

Item	Services (A) 100% Schematic Phase	Services (B) 100% Design Development Phase	Services (C) 50% Construction Document Phase (See Note 1)	Services (D) 95% Construction Document Phase (See Note 2 below for 95% requirements. See Note 3 below for 100% requirements.)
General Description	<ol style="list-style-type: none"> 1. Scope of work narrative 2. List of applicable building codes on drawings and title sheet 3. Review and update Project Program document. 4. Schematic drawings to include site plan, floor plan(s), building section(s), and exterior elevation(s) as a minimum. See Note 4 below. 5. Engineering systems description 6. Energy use and conservation analysis 7. Project Schedule and work plan (including proposed meeting dates and dates of Board of Trustees approvals) 8. Estimate of Cost 9. 3-D computer rendering(s) indicating site massing and building elevation options 10. Minutes of meetings 11. Responses to Owner's Review Comments on 100% Schematic Design Submittal 	<ol style="list-style-type: none"> 1. Building code review and description of means of code compliance 2. Preliminary drawings to include outline specifications, fire protection/life safety plan, site plan, floor plan(s), elevations, typical wall section(s), and building section(s). See Note 4 below. 3. Equipment lists 4. Engineering systems analysis 5. Preliminary energy use and conservation analysis 6. Updated Project Schedule 7. Estimate of Cost 8. 3-D computer rendering of building exterior and critical interior spaces 9. Minutes of meetings 10. LEED Scorecard update 11. Responses to Owner's Review Comments on 100% Design Development Submittal 	<ol style="list-style-type: none"> 1. Documentation on drawings as required by building codes 2. Contract documents (see Note 4 below) 3. Updated Project Schedule 4. Estimate of Cost 5. Identification of construction phasing plan (including temporary requirements during each phase) and construction logistics plan 6. Minutes of meetings 7. LEED Scorecard update 8. Responses to Owner's Review Comments on 50% Construction Document Submittal 	<ol style="list-style-type: none"> 1. Documentation on drawings as required by building codes 2. Final contract documents (see Note 4 below) 3. Updated Project Schedule 4. Estimate of Cost 5. Updated construction phasing plan (including temporary requirements during each phase) and construction logistics plan 6. Minutes of meetings 7. LEED Scorecard update 8. Responses to Owner's Review Comments on 95% Construction Document Submittal
Specifications	<ol style="list-style-type: none"> 1. System & material narrative description 	<ol style="list-style-type: none"> 1. Outline specifications w/ same section numbering as final 	<ol style="list-style-type: none"> 1. Complete specifications including draft front-end documents 	<ol style="list-style-type: none"> 1. Final specifications including front-end documents
Site	<ol style="list-style-type: none"> 1. Existing conditions 2. Demolition identified 3. Building outline(s) 4. Site entrance 5. Roads & driveways 6. Parking locations 7. Loading dock location 8. Waste collection location(s) 9. Walkway locations 10. Stairway locations 11. Future expansion 12. Utility requirements 13. Site utilities <p>Note: Site survey and soil tests indicating all existing conditions will be provided by the Owner and shall be reviewed by the design team.</p>	<ol style="list-style-type: none"> 1. General dimensions & elevations 2. Site demolition plan 3. Parking plan & elevations 4. Site drainage 5. Lighting plan 6. Concept details of site fixtures & equipment 7. Utility series plans, elevations & details 8. Plan to address existing hazardous materials, if applicable 9. Dewatering plan 10. Soil retention work, if needed 	<ol style="list-style-type: none"> 1. Extent of construction area and work 2. Site demolition plan 3. Traffic plan, if existing roads/walks are impacted 4. Site development and phasing plans 5. Construction site access 6. Staging area 7. Soil erosion control plan for both construction and occupancy periods 8. Construction signage 9. Location for building identification signage (by Owner) 10. Pipe sizes 11. Connection details 12. Protection requirements for construction and plantings that remain 	<ol style="list-style-type: none"> 1. Extent of construction area and work 2. Site demolition plans 3. Traffic plan, if existing roads/walks are impacted 4. Site development and phasing plans 5. Construction site access 6. Staging area 7. Soil erosion control plan for both construction and occupancy periods 8. Construction signage 9. Location for building identification signage (by Owner) 10. Pipe sizes 11. Connection details 12. Protection requirements for construction, plantings that remain
Landscaping	<ol style="list-style-type: none"> 1. Existing conditions 2. Written narrative of design intent 	<ol style="list-style-type: none"> 1. Planting plan 2. Irrigation plan 3. Existing irrigation 4. Irrigation legend 	<ol style="list-style-type: none"> 1. Planting plan 2. Irrigation plan, including existing irrigation systems 3. Irrigation legend 4. Existing tree protection 5. Soil preparation & planting specifications 6. Guying diagrams 7. Piping diagrams 8. Pipe sizes 9. Landscape details 	<ol style="list-style-type: none"> 1. Planting plan 2. Irrigation plan, including existing irrigation systems 3. Irrigation legend 4. Existing tree protection 5. Soil preparation & planting specifications 6. Guying diagrams 7. Piping diagrams 8. Pipe sizes 9. Landscape details
Structural	<ol style="list-style-type: none"> 1. Structural scheme 2. Written narrative 	<ol style="list-style-type: none"> 1. Foundation plan 2. Typical floor framing plan 3. Framing plan(s) at unique features 4. Main member sizing 5. Structural sections 6. Vibration study, if required 	<ol style="list-style-type: none"> 1. Definition of control joints 2. Beam, column & slab schedules 3. Mechanical and electrical concrete pads 4. Foundation details 5. Structural details 6. Structural notes 7. Final calculations, if requested 	<ol style="list-style-type: none"> 1. Definition of control joints 2. Beam, column & slab schedules 3. Mechanical and electrical concrete pads 4. Foundation details 5. Structural details 6. Structural notes 7. Final calculations, if requested
Building Exterior Envelope	<ol style="list-style-type: none"> 1. Building elevations (1/8" = 1'-0" scale minimum) 2. Fenestration layout 3. Material designations 4. Energy code requirements 5. Roof layout 	<ol style="list-style-type: none"> 1. All building elevations w/ dimensional heights 2. Typical wall sections 3. Overall building cross-sections (1/8" = 1'-0" scale minimum) 4. Roof layout (1/8" = 1'-0" scale minimum) 	<ol style="list-style-type: none"> 1. Roof-mounted equipment 2. Roof details 3. Exterior details, including building envelope requirements 4. Flashing details 5. Control joint definition and details 6. Parapet & coping details, including building envelope requirements 7. Roof & drainage plan 8. Exterior door details, including building envelope requirements 9. Typical window details, including building envelope requirements 10. Details of unique features 11. Expansion joint locations 12. Large scale building cross-sections 	<ol style="list-style-type: none"> 1. Roof-mounted equipment 2. Roof details 3. Exterior details, including building envelope requirements 4. Flashing details 5. Control joint definition and details 6. Parapet & coping details, including building envelope requirements 7. Roof & drainage plan 8. Exterior door details, including building envelope requirements 9. Typical window details, including building envelope requirements 10. Details of unique features 11. Expansion joint locations 12. Large scale building cross-sections
Building Interior	<ol style="list-style-type: none"> 1. Typical floor plans (1/16" = 1'-0" scale min.) with legends 2. Demolition plan(s), if applicable 3. Area use identification & area in square ft. 4. Mechanical, electrical & other service closets & rooms 5. Life safety plan 	<ol style="list-style-type: none"> 1. All floor plans (1/16" = 1'-0" scale min.) with key plans 2. Demolition plan(s), if applicable 3. Wall types, fire ratings, and smoke control zones 4. Plan to address existing hazardous materials, if applicable 5. Fixed seating 	<ol style="list-style-type: none"> 1. Dimensioned floor plans with key plans 2. Enlarged plans 3. Partition details 4. Interior details 5. Interior elevations 	<ol style="list-style-type: none"> 1. Dimensioned floor plans with key plans 2. Enlarged plans 3. Partition details 4. Interior details 5. Interior elevations

	6. Area tabulations compared to program requirements	6. Defined seating, serving & kitchen facilities	6. Finish schedules	6. Finish schedules
	7. Show flexibility for expansion and alterations	7. Equipment & furniture layouts	7. Door & hardware schedules	7. Door & hardware schedules
	8. Preliminary layout of major spaces with fixed equipment	8. Important interior elevations	8. Room & informational signage	8. Room & informational signage
		9. Preliminary finish schedule and finish materials sample board	9. Location of proposed movable equipment	9. Location of proposed movable equipment
		10. Preliminary door schedule	10. Schedule of lab fixtures, if applicable	10. Schedule of lab fixtures, if applicable
		11. All room numbers	11. Enlarged plans at elevation changes (such as stairs)	11. Enlarged plans at elevation changes (such as stairs)
		12. Integration of specialized equipment	12. Enlarged plans of toilet rooms	12. Enlarged plans of toilet rooms
			13. Reflected ceiling plans	13. Reflected ceiling plans
			14. Details of unique features	14. Details of unique features
			15. Details of fixed equipment	15. Details of fixed equipment
			16. Integration of specialized equipment	16. Integration of specialized equipment
Elevators	1. Elevator location(s)	1. Equipment description	1. Dimensioned plans	1. Dimensioned plans
	2. Equipment room location(s)	2. Enlarged plans and details	2. Enlarged plans and details	2. Enlarged plans and details
		3. Sections & details of pit and hydraulic cylinder, if applicable	3. Sections & details of pit and hydraulic cylinder, if applicable	3. Sections & details of pit and hydraulic cylinder, if applicable
		4. Description of shaft sump pit(s)	4. Description of shaft sump pit(s)	4. Description of shaft sump pit(s)
		5. Elevator car & equipment support details	5. Elevator car & equipment support details	5. Elevator car & equipment support details
		6. Description of controls & fixtures	6. Description of controls & fixtures	6. Description of controls & fixtures
		7. Door & frame details	7. Door & frame details	7. Door & frame details
		8. Interior details including lighting	8. Interior details including lighting	8. Interior details including lighting
		9. Elevator shaft section	9. Elevator shaft section	9. Elevator shaft section
FF&E	1. Inventory of all existing furniture, furnishings and equipment that are proposed to be relocated to the new facility	1. Furniture program and budget	1. 50% Drawings, generic Specifications, schedule, and estimate of cost	1. 95% procurement documents, including furniture specifications and installation plans
		2. Concept design and cost estimate for the FF&E	2. Move Coordination Plan	2. Move Coordination Plan
		3. Move Coordination Plan		
		4. Design Phase Studies		
		5. Outline specifications		
HVAC	1. Identify all systems	1. Updated design criteria for each mechanical system	1. One-line flow diagrams for all mechanical systems, chilled water, heating hot water, etc.	1. One-line flow diagrams for all mechanical systems: chilled water, heating hot water, etc.
	2. Exterior equipment locations	2. One-line diagrams and other materials as required to describe the fundamental design concept for all mechanical systems	2. Floor plans with all components and required service access to areas drawn to actual scale. On the plans, indicate duct sizes and airflow quantities relative to each room, including CFM in and out of all doors. Indicate location of control panels.	2. Floor plans w/ all components and required service access area drawn to actual scale. On the plans, indicate duct sizes and airflow quantities relative to each room, including CFM in and out of all doors. Indicate location of control panels.
	3. Special occupancy zones	3. Indication of the amount of redundancy for all major pieces of mechanical equipment (e.g., "two pumps 100% capacity each")	3. Valves and volume control boxes (note that each is to be identified by a unique number assigned by the engineer).	3. Valves and volume control boxes (note that each is to be identified by a unique number assigned by the engineer).
	4. Energy code requirements	4. Overall building air flow diagram indicating air handlers, exhaust fans, duct risers, and duct mains	4. Provide a schedule that indicates the control sequence that applies to each room (room #, room descriptor & control sequence #).	4. Provide a schedule that indicates the control sequence that applies to each room (room #, room descriptor & control sequence #).
		5. Plans indicating shaft, chase and recess requirements	5. Detailed floor plans of mechanical rooms with all components and required service access areas drawn to actual scale	5. Detailed floor plans of mechanical rooms w/ all components and required service access areas drawn to actual scale
		6. Duct layout for typical spaces	6. Cross-sections through mechanical rooms and areas where there are installation/coordination issues (tight space, zoning of utilities). Indicate required service access areas.	6. Cross-sections through mechanical rooms and areas where there are installation/coordination issues (tight space, zoning of utilities). Indicate required service access areas
		7. Equipment schedules (major equipment)	7. In common mechanical space, indicate space zoning by system.	7. In common mechanical space, indication of space zoning by system
		8. Equipment locations (w/ enlarged mechanical plan(s))	8. Connection to fire alarm & campus control systems	8. Connection to fire alarm & campus control systems
		9. Control diagrams (concept form) for all mechanical and plumbing systems	9. Equipment details, including structural support requirements	9. Equipment details, including structural support requirements
		10. Description of major sequences of operation	10. Penetration details and installation details	10. Penetration details and installation details
		11. Central automation operation including Building Automation System architecture	11. Duct construction schedule (on the drawings), indicating materials and pressure class for each duct system	11. Duct construction schedule (on the drawings), indicating materials & pressure class for each duct system
		12. M/E smoke control scheme including fire alarm system and interface	12. Detailed controls drawings, including clear differentiation of trade responsibility for control, fire and control power wiring	12. Detailed controls drawings, including clear differentiation of trade responsibility for control, fire, and control power wiring
		13. Preliminary calculations	13. Detailed sequences of operation	13. Detailed sequences of operation
		14. Air intake and discharge locations	14. Design calculations actual scale	14. Design calculations actual scale
		15. Mechanical legend	15. Commissioning specifications	15. Commissioning specifications
		16. Efficiency of HVAC systems	16. Initial Major HVAC equipment, including lab exhaust and sequence of controls	16. Initial Major HVAC equipment, including lab exhaust and sequence of controls
		17. Wind Tunnel Modeling (for all buildings with lab/hazardous/ odorous exhaust)		
Plumbing & Piping	1. Main water supply	1. Updated design criteria for each plumbing system (including set (continued) points, water quality levels, etc.)	1. Water riser diagram, including assumed fixture counts per floor connection (continued)	1. Water riser diagram, including assumed fixture counts per floor connection (continued)
	2. Restroom location(s)	2. One-line diagrams that describe the fundamental design concept for all plumbing systems	2. Waste and vent riser diagrams including assumed fixture counts per floor connection	2. Waste and vent riser diagrams including assumed fixture counts per floor connection
		3. Piping plans (domestic & process) with indication of required service access areas	3. Radiation riser diagram	3. Radiation riser diagram
		4. Water header diagram	4. Central cooling water riser diagram	4. Central cooling water riser diagram
		5. Central cooling water header diagram	5. Chilled water riser diagram	5. Chilled water riser diagram
		6. Steam header diagram	6. Riser diagrams of other plumbing systems, such as natural gas and pure water	6. Riser diagrams of other plumbing systems, such as natural gas and pure water
		7. Thermal energy metering concept	7. Foundation drains	7. Foundation drains
			8. Pipe sizes	8. Pipe sizes
			9. Typical plumbing details, including structural support requirements	9. Typical plumbing details, including structural support requirements
			10. Water heating piping detail	10. Water heating piping detail
			11. Coil piping detail	11. Coil piping detail
			12. Convactor piping detail	12. Convactor piping detail
			13. Penetration details	13. Penetration details
			14. Design calculations	14. Design calculations
Fire Protection (Mechanical)	1. Report documenting adequacy of utility	1. Riser diagram	1. Fire protection service entrance details	1. Fire protection service entrance details
	2. Connection to utility	2. One-line layout	2. Fire protection plans (including header and riser layout) with indication of any required service access areas	2. Fire protection plans (including header and riser layout) with indication of any required service access areas

	3. Optional Fire Protection systems	3. Fire pump sizing calculations and how connected to emergency electrical	3. Pipe sizes	3. Pipe sizes
			4. Typical sprinkler installation details, including structural support requirements	4. Typical sprinkler installation details, including structural support requirements
			5. Penetration details	5. Penetration details
			6. Design calculations	6. Design calculations
Lighting		1. Typical lighting plans, including site lighting	1. Lighting plans of all areas	1. Lighting plans of all areas
		2. Fixture/switching layout	2. Control diagrams	2. Control diagrams
		3. Fixture types & schedule	3. Installation details, including structural support requirements	3. Installation details, including structural support requirements
		4. General light fixture	4. Design calculations	4. Design calculations
		5. Light level calculations	5. Photometric study of exterior lighting	5. Photometric study of exterior lighting
		6. Energy code requirements		
Electric Power Distribution	1. Exterior equipment locations	1. List of equipment on emergency power	1. Load summary	1. Load summary
	2. Electrical closet location(s)	2. Emergency generator layout including emergency power scheme and layout	2. Panel schedules	2. Panel schedules
		3. Equipment layout/ sizes, with receptacles	3. Details of power service to building	3. Details of power service to building
		4. Panel locations/schedules	4. Power distribution plans that indicates the location of all receptacles	4. Power distribution plans that indicates the location of all receptacles
		5. Load estimates	5. Plans and details of emergency power generation system and controls	5. Plans and details of emergency power generation system and controls
		6. Plan for temporary power during construction	6. Connections to other building systems, including fire alarms & HVAC systems	6. Connections to other building systems, including fire alarms & HVAC systems
		7. Electrical one-line schematics	7. Details of special terminal devices	7. Details of special terminal devices
		8. Electrical metering concept	8. MCC details	8. MCC details
			9. Penetration details	9. Penetration details
			10. Design calculations	10. Design calculations
			11. Normal power riser diagram with transformer, MDP, circuit breaker and other sizing	11. Normal power riser diagram with circuit breaker sizes
			12. Emergency power riser diagram with circuit breaker sizes	12. Emergency power riser diagram with circuit breaker & fuse sizes
			13. Final electrical meter location and tie-in to Building Automation System	13. Final electrical meter location and tie-in to Building Automation System
Fire Alarm	1. Connection to Laramie Fire Department, UW Police, and UW Operations	1. Fire alarm zones	1. Indication of connection to fire alarm, HVAC & central campus monitoring systems	1. Indication of connection to fire alarm, HVAC & central campus monitoring systems
		2. Smoke zones	2. Connection details	2. Connection details
			3. Riser diagram	
			4. Device locations	
Security Systems		1. General security/ CCTV system description	1. Riser diagrams	1. Riser diagrams
		2. General description of card access system	2. Equipment closet layout & elevations	2. Equipment closet layout & elevations
			3. Concealed & exposed raceways	3. Concealed & exposed raceways
			4. Installation details	4. Installation details
			5. Security camera system	5. Security camera system
			6. Security equipment locations	6. Security equipment locations
			7. Card access equipment closet layout & elevations	7. Card access equipment closet layout & elevations
			8. Access control door schedule	8. Access control door schedule
AV/IT		1. General description of audio-visual systems	1. Audio-visual equipment schedules	1. Audio-visual equipment schedules
		2. Special cooling requirements	2. Communications site plan	2. Communications site plan
		3. Floor plans showing location of AV & IT equipment	3. Communications floor plans	3. Communications floor plans
			4. Telecom room plan	4. Telecom room plan
			5. Rack elevation/ schedule	5. Rack elevation/ schedule
			6. Wall elevations showing equipment	6. Wall elevations showing equipment
			7. One-line diagrams	7. One-line diagrams
			8. Riser diagrams	8. Riser diagrams
			9. Installation details	9. Installation details
			10. Wall backing details	10. Wall backing details
Other Graphics	1. Rendering(s), models, or other graphics as necessary to clearly present concept			
Cost	1. Preliminary cost estimate (System-by-system acceptable)	1. Updated cost estimate by materials	1. Updated cost estimate	1. Updated cost estimate
Notes:	1. Each of the requested documents noted in this service shall contain, at a minimum, 50% of the information required for each document. 2. Each of the requested documents noted in this service shall be 100% complete, with the exception of modifications required by the Authority Having Jurisdiction (AHJ) and Owner review comments. 3. 100% (final review) shall incorporate all revisions of the 95% phase review. 4. All plan drawings, including enlarged plans and plan details, shall include north arrows.			