# STUDY AND SCHEMATIC DESIGN WORK PLAN

# Department of Correction

# Study and Design of Correctional Center for Women

11/17/2022

Project Number: DOC2106

Project Name: Study and Design of Correctional Center for Women

User Agency: Department of Correction (DOC)

DCAMM Contacts: Elayne Campos, Director, Office of Planning

Emmanuel Andrade, Project Manager, Office of Planning Fabrizio Caruso, Director, Office of Design and Construction Dennis Love, Project Manager, Office of Design and Construction

User Agency Head: Carol Mici, Commissioner

Agency Contacts: Mitzi Peterson, Deputy Commissioner

Jeffrey Quick, Director of Division of Resources Management

Prime Consultant: HDR Architecture, P.C. (HDR)

Design Team Lead: Gerry Guerrero, Principal-in-Charge





# **Table of Contents**

| Work Plan / | Approval   | 3  |
|-------------|--|----|
|             | nd Schematic Design; Revised Work Plan Approval                                      |    |
| Project Ove | erview   | 4  |
| General     | Scope of Work  | 4  |
| Project A   | Approach   | 5  |
| Project F   | ee/Schedule  | 6  |
| Financia    | Il Procedures and Requirements   | 6  |
| Detailed W  | ork Plan   | 7  |
| Task 1:     | Project Start-up and Work Plan   | 7  |
| Task 2:     | Existing Conditions Documentation and Analysis, Site Capacity and Program Assessment |    |
| Task 3:     | Study Development and Evaluation of Priority Alternatives                            | 15 |
| Task 4:     | Preferred Alternative  | 18 |
| Task 5:     | Schematic Design   | 18 |
| Task 6:     | Certifiable Report   | 23 |

# **Work Plan Approval**

This Study Work Plan outlines the scope of work required to complete the Study and Schematic Design phase for the re-imagination of a correctional center for women under the care and custody of the Department of Correction (DOC).

The work plan includes a breakdown of major tasks, critical meetings and workshops, deliverables, fee allocation, and project schedule.

The final product will be a Certifiable Study including Schematic Design that describes the project design, budget, schedule, and implementation plan. The definitions, obligations and requirements for a Certified Study and Schematic Design are defined in Massachusetts General Law Chapter 7C, Section 59:

https://malegislature.gov/Laws/GeneralLaws/PartI/TitleII/Chapter7C/Section59

Study and Schematic Design; Revised Work Plan Approval

Elayne Campos, Director

11.18.22

Date

# **Project Overview**

# General Scope of Work

The Division of Capital Asset Management (DCAMM), in collaboration with DOC and EOPSS, has engaged HDR for the study and final design for the re-imagination of a correctional center for women under the care and custody of the Department of Correction (DOC). The project will be based on a Strategic Plan currently being developed by The Ripples Group and which is expected to be completed in Fall of 2021. The strategic planning effort will result in an agency blueprint to provide policy direction for women who are currently incarcerated in the state, including how DOC can best utilize its resources to serve the currently incarcerated women, their families, and the public by examining multifaceted issues and opportunities.

By starting with a data-driven, informed decision making and prioritized investment strategy established by the Strategic Plan, the goal will be to develop an appropriate program and evidence-based design to support the transformational growth of women under the care of DOC. The objective of the Study is to determine a Consensus Solution for implementing the recommendations of the Strategic Plan. Such Consensus Solution could include either the replacement or renovation of existing correctional centers for women, as determined by the findings of the Study. While no specific site has been determined for the Consensus Solution, it is possible that more than one site will be required to provide the range of care outlined in the Strategic Plan.

The project will include Study and Schematic Design services initially, with the intent to continue into Design Development, Construction Documentation and Construction Administration services for the recommended option identified by this Study, using a Construction Manager at Risk (CMAR) process. The Study/Schematic Design will clearly define the siting, design, scope, budget, schedule, and programmatic impact for options for a correctional center, or correctional centers, for women, potentially within one or more of the following campuses:

- MCI Framingham.
- South Middlesex Correctional Center in Framingham.
- Bay State Correctional Center in Norfolk.

#### **Final Documentation**

The definitions, obligations, and requirements for a Certified Study and for Schematic Design are defined in Massachusetts General Law Chapter 7C, Section 59:

https://malegislature.gov/Laws/GeneralLaws/PartI/TitleII/Chapter7C/Section59

The Study/Schematic Design is organized into the following major tasks:

- Task 1 Project Start-up and Work Plan
- Task 2 Existing Conditions Documentation and Analysis, Site Capacity and Program Assessment (this task includes Problem Restatement)
- Task 3 Study Development and Evaluation of Priority Alternatives
- Task 4 Preferred Solution

The Schematic Design is organized into the following major tasks:

Task 5 – Schematic Design

Task 6 – Final Documentation – Certifiable Study

Throughout the process, it is imperative that issues potentially impacting program, scope, costs, and schedule be identified and accounted for to provide all parties with the relevant information to make informed decisions. As stipulated by the Designer Selection Board (DSB) during the DSB meeting on March 3, 2021, a review of the Study by the Board ahead of continuation of services, in accordance with M.G.L. c. 7C. HDR will present the Schematic Design package to the Board prior to the completion of the Certified Study.

# **Project Approach**

#### **Project Roles**

#### DCAMM Planning Project Manager

The DCAMM Planning Project Manager will serve as the primary contact for all parties to ensure clear communication and answer questions or contact individuals who have answers to questions as they arise throughout the course of the Study. This individual will manage the project scope, schedule and budget from the client's perspective and will facilitate all interaction with the client agency, DOC.

# Steering Committee (decision making)

DCAMM, DOC, and EOPSS will form an oversight and decision-making group (Steering Committee) to provide guidance throughout the Study. HDR will meet during relevant milestones (within regular bi-weekly meetings) with this group to update them on Study findings, share information, and discuss the issues they are charged with addressing.

#### **Project Administration & Communication**

With respect to project administration and communication, please note HDR's contractual obligations are to DCAMM, who will be responsible for all project direction and matters related to the project scope of work. Further investigations may be required to accurately determine the impact of a specific issue. The Design Team's obligation during the Study is to identify those issues and use their professional expertise to anticipate, estimate, and document their potential impact. Changes to the scope of work require prior authorization by DCAMM. No work can commence without prior authorization from DCAMM.

#### **Meetings**

Unless otherwise notified, the Designer should assume bi-weekly Project meetings throughout the duration of the Study phase with key members of the design team and representatives from DCAMM and DOC. The intent is to keep the workflow moving with minimal delays. Recognizing the current public health crisis, meetings may be conducted remotely via a virtual meeting platform at DCAMM's discretion. At key milestones for each task, workshops may be held, with greater participation by DCAMM, DOC, and EOPSS stakeholders, to develop Program requirement, review findings, and solicit input for decision making.

DCAMM will review all agendas and presentations a minimum of three (3) business days in advance of all meetings with DOC thus timelines should be planned accordingly. HDR is responsible for recording summary minutes of all key project meetings and submitting these to the DCAMM Project Manager in draft form within three (3) business days of the meeting for DCAMM's review, editing, and approval. DCAMM reserves the right to edit meeting minutes prior to HDR issuing the official edition to others. Meeting minutes will be included in the Appendix of the Final Study.

# **Project Fee/Schedule**

The fee breakdown and schedule are outlined below. The Feasibility Study is expected to span nine (9) months:

|  |   | Approximate   |               | % of  |
|--|---|---------------|---------------|-------|
|  |   | Duration from | Total Fee/    | Total |
| TASKS                                  |   | NTP           | Payment       | Fee   |
| Task 1: Project Start-up and Work Plan |   | Completed     | \$ 16,500.00  | 3%    |
| Task 2                                 | 2.1 Existing Conditions Documentation and Analysis                | Completed     | \$ 156,750.00 | 28.5% |
|  | 2.2 Problem Restatement   | *see below    | \$ 27,500.00  | 5.0%  |
|  | 2.3 Site Capacity Assessment                                      | *see below    | \$ 27,500.00  | 5.0%  |
|  | 2.4 Program Assessment  | *see below    | \$ 82,500.00  | 15.0% |
|  | 2.5 Cost Analysis   | *see below    | \$ 27,500.00  | 5.0%  |
|  | 2.6 Project Schedule  | *see below    | \$ 19,250.00  | 3.5%  |
| Tasl                                   | C 3: Study Development and Evaluation of Priority<br>Alternatives | *see below    | \$ 110,000.00 | 20.0% |
| Task 4: Preferred Alternative          |   | *see below    | \$ 82,500.00  | 15.0% |
| TOT                                    | AL .  |               | \$ 550,000.00 | 100%  |

<sup>\*</sup> Task 2 will be completed 30 calendar days after this signed Work Plan Approval (approximately December 1, 2022). Task 3 and 4 will be completed 150 calendar days after this executed Amendment (approximately March 31, 2023)

Task 5: Schematic Design and Task 6: Certifiable Study will be negotiated at a later date. Following agreement and the development of a funding strategy for the recommended solution, HDR will be tasked to develop a Certifiable Study that incorporates Schematic Design. Schematic Design/Certifiable Study is expected to span three (3) months.

# Financial Procedures and Requirements

Payment of work performed is per the Work Plan and based on the deliverables completed (not percentage of work completed) and approved.

Draft invoices shall be reviewed with the DCAMM Project Manager prior to submittal. HDR shall adhere to instructions from the finance office received at contract signing which describe the process for invoicing. All invoices should include necessary backup documentation.

Note that the DCAMM policy regarding administrative costs is that travel costs, phone charges, etc. are included in project fee and will not be reimbursed separately. Printing and documentation expenses are included in the contract; copies in excess of the contract may be reimbursed.

# **Detailed Work Plan**

The Detailed Work Plan provides a comprehensive description of major tasks, critical meetings and workshops, and deliverables. Recognizing the current public health crisis, most of the services will be conducted remotely via virtual on-line meeting at DCAMM's discretion.

# Task 1: Project Start-up and Work Plan

Objective: Confirm with HDR, DCAMM, and DOC the scope of the work anticipated and establish clear, commonly understood objectives and a methodology for the project execution.

During this task, HDR will perform the following:

#### 1.1 Project Start-up

#### • Administrative Conference:

HDR and the major sub consultants and DCAMM will discuss guidelines, relationships between Designer, DCAMM and User Agency, billing procedures, Designer's project management responsibilities, and general expectations and procedures as well as COVID-19 protocols required in anticipation of site visits for existing conditions verification and site analysis during this Study. A brief discussion on the project schedule and project directory as well as the coordination with the Strategic Plan being developed by The Ripples Group will be included in this conference call.

#### • <u>Project Schedule</u>:

HDR will develop a proposed project schedule for DCAMM review, based on the detailed understanding of the project scope and objectives, tasks, and deliverables. The project schedule should incorporate proposed dates for meetings and workshops as outlined in this Work Plan or as proposed by HDR. The format for the schedule should readily allow for continuous refinement and additional detail as required by the evolution of the project scope.

#### Project Directory:

HDR will finalize a project directory drafted by DCAMM with a detailed listing of all core project team personnel and all other key participants, their telephone numbers, and email addresses. The project directory will be maintained and updated by HDR as necessary during the project, and updated electronic copies submitted to the DCAMM Project Manager.

#### • Project Kick-off Session:

HDR will conduct a kick-off meeting to lead a discussion to establish overall strategic priorities, constraints, and expectations. In preparation to the Project Kick-off Session, HDR will develop an agenda and presentation for the Project Kick-off Session, a first meeting with the Steering Committee, to illustrate the process and scope of work for the project, including project goals, project metrics/evaluation criteria, team structure, next steps, additional information needed, and a project schedule with critical decision-making

points. Core team members from HDR, including key sub-consultants, will be introduced and their roles and responsibilities described at the Project Kick-off Session.

#### 1.2 Work Plan

#### Work Plan:

Upon Contract signing, HDR will, with DCAMM and DOC, confirm the scope of work and objectives for the project. HDR will propose revisions to this Work Plan and submit a draft project Work Plan for review and approval by DCAMM. Study Phase Services shall be authorized by a Notice to Proceed and must comply with the workplan approved by the DCAMM Director of Planning, which will be incorporated into the Designer's Contract upon written approval. The final approved Work Plan will include:

- a clear project definition with an understanding of the vision and goals.
- a task and fee breakdown for the scope and each deliverable.
- a meeting schedule, a timeframe for each task, and the role of each discipline.
- a confirmation of team members' roles and their expected participation including MBE/WBE participation.
- a detailed schedule of meetings and workshops through the Study phase including key attendees. The schedule must also include HDR's coordination with The Ripples Group throughout the development of the Strategic Plan, including activities related to data collection and analysis, and stakeholder engagement (please refer to the "Program Assessment" section in Task 2 for more information).

During the course of the Study, new opportunities or constraints may be uncovered and require a re-thinking of original intentions. For this reason, the workplan allows for a problem restatement after Task 2. If necessary, HDR will issue a memorandum outlining revisions to the Work Plan that might be required at this time.

#### Deliverables Task 1:

- > Administrative conference.
- Project schedule.
- Project directory.
- > Agenda and presentation for the Project Kick-off Session.
- > Meeting attendance and meeting minutes for the Project Kick-off Session.
- > Work Plan for final approval by Director of Planning.

# Task 2: Existing Conditions Documentation and Analysis, Site Capacity & Program Assessment

Objective: Collect and analyze data which will inform the development of a Study for a long-term overall development concept for a correctional center for women, as well as to identify priority Projects that will proceed into Task 3. Coordination with the strategic planning effort by The Ripples Group will be required to enable informed decisions about future programming.

#### 2.1 Existing Conditions Documentation and Analysis

HDR will review background documentation and conduct field investigations of MCI Framingham and South Middlesex Correctional Center in Framingham and Bay State Correctional Center in Norfolk to assess conditions of buildings and utility systems both located on each of the three site and also serving each of the three sites to create a prioritized list of improvements needed. While it is possible that none of the three sites will be utilized in the consensus solution, Bay State Correctional Center has been identified as a potential site in the event that HDR demonstrates that the Project goal cannot be achieved within MCI Framingham and/or South Middlesex Correctional Center. For each correctional center listed above, HDR will:

- Analyze prior relevant studies compiled by DCAMM and DOC and identify
  missing/needed information related to existing conditions, including existing hazardous
  materials documentation, and advise DCAMM regarding additional site or building
  investigations needed to complete this task.
- Confirm documentation of existing layouts and prepare a campus site plan and base plans for all major buildings based on drawings provided by DCAMM and DOC. Field measuring of existing conditions and preparation of measured drawings and site surveys to be conducted as additional service if needed.
- Have architectural and engineering teams perform a visual survey to develop a general understanding of the facilities and their present condition relative to prior facility condition assessments. In the event that a given site appears viable for one of the Task 3 alternates, the visual survey shall be supplemented by additional site or building investigations, such as Site Environmental, Geotechnical, and/or Topographic Site Survey, hydrant flow testing, and other specialized testing that might be required to complete the scope (to be conducted as additional services, if needed).
  (Note: A comprehensive facility conditions assessment as well as accessibility audit of the correctional center were recently completed by DCAMM's accessibility consultant;
- Interview DOC facility, maintenance, and security staff for input on condition, use, and operation of buildings and to (i) review operations and maintenance procedures and (ii) obtain documentation of completed building improvements.
- Identify if the correctional centers have historic designation and determine whether the Project must be reviewed by the Massachusetts Historical Commission (MHC) as well as the Local Historical Commission for impacts to historic and archaeological properties.
- Review Executive Order 594 (Leading by Example), LEED criteria, and other applicable
  performance data requirements. In coordination with DCAMM's Energy Team, develop a
  Project base case profile for climate change, energy use, and water use proposal to
  comply with Executive Orders.

findings will be shared with the Design team).

- Set site energy use intensity (EUI, measured in kBTU/sf) target(s) for various building types in the Project based on national energy use intensities.
- In the event that a given building appears viable for one of the Task 3 alternates, evaluate existing envelope conditions and opportunities to reduce envelope heat loss and right-size mechanical systems.
- In the event that a given site appears viable for one of the Task 3 alternates, determine existing building site EUI and set target for buildings to be renovated.
- Provide an evaluation of vulnerability to flood, storm surge, rising sea level, increased
  precipitation, and temperature; identify strategies to mitigate known problems and, to
  the extent practicable, avoid risk (use Resilience Checklist provided by DCAMM's Energy
  Team).
- Provide a code analysis identifying applicable building code requirements. Seismic
  requirements should be clearly noted. (Note: A comprehensive facility conditions
  assessment as well as accessibility audit of both correctional centers were recently
  completed by DCAMM's accessibility consultant; findings will be shared with the Design
  team).
- Identify necessary permits, reviews, and anticipated interactions with regulatory
  agencies and factor into detailed timeline for Project delivery. Identify relevant Executive
  Orders and applicable utility or energy-related incentives. Detail relevant deficiencies
  and/or concerns; prioritize the improvements based on life cycle considerations, life
  safety concerns, energy, resiliency and vulnerability considerations, and utility systems
  (on site and serving the site) among other relevant criteria.
- Prepare order of magnitude costs for the upgrades and potential operating cost impacts for proposed alterations.

#### 2.2 Problem Restatement

After the completion of Task 2.1 as well as the completion of the Strategic Plan by The Ripples Group, HDR will compare information gathered against the original goals agreed upon at the start of the project and evaluate the extent to which project objectives might need to be adjusted based on (i) development of program, (ii) investigation of existing conditions, (iii) constraints of budget, (iv) physical conditions of the site(s) and/or buildings, and (v) the direction of the Strategic Plan.

Based on findings to date, HDR in conjunction with DCAMM will consider if the work plan should be modified. If modifications to the work plan are required, HDR will provide a memorandum outlining proposed revisions to the original document. If such modifications constitute a material change to the parameters of the work plan, HDR will develop and submit proposed revisions to the work plan for DCAMM's review and approval.

#### 2.3 Site Capacity Assessment

HDR will, through site visits and review of existing information, assess the opportunities and constraints of MCI Framingham and South Middlesex Correctional Center, and determine their capacity to accommodate space needs, outdoor recreation needs, infrastructure needs, site security needs, environmental resiliency mitigations, demolition, and construction feasibility of a medium-security correctional center. For each correctional center listed above, HDR will:

Analyze and document conditions relevant to site development for new construction, including, but not limited to, existing building locations and size, topography, hazardous materials, wetlands, drainage and groundwater flows, location and capacity of utilities and infrastructure, vegetation, wind direction and solar exposure, primarily internal and external pedestrian circulation, desire lines and access issues, parking capacity and vehicular circulation, access to public transit for visitors, staff and volunteers, outdoor recreational areas, and site security (including perimeter fence with detection system, lighting, access control points, etc.).

### 2.4 Program Assessment

HDR will confirm general program requirements to achieve the goals of the Project: a medium-security correctional center. This will include an analysis of the existing program relative to right-sized standards as well as future program requirements, including key program needs raised by the Strategic Plan. HDR will develop the program, which will be used to establish a conceptual budget and timeline to implement the recommendations of the Strategic Plan and to determine priority projects that will proceed into Task 3.

#### 2.4.1 Program Analysis

The Steering Committee will serve as subject matter experts and work with HDR to identify the programmatic requirements, describing in sufficient detail the needed services, programs, activities, capacities, staffing, etc. As part of this task, HDR will:

- Review the Strategic Plan report and supporting materials produced by The Ripples
  Group and synthesize information including, data from research and stakeholder
  engagement, and most importantly, recommendations to the built environment of the
  correctional centers for women and identify additional documentation or information
  required to complete the program assessment.
- Conduct site visits for field observations at MCI Framingham and South Middlesex
   Correctional Center to confirm documentation of space allocation and capacity, space suitability/quality, and current bed count.
- Conduct programming interviews with DOC representatives and others to gain a
  thorough understanding of their mission, programs, services, activities, staffing, functional
  and technical requirements, and other relevant planning or design considerations.
- Distribute summary of findings and an assessment of the implications for space planning.

#### 2.4.2 Space Program Development

As part of this task, HDR will:

Evaluate current and future programmatic needs, with an assessment of current incustody and community programs, their fit with the currently incarcerated female population, and their impact on facility and program requirements. The analysis will include a visual presentation with case studies to compare program offerings with other similar correctional facilities for women and confirm the program is detailed enough to demonstrate whether such programs would fit in existing buildings at correctional centers under consideration and to determine the extent to which additions and/or new construction would be necessary.

- Evaluate the program with respect to industry standards and norms for correctional centers designed for women including, but not limited to, (i) the Standards for Adult Correctional Institutions published by the American Correctional Association (ACA) and (ii) DOC's Design Criteria and Planning Guidelines (103 DOC 703).
- Develop a detailed tabular program for space allocation based on the findings and recommendations from the Strategic Plan. The tabular program should include existing, right-sized, and proposed space allocations, and include operational needs, staffing capacity, regulatory and technical requirements, justifiable space planning standards and guidelines (including space allocation and utilization from DOC and ACA), and code requirements, broken down by individual functional area and sub-area for both new facilities and existing facilities. Appropriate factors for grossing net usable areas to project total built area and building footprint shall be provided. Backfill of vacated areas, if appropriate and/or desirable, should be appropriately addressed as part of space planning efforts.
- Provide conceptual site layouts for exterior spaces and preliminary room data sheets for key program spaces.
- Provide spatial adjacency diagrams indicating key relationships and technical requirements.
- For key program spaces, prepare preliminary documentation of furnishings and equipment.

The efforts noted above will inform the development of the Project budget which is currently targeted to fit within a total project cost in the range of \$20M to \$40M and is subject to update in conjunction with the strategic planning effort.

### 2.5 Cost Analysis

HDR will develop a high-level overview of the current budget, including average cost per square foot for new construction, renovation and demolition based on recent, comparable correctional projects by both DCAMM and HDR. The overview must include assumptions about factors that may impact the project budget including, but not be limited to:

- Higher construction costs within occupied, secured facilities.
- Higher construction costs for anti-ligature/vandal-proof features.
- Higher construction costs on historical sites.

Unless otherwise agreed between DCAMM and HDR, cost analysis shall be based on a Construction Management-at-Risk project delivery method. Formal cost analysis shall adhere fully to the detailed requirements described in the DCAMM <u>Consultant Estimating Manual</u>.

#### 2.6 Project Schedule

As part of this task, HDR will prepare preliminary project schedule for review and updating as the Study phase progresses. A phasing plan for short-term and long-term site and building improvements at MCI Framingham, South Middlesex Correctional Center and Bay State Correctional Center must be included to the extent that such improvements are anticipated as part of the Task 3 alternates.

For those improvements determined to be high priority and suitable to be accomplished within available funding, HDR will identify permits, anticipated reviews and interactions with regulatory agencies, phases and milestones, and their impact on timeline for project delivery. The project schedules must outline an approach to maintain current programming on-site during construction periods, including a plan for swing space, if necessary.

#### **Deliverables Task 2:**

Task 2 will culminate in the preparation of a Study report, which will be a stand-alone document, but will also be summarized and incorporated into the Certifiable Study, that consists of the following components at a minimum:

- ➤ List of relevant documentation provided by DCAMM and DOC.
- > List of additional documentation or information required to complete this Study.
- > Base document set including site plans and dimensioned drawings.
- Analysis report of existing conditions, including narratives and photographs documenting conditions of the sites and the buildings.
- Problem Statement and revised work plan (if applicable).
- > Site diagrams with assessment of site capacity for each site, including:
  - o Property and security lines.
  - Vegetation and topography.
  - o Site access, both pedestrian and vehicular.
  - o Wetlands.
  - o Utilities.
  - o Building information.
  - o Housing.
- > Updated Climate Resilience checklist for each site.
- Programming narrative, including a detailed tabular program, adjacency diagram, and room data sheets, reflecting information produced in the Strategic Plan and gathered from programming interviews with DOC staff and women who are currently incarcerated.
- Preliminary cost analysis.
- > Preliminary project schedule.
- Meeting minutes and presentations.

# Task 3: Study Development and Evaluation of Priority Alternatives

Objective: Refine programming and design considerations and summarize all key findings and planning options for a new correctional center, or correctional centers, for women into a comprehensive report. Identify and analyze meaningful alternative design concepts for implementing the proposed project.

#### 3.1 Alternatives

Based on the assessments conducted in Task 2, HDR will analyze feasible alternatives for the priorities to be achievable within the immediately available budget. These scenarios will define and (to the extent that the three existing correctional centers will be included in the Task 3 alternates) prioritize the deficiencies at the existing correctional centers and, in the context of (i) the Strategic Plan, (ii) national correctional facility standards and practices including ACA guidelines, (iii) DOC standards and practices, (iv) Massachusetts Criminal Justice Reform legislation, (v) the project budget, and (vi) other project criteria agreed by project team. The scenarios will identify a range of approaches, whether through renovation or new construction within MCI Framingham and/or South Middlesex Correctional Center, or Bay State Correctional Center. In the event that these three existing correctional centers are unable to meet Program requirements in whole or in part, HDR will identify program requirements for additional sites not yet identified. As part of this task, HDR will:

- Collaborate with the project team to establish project criteria to evaluate alternatives including, but not limited to, project goals (as provided in the DSB advertisement or updated through the Task 2 Problem Restatement), feasibility, constructability, energy and water consumption, improved accessibility, building resiliency considerations, impact on maintenance and operations, and programmatic space requirements to promote the health, wellbeing, and rehabilitation of the female population.
- Further assess and refine the existing conditions assessment developed in Task 2 to determine whether the existing facilities can reasonably be considered as alternates for meeting the program in whole or in part. To the extent that reuse/repurposing of one or more of the existing facilities is viable, HDR shall develop a master list of facility deficiencies to be addressed as part or such reuse/repurposing. This master list shall identify an initial scope of work required to address the deficiencies. It shall also include relevant criteria including but not limited to (i)code/life safety upgrades identified in the code analysis required to reuse/repurpose the existing building(s), (ii) improvements based on life cycle considerations, (iii) energy, resiliency, and vulnerability considerations, and (iv) utility systems on and serving the site, among other relevant criteria.
- Further assess and refine "right sized" and proposed programming needs identified in Task 2 for the top priority projects, including assessment of trade-offs to balance optimal space needs with what can most feasibly be achieved within available funding.
- Identify and define priority projects for short-term and long-term implementation.
   Recommend potential construction phasing solutions and, in coordination with DCAMM and the DOC, evaluate swing space options (if required) to accommodate construction while maintaining current operations.

- In coordination with DCAMM and the DOC, determine the potential of utilizing DOC's Division of Resource Management to perform enabling projects (minor or moderate renovations to existing buildings and site) in addition to work utilizing a construction management firm.
- In coordination with DCAMM's Energy Team, evaluate the site for potential risks and vulnerabilities related to environmental sustainability and climate change, and work with DCAMM to prepare a resilience analysis to identify mitigation requirements that minimize impacts related to climate change.
- Develop up to three meaningful alternatives for conceptual site and building design options to accommodate intended priority programming needs at MCI Framingham and South Middlesex Correctional Center, as-yet unidentified potential sites, or viable combinations thereof. Such meaningful alternatives shall include test fit options for the associated renovations, additions, demolitions, or full building replacement possibilities.
- Conduct up to two Project Review workshops to confirm the program requirements and primary design considerations, review the alternative design concepts, cost analysis and implementation schedule, and discuss the likely preferred architectural concept. As part of the workshop(s), HDR will give the Steering Committee an opportunity to comment on the key issues and findings resulting from the overall analysis of the Project, and the preferred solution selected from the alternatives.

#### For each alternative, HDR will include:

#### 3.1.1 Program

- Narrative summary with preliminary scopes of work.
- Tabular program (existing, right-sized, proposed).
- Blocking/stacking diagrams.

# 3.1.2 Site and Building

- Site plan and site planning diagrams indicating new construction, demolition, circulation, parking impacts and Universal Design features.
- Illustrative floor plans and preliminary building sections, elevations, three-dimensional massing views.
- Narrative approaches to building systems, accessibility and universal design goals, and achievement of design objectives.
- Narrative approaches to address sustainable design considerations and environmental impacts from climate change.

#### 3.1.3 Cost Analysis

- Order of magnitude cost estimate summaries. A cost analysis workshop will be held to
  review the findings, discuss strategic allocation of resources, and provide initial guidance
  for aligning architectural options with the project budget. Costs to be considered will
  include, but not be limited to:Site improvement costs, including utility systems upgrades,
  site security, vehicular and pedestrian circulation, outdoor recreational areas, and site
  development needs for buildings and other structures.
- Renovation and system upgrades for existing buildings to meet space programming objectives, Executive Order 594 (Leading by Example), LEED Silver requirements, Universal Design, historic designation, Code Analysis, and other key Project criteria.

- Demolition costs for buildings determined to be infeasible to retain (provided that such demolition is required to implement design alternates).
- Construction of new buildings and/or additions identified for programming or facilities management purposes.
- A summary of life cycle cost analysis and operating cost impacts.
- Cost implications of swing space needs and enabling projects.
- Phasing plan for longer-term improvements as additional funding becomes available.

#### 3.1.4 Project Schedule

- Project implementation, phasing and construction schedule including required permits and associated regulatory review which can impact the schedule.
- Evaluation of schedule options and issues, including swing space and enabling projects.

#### **Deliverables Task 3:**

Task 3 will culminate in the preparation of an 'Alternatives Assessment Presentation', which will also be summarized and incorporated into the Certifiable Study (following authorization of Schematic Design and Certifiable Study services under the Contract), that consists of a written narrative and supporting graphics and spreadsheets that details, but is not limited to, the following components:

- A summary of existing conditions and required upgrades, and recommended improvements (if required to implement the given alternative). Code analysis (Chapter 34 update for the 9th Edition or latest edition of the State Building Code, current at the time the Task 2 Deliverables are being prepared) identifying permits, reviews and interactions with regulatory agencies required.
- A summary of requirements for additional site(s) (to the extent that program requirements for a given alternate cannot be met at the existing sites).
- > A summary of programming objectives, programming needs, tabular programs, required adjacencies, and proposed space accommodations.
- > Alternative design concepts including program, site, and building design.
- > Scope of each alternative including level of renovations, new construction, and demolition
- > Comparative matrix illustrating pros and for each alternative per the project criteria.
- Technical memorandum on costs, including comparable costs and assessments, possible approaches for cost control, and results of workshops. Technical memorandum with order of magnitude cost estimates. To the extent that existing sites and/or buildings are anticipated, such order of magnitude cost estimates shall include recommended site improvements, building systems upgrades, demolition, and renovations for existing buildings. Such order of magnitude cost estimates shall also include construction of anticipated new buildings and/or exterior facilities required for programming or facilities management purposes.
- Project schedule for design and construction, including required permits and regulatory reviews, and applicable timing for swing space needs and other enabling projects.
- Materials related to the Project Review Workshops and bi-weekly Project meetings, including presentations and meeting minutes.

#### Task 4: Preferred Alternative

Objective: Based upon input received during the Project Review Workshops, HDR will further develop and finalize the agreed-upon, Preferred Alternative. Task 4 will culminate in the preparation of presentation of the Preferred Alternative, which will also be summarized and incorporated into the Certifiable Study.

#### 4.1 Global Workshop

HDR will prepare a presentation to present relevant and defining aspects of the Preferred Alternative for a broader audience. The intent of the Global Workshop is to bring the entire design team, including the engineering team, the Steering Committee, and other stakeholders (as needed) together to gather feedback and on specific aspects of the project. HDR will lead the meeting and present the project goals, ideas, and solutions including:

- A clear problem statement.
- A summary of space needs.
- Relevant issues related to siting, access, adjacencies, and efficiency.
- A description of primary building elements relating to building enclosure and systems.
- An implementation schedule for design, construction, and material impacts on occupancy.
- Comprehensive project costs and potential alternatives that might substantively impact the building and operational costs.

HDR will schedule the Global Workshop so input can be incorporated into the development of the Preferred Alternative.

#### 4.2 Preferred Alternative

HDR will prepare a Preferred Alternative memorandum with written narratives, supporting graphics, and spreadsheets to detail the following components for all buildings related to the preferred alternative:

# 4.2.1 Program

- Final space programs for buildings and exterior programs.
- Revised room data sheets with room layouts as required for illustration.
- FF&E list of new and reusable furniture and equipment, including performance requirements.
- Narrative identifying swing space needs and enabling projects.

#### 4.2.2 Site and Building

Narrative outlining detailed recommended scope of renovations, additions, or new
construction including site improvements, space designs, building systems upgrades,
summary of accessibility and energy code compliance, and climate resiliency goals. The
narrative also must identify buildings to be demolished, solutions for swing space needs,
enabling projects to be performed by DOC's Division of Resource Management, and
other relevant technical reports such as geotechnical, site environmental, and
hazardous materials.

- Pre-schematic architectural drawings that clearly outline the Preferred Alternative design including, but not limited to, site plans, floor plans, building elevations and sections, massing model, and illustrative views.
- Building code analysis and report with a detailed list of applicable codes, permits, and compliance requirements.
- Building systems narrative of recommended systems and alternatives.
- Review of the Preferred Alternative with regulatory agencies including, but not limited to
  the Massachusetts Historical Commission (MHC) and the Local Historical Commission for
  impacts to historic and archaeological properties. HDR will also consult with DCAMM's
  Statewide Accessibility Initiative to develop a narrative to address issues and to perform
  regulatory reviews with the Architectural Access Board.
- Narrative with statement of compliance with Executive Order 594 (Leading by Example)
  and provisions for addressing environmental and community impacts as well as goals for
  the elimination of fossil fuels and use of renewable thermal technologies (such as ground
  source heat pumps or other renewables) for heating and cooling.
- Preliminary LEED checklist indicating project goals and final climate resiliency checklist.

#### 4.2.3 Cost Analysis

- Detailed cost estimate based on a Construction Management-at-Risk project delivery method. All formal cost analysis should adhere fully to the detailed requirements described in the DCAMM <u>Consultant Estimating Manual</u>.
- Up to two cost analysis workshops as needed to review project costs and budget. DOC and DCAMM will review and confirm the timely availability of funding for Total Project Cost prior to authorizing start of Schematic Design.

### 4.2.4 Project Schedule

- Final implementation plan including required move and swing space coordination and other critical logistics and enabling projects to maintain continuous operations of existing activities on the selected campus(es).
- Final implementation schedule addressing phasing, permitting, regulatory reviews, and other requirements.

#### 4.3 Construction Manager Selection

As part of this task, HDR will participate with DCAMM and DOC in a committee to select the construction manager for the proposed project. The selection process will involve the review and evaluation of qualifications and proposals, potential interviews of short-listed firms, and final selection. DCAMM will be responsible for drafting and issuing the Request for Qualifications and Request for Proposals. The goal is to select a construction manager who may be available to assist the project team with pre-construction services during the Schematic Design phase.

# **Deliverables Task 4:**

- > Meeting minutes and presentations.
- Preferred Alternative, including summary findings from additional site investigations (Geotech, site environmental, civil, hazmat, etc.).
- > Deliverables related to Construction Manager selection.

The preferred alternative will be further developed in the Schematic Design phase of the Study following authorization for such services in accordance with the Contract. Authorization to progress to Schematic Design will be based on a review of available funding sources for the total project cost and alignment with initial project goals.

# Task 5: Schematic Design

Objective: Schematic Design phase shall develop the Study outcomes to a customary and appropriate level of detail and specificity in order to verify the cost and demonstrate that the project is maintaining the established budget.

#### 5.1 Schematic Design Submission

In agreement with a kick-off meeting for Schematic Design with DCAMM, HDR will prepare and submit Schematic Design documents in accordance with DCAMM's Contract for Designer services and based on the DCAMM Designer Procedures Manual from August 2008. The manual is available online at the following link:

https://www.mass.gov/files/documents/2017/12/19/designers-procedures-manual-aug08.pdf

The Schematic Design submission will include, but not be limited to, the following:

#### • <u>Site and building design</u>, including:

- o Site plans, including civil and landscape design plans.
- Demolition and architectural floor plans of all levels identifying program spaces.
- o Floor plans of the building's general structural, mechanical, electrical, plumbing, and fire protection systems.
- o Building elevations and sections, massing model, and illustrative views.
- Building information model for the proposed project design developed in accordance with DCAMM requirements.
- o Finishes and FF&E schedules.

#### Specifications, including:

- Basis of design, including design parameters that affect the design of the building systems.
- o Table of contents and scope of work for each specification section.
- Comprehensive specifications to address relevant components/sections of the work including equipment, capacities, and descriptions of structural, mechanical, electrical, and other special systems that impact the project.

#### • Narratives, including:

- Building code analysis, sustainability analysis (including LEED checklist), and accessibility analysis. In preparation for the building code analysis and in recognition that more than one project site could be required, HDR will prepare for and attend a meeting (or meetings) with the State Building Inspector, State Plumbing Inspector, and the local Fire Chief for each jurisdiction in which components of the project are located.
- Commissioning plan with a scope of work for commissioning services.
- o Hazardous materials plan.

# • Cost Estimates:

Detailed estimate prepared by the Cost Estimator and based on the Schematic Design documents and per the <u>Cost Estimating Manual</u>. Specialty components prepared by others may be incorporated. The estimate shall include customary and appropriate margins and allowances necessary to produce an Estimate of probable Construction Cost (ECC).

Throughout Schematic Design, cost modeling and estimating will be required to develop a design that can reasonably be accomplished within the established project budget.

Reconciliation of the estimate with the CM's cost estimate is required and included.

#### Project schedule:

Detailed schedule for the design, procurement, and construction durations, including anticipated permits and testing. HDR will communicate and coordinate with the selected Construction Manager (CM) to develop a solution to the project that meets the anticipated construction schedule and phasing requirements.

#### **5.2 Progress Workshops**

Throughout the Schematic Design process, HDR will continue with bi-weekly meetings with key members of the design team and representatives from DCAMM and the DOC. HDR will also engage the broader project team, including the Steering Committee and other stakeholders (as needed), during approximately two progress workshops (tentatively at 50% SD and at 95% SD) to refine the program, the design, and cost estimate. HDR will lead the meeting and present the project goals, ideas, and solutions.

HDR will develop a sufficiently detailed project schedule with phases, major tasks, critical path items, milestones, and deadlines anticipated through occupancy. HDR will prepare meeting minutes of all formal meetings and progress workshops and incorporate these comments into the Schematic Design submission (Task 5.1).

#### **5.3 Construction Manager Coordination**

Throughout the Schematic Design process, HDR will coordinate design decisions, construction schedule and cost estimating with the Construction Manager. Information produced during this task that is (i) relevant and material to defining the project scope and (ii) required as part of Schematic Design obligations under the Designer's Procedures Manual must be properly incorporated in the Schematic Design submission (Task 5.1).

# **Deliverables Task 5:**

- Meeting minutes and presentations.
- Schematic Design deliverables as specified in the <u>Designer's Procedures Manual</u>.
- Deliverables related to Construction Manager coordination.

# Task 6: Certifiable Report

Objective: Prepare a Certifiable Report incorporating, coordinating, and narrating appropriate content for Task 1 through 5. The Report will provide a sufficiently detailed information package to describe relevant aspects of the proposed project program and design concept.

#### 6.1 Table of Contents for Certifiable Report

HDR will prepare a table of contents for the Certifiable Report for DCAMM review. The contents of the draft report should include, but not be limited to, the following, with the intent of describing important aspects of the project justification and proposed development:

- Executive Summary, including a brief project description, program size of project, scope, estimated construction cost (ECC), total project cost (TPC), and project schedule.
- Finalized program with tabular and blocking diagrams, and program narrative with analysis, challenges, and opportunities.
- Existing conditions summary (major takeaways from Task 2 Report).
- Summary of the design alternatives effort.
- Consensus solution with design narrative, design concept diagrams, and drawings to illustrate the proposed site planning and building design.
- Schematic design with key drawings, finishes and FF&E schedules, and specifications.
- Code analysis (Chapter 34 update for the 9th Edition), sustainability and resiliency analysis (including LEED checklist), and accessibility analysis.
- Supplemental narratives, including building performance requirements, system narratives, and code compliance reports.
- Project cost estimate.
- Summary of life-cycle costs and operating costs.
- Project schedule, phasing and permitting requirements.
- An appendix including the following information:
  - Updated documents (finalized room data sheets, tabular program, etc.).
  - o Technical reports such as geotechnical, site environmental, etc.
  - Meeting minutes, presentations, and relevant project correspondence.

#### **6.2 Draft Report Submission**

HDR will prepare and submit a draft report with the content listed above for detailed review and editing by DCAMM. HDR will submit native files as well as electronic files that are searchable and bookmarked. The edited draft report will then be circulated for user agency review.

#### **6.3 Final Report Submission**

HDR will prepare and submit a draft report with the content listed above, with revisions as directed by DCAMM, and submit three (3) bound hard copies. HDR will submit native files as well as electronic files that are searchable and bookmarked. The preferred report format is 8-½" x 11" size with portrait orientation. The final deliverable will be a professionally packaged, well organized, well-written, and well-illustrated product.

#### **Deliverables Task 6:**

- Meeting minutes and presentations.
- Draft and Final Certifiable Report.