

SCHEDULE – A - Deliverables

Project deliverables have been separated into two categories: *Work Plan* and *Work Product* as defined below:

A. Work Plan

The Work Plan is the PDT's approach and schedule to perform the work and its best estimate of resources required to supply all contract analyses, designs, documents and deliverables.

- 1) **Schedule.** The schedule shall reflect the PDT's best business approach, allowance for PNNL reviews and key elements of the work to include: campus master planning, facility programming, alternatives analyses and conceptual design(s).
- 2) **Resource loaded man-hour estimate.** The PDT shall address all categories and grades of professional services contemplated and estimate the number of hours to be expended by each. The PDT shall include its labor category "dictionary" used to establish the education and experience requirements for the professional categories and grades used. The PDT's estimate of hours shall roll up to a summary calculation that reflects its estimates to perform the following:
 - a. Campus Master Plan Update
 - b. Facility Programming
 - c. Alternatives Analysis
 - o PNNL's Project Programming
 - o Alternate 1
 - o Alternate 2
 - o Alternate 3
 - d. Conceptual Designs
 - o First Strategy (PNNL Project Programming)
 - o Second Strategy (The optimal or some combination of alternatives)

If selected as the highest qualified firm, the Work Plan will be the PDT's scope basis for pricing and negotiating the Work.

B. Work Product

Battelle intends to use the documents and reports produced as Work Product to support the development of Critical Decision-1 submittal(s) as required by DOE Order 413.3.

1) **Campus Master Plan**

The PDT will update the existing PNNL campus master plan to state the development and improvement strategy that will progressively transform the existing campus into an exceptional working environment that is reflective of PNNL's signature capabilities and corporate values. The campus master plan needs to show flexibility to include all alternative analyses and campus strategies considered by the

SCHEDULE – A - Deliverables

PDT and be fully integrated with the programming and conceptual design work. The update will also consider the environment, energy, economy, community, life cycle, sustainability, site requirements and campus infrastructure. The campus plan design criteria are included in the *Project Design Criteria* contained in RFP PART III – Exhibits and Attachments. PNNL shall provide additional campus master plan information produced within PNNL for use in completing the campus master plan update. As a minimum, the campus master plan shall include:

- a. Site Analysis and Selection
- b. Design Summary
- c. Future planning and design criteria
- d. Building location criteria
- e. Future site plan
- f. Phasing strategy
- g. Basic utility information
- h. Sustainability Report
- i. Discussion of alternatives analyzed

2) *Facility Program*

The PDT will provide a master facilities program that will include new space requirements and descriptions for the existing capabilities to be relocated. This program will be the basis for the alternatives analyses which will explore multiple facility replacement alternatives. PNNL shall provide additional programming data produced within PNNL for use in completing the facility programming. As a minimum, the facility programming shall include:

- a. Owner-Supplied Data Coordination
- b. Stakeholder Interviews
- c. Evaluation of Infrastructure, capabilities and resources
- d. Building code and regulatory requirements
- e. Project standards, and procedures
- f. Establish functional requirements
- g. Space standards, benchmarking and recommendations
- h. Laboratory requirements
- i. Office/support requirements
- j. Required laboratory services
- k. Required laboratory equipment
- l. Site requirements including safeguards, security and environmental safety and health.

3) *Alternatives Analyses*

In addition to analyzing Battelle's Project Programming, the PDT will provide three (3) alternatives analyses for the new replacement facilities. These alternatives will explore research efficiency, construction costs, relationships to supporting facilities, funding sponsors and customer needs. These alternatives will provide PNNL with multiple strategies for replacing these capabilities and will provide the basis for conceptual design of one or more alternatives. As a minimum, each alternative shall include:

SCHEDULE – A - Deliverables

- a. Number of required facilities
- b. Design Summary
- c. Conceptual Site Plan
- d. Conceptual Facility Program(s)
- e. Conceptual Floor Plans
- f. Estimated Construction Schedule
- g. Estimated Construction costs

4) *Conceptual Design(s)*

The PDT will prepare conceptual design(s) to be included in Conceptual Design Report(s) (CDR's) that will be developed by the PDT and submitted to DOE by PNNL pursuant the Critical Decision process of DOE Order 413.3. The PDT will complete conceptual design(s) to support one campus strategy and potentially provide conceptual designs necessary to support a second distinct campus strategy. The designs will define the building(s) size, quality, appearance and relationship to the existing campus as integrated into the campus master plan. Each facility in each strategy will be defined to include basic infrastructure and envelope strategy. The designs will include estimated construction cost, and estimated design and construction schedule for each facility.

First Strategy: The PDT will analyze Battelle's Project Programming, including Battelle's capability grouping and recommended building placement and develop the necessary conceptual design(s) to support 4 replacement (new) facilities.

Second Strategy: The PDT shall prepare conceptual design(s) based on Battelle's acceptance/approval of one of the 3 alternative analyses, or some combination of alternative analyses desirable to Battelle.

Each conceptual design shall include as a minimum:

- a. Design summary
- b. Conceptual Civil (site) Design
- c. Conceptual Building Systems Strategy
- d. Conceptual Code review
- e. Site plan
- f. Landscape plan
- g. Floor plan(s)
- h. Building elevations
- i. Building sections
- j. Building perspectives
- k. Laboratory space diagrams
- l. Common space descriptions
- m. Sustainable design analysis and report
- n. Estimated Design Schedule
- o. Estimated Construction Schedule
- p. Estimated Construction Costs
- q. Site requirements including safeguards, security and environmental safety and health.

SCHEDULE – A - Deliverables

- 5) **Monthly Reports.** With its monthly billing invoice, the PDT will be required to submit a monthly report.

The report shall include a narrative status of:

- a. significant activities accomplished during the month;
- b. schedule concerns; and
- c. significant upcoming activities.

The monthly progress report shall also include an updated project schedule showing actual start and completion dates as well as forecasted start and completion dates for the total project schedule. report shall status PDT progress against the Work Plan and shall identify any activities that could affect contract price or performance.