protection Riser Diagram
- Final Hydraulic Calculations
- Final Fire Protection Details (Control Valves, Flow Switches, etc.)
- Proposed Variances, if any, Identified and Submitted

MECHANICAL

- DD Comments Incorporated into CD Drawings
- Final Demolition Plan
- Final Site Plan
- Final HVAC Floor Plans, Including Lab Ventilation Systems and Fire/Smoke Dampers Shown in Fire Rated Walls
- Final Plan Diagrams with HVAC Zoning
- Final Piping Floor Plans
- Final Clash Detection of Architecture, Structure, MEP/FP and IT Systems Complete
- Final Enlarged Mechanical Room and Mechanical Yard Plans, Showing All HVAC Equipment (Pumps, Fans, AHUs, Chiller, Boiler, etc.)
- Final Equipment Schedules
- Final Air and Chilled/Hot Water Flow Diagrams
- Final Mechanical Details
- Final Specifications with UH Master Specification in UH Format
- Proposed Variances, if any, Identified and Submitted

ELECTRICAL

- DD Comments Incorporated into CD Drawings
- Final Demolition Plan

- Final Site Plan
- Final Site Lighting Layout with Photometric Analysis
- Final Grounding Systems Plan
- Final Grounding System Riser Diagram
- Final Single Line Diagram with Load Analysis, Main Feeder and Branch Sizing – All Conductors Must Be Copper
- Final Interior Lighting Plans with Photometric Analysis and Circuiting
- Final Lighting Details
- Final Fixture Schedule
- Final Lighting Control Plans
- Final Power Plans Showing All Equipment (Including Elevator), Devices and Circuiting
- Final Electrical Installation Details
- Final Enlarged Electrical Room Plans Showing All Electrical Equipment Locations
- Final Special Systems Layout, if any
- Final Emergency Generator Plans; Generator Sized for Life Safety Loads, Standby Loads and Optional Loads Approved by UH
- Final Panel Schedules with Complete Circuit Information
- Final Fire Alarm Riser and Plans
- Final Specifications in UH Master Specification Format
- Proposed Variances, if any, Identified and Submitted

PLUMBING

- DD Comments Incorporated into CD Drawings
- Final Demolition Plan
- Final Site Plan
- Final Floor Plans with Pipe Sizes, Floor Drains, Equipment (Pumps, Softeners, Mixing Valves, Elevator pit Sump Pumps, Heaters, Backflows, etc.) and Service Access Shown
- Final Roof Plan
- Final Plumbing Fixtures Schedule
- Final Plumbing Equipment Schedules
- Final Plumbing Details
- Natural Gas, etc.
- Clash Detection of Architecture, Structure, MEP/FP and IT Systems Complete
- Final Equipment and Mains for Gas and Compressed Air Systems Shown
- Final Specifications in UH Master Specification Format
- Proposed Variances, if any, Identified and Submitted

BUILDING MANAGEMENT SYSTEMS

- DD Comments Incorporated into CD Drawings
- Final Control Diagrams with a list of Control Points and Sequence of Operations
- Final Specifications per UH Division 25 Master Specifications Included in UH Format
- Proposed Variances, if any, Identified and Submitted

TELECOM-IT

- DD Comments Incorporated into CD Drawings
- Final Scope Matrix
- Final Telecom Site Plan
- Final Telecom Riser Diagram
- Final Floor Plans and Reflected Ceiling Plans, Fully Coordinated with Architecture, MEP/FP, AV, Security, EAC and Furniture
- Final Enlarged BDF and IDF Plans and Elevations
- Final Rough-in Details
- Final Specifications in UH Master Specification Format, Identifying Proposed Products
- Proposed Variances, if any, Identified and Submitted

AUDIO VISUAL

- DD Comments Incorporated into CD Drawings
- Final Scope Matrix
- Final Floor Plans and Reflected Ceiling Plans, Fully Coordinated with Interior Elevations, Furniture, Power, Lighting and Communications
- Final Rough-in Details for All AV Spaces and Equipment
- Final Specifications and AV Equipment in UH Master Specification Format
- Proposed Variances, if any, Identified and Submitted

SECURITY

- DD Comments Incorporated into CD Drawings
- Final Scope Matrix
- Final Site Plan and Exterior Camera Schedule
- Final Pole-Mounted and Building-Mounted Camera Details
- Final Reflected Ceiling Plans and Elevations, Fully Coordinated with Interior Elevations, Power and Communications
- Simulated Camera Views for Each Camera
- Final Camera Schedule
- Final Specifications in UH Master Specification Format, Identifying Proposed Products
- Proposed Variances, if any, Identified and Submitted

ELECTRONIC ACCESS CONTROL

- DD Comments Incorporated into CD Drawings
- Final Scope Matrix
- Final Floor Plans and Elevations
- Final Schedule of Doors and Openings Receiving EAC, with All Related Equipment, Fully Coordinated with Door Hardware, Power and Communications
- Final Door Details for Wi-Fi and POE Access Control Systems
- Final Diagrams of Conduit, Raceway Systems, Power Supply and Data Circuits with "Points of Connection" Shown Between Work by Owner and Work by Contractor
- Final Sequence of Operations Diagrams

- EAC QA/QC Form Complete and Submitted to EAC for Review and Adjustment
- Final Department Work Spaces Outlined, Including All Interdepartmental Areas and Shared Spaces
- Finalized List of All Faculty, Staff and Students That Require Access the Building and Rooms
- Final Specifications in UH Master Specification Format
- Proposed Variances, if any, Identified and Submitted

I confirm that the above minimum requirements are provided within the Construction Documentation Review Package, or that I have provided an explanation for any omissions.

Signature

Date

Printed Name

- END OF CONSTRUCTION DOCUMENTATION REVIEW PACKAGE CHECKLIST -