

## 5. Proposed project approach:

### *Structure of the contractor's project management team and interface with the Owner:*

#### **DESIGN BUILD MEP APPROACH:**

As a full mechanical contractor, we pride ourselves on providing a comprehensive design package, all project requirements from delegated systems design to playing an active role in the commissioning effort, are second nature and just part of the role we play as a design partner. We understand that time is of the essence and providing these details early for review and approval will assist in maintaining schedule for a strong finish. We typically show up in force to our meetings with a single point of contact from Apollo and a host of support from our Design engineer partner, usually including the design project manager and lead designer. Any additional support will be brought in to support meetings as required.

Apollo's management approach to Design and Designing to Budget is to be part of a cohesive team with the owner's representative team. Our growing knowledge of current market conditions, emerging technology, and lessons learned from previous projects allows us to approach this project with a positive perspective. Apollo will take complete ownership in providing expertise in mechanical and plumbing systems to assist the team in target value design. This starts with a thorough understanding of the Owner Project Requirements and active participation in the entire design process from Design Development to IFC. During this process, we will collaborate with the entire team and other trade partners to meet or exceed the project requirements. We have found that this is achieved with focused weekly or multi-weekly design meetings. To better manage the design process, we encourage assigning roles and responsibilities to each design-assist trade partner and design team member. The Roles and Responsibilities of each trade partner should specify tasks and assign these tasks to individuals, not companies which will establish accountability and keep the process moving forward on track. Roles, responsibilities, and tasks can be tracked using a web-based living document (Microsoft Planner, Note, Google Docs, etc.), that makes collaborative efforts accessible and presents information in real-time. This team approach ensures that any components are not lost and fall through the cracks.

Coordination and communication are key. Throughout the life of the project collaboration and coordination is a continual process that we at Apollo have full buy-in with. We believe that our involvement does not stop at just the mechanical or plumbing scopes but looking at other trade scopes and how they work as an integrated system. Our team works with OFCI vendors making sure components and accessories meet project requirements, ensures controls and commissioning agents have full commissioning support, and the project team has constant schedule feedback. This RFP will show how our approach is backed by years of not only commercial construction but healthcare project experience.

#### **DECISION MAKING:**

Apollo will use several coordination tools throughout the evolution of Preconstruction and construction either from in house documents or those established by the project team for use in decision making:

#### **TOOLS & METHODS**

TOOLS	VALUE
Create Project working teams (PWTs) to solve complex issues.	Collaboration with project partners to yield solutions to address design, constructability, budget, and operational requirements.
Big room approach, collaboration as a full team.	All-inclusive approach builds trust, rapport, and effective communication leading to a coordinated project on time and within budget.
Recurring team meetings to review open decisions, scheduling, risk assessments, SMART sheets.	Teams who are well informed and have clear expectations and shared understanding of Project direction, schedule, cost, and significant information uphold project focus and alignment.
Choosing by advantage, essential to cost and scope management	Comprehensive approach weighing multiple paths of proposed alternatives to identify and or explain cost, and design considerations in a transparent documented method, allowing for quick decisions by the project team.

### *Maintaining continuous clinic operations:*

Apollo implements a comprehensive approach to maintaining clinic operations by implementing the below tasks:

- **Proactive Risk Assessment:** Before any construction begins, we conduct thorough risk assessments and tailor our site investigations to the specific healthcare environment, identifying potential hazards that could affect patients, staff, and visitors.
- **Safety Training and Awareness:** Our firm prioritizes safety as a core value in executing our installation planning on all projects. All training on safety protocols, including specialized training for working in healthcare and occupied facility environments. We emphasize the importance of communication and acute awareness to prevent accidents.
- **Stakeholder Engagement:** We actively engage with Representative partners, Owners, and stakeholders who may have insight, to address safety, scheduling, and facilities concerns and incorporate their knowledge into planning our work.
- **Monitoring and Reporting:** We maintain rigorous monitoring of installation practices on-site, using daily planning, audits, and incident reporting systems to ensure compliance and continuous improvement in our work and project safety.
- **We schedule intently with the team:** Incorporate into our scheduled meeting required coordination of all leads, office staff, facilities, and department heads to make sure everyone has input and is aware of phases and areas of work. We will give durations and location specific activities, so the entire team is abreast of construction tasks.
- **Seek prior written approval of all construction related tasks,** thereby minimizing any issues related to construction activities.


*Schedule, provide a general schedule of design and implementation including, identify long lead items, time frames for Owner approval of design and the proposed system. (A detailed schedule will be required of the awarded team):*

- Concept discussions with Tulalip Nation and report of findings: 1 month from NTP
- SD plans and Review period 45 days after Concept approval
- DD Plans (initial pricing) 60 days after SD approval
- Permit and CDs 90 days after DD approval
- Main Mechanical Room BIM / VDC coordination ~ 4 weeks plus fabrication and installation period
- Long lead equipment items to consider:
  - i. Boilers – 8-12 weeks
  - ii. Fan Coils – 8-10 weeks
  - iii. Hydronic Pumps – 8-10 weeks
  - iv. AHU Replacements – 18-24 weeks currently (General)

### Approach to ensure ease of use, maintenance:

Our coordinated designs accommodate the space requirement needs of the facility to maintain proper walk & aisle ways. Taking care to review operational and maintenance procedures and provide space allocation to meet code and ease of maintenance requirements is a priority. Our BIM team lead, Eric Ehrhardt, continues to be a pioneer in the VDC space, pushing us and our partners to implement cutting-edge technology where it is shown to provide value to our clients. On the Tulalip Tribe Health Clinic HVAC Renovation project, Eric and his team of detailers **will use Revit to implement the project's BIM Execution Plan**. Eric and his team will be responsible for implementing Apollo's CAD-FAB-FIELD (CFF) process. We have developed this process to provide a standard protocol for delivering all our projects. It emphasizes rigorous pre-planning during the CAD/BIM process to simplify fabrication and field installation. Lean and pre-fabrication are the driving forces behind our CFF process. The principle behind CFF is Kanban or pull, with the installation schedule dates ultimately driving all prior dates in the process. An example of this is in our Fabrication Request Form (FRF) that is completed by our field teams. The required delivery of fabricated material on site "pulls" all of the proceeding activities.

### Sample FRF Form

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Package or Task Number	Line or System Number	System	Detailing Complete	Coordination Sign Off	Spool Drawings	Hangers On Site (Filled out by Field)	Spools On Site (Filled out by Field)	Fabrication Status
			Due Date	Due Date	Due Date	Due Date	Due Date	Received, Fabricated, or Delivered
12-1-3-009	12000	storm	11-21-18	11-28-18	12-12-18	12-19-18	12-26-18	Delivered
11-101	11000	sanitary	11-21-18	11-28-18	12-12-18	12-19-18	12-26-18	Delivered
11-1-3-008	11000	sanitary	11-21-18	11-28-18	12-12-18	12-19-18	12-26-18	Fabricated
10-1-3-003	10000	vents	11-21-18	11-28-18	12-12-18	12-19-18	12-26-18	Received
10-1-3-007	10000	vents	11-21-18	11-28-18	12-12-18	12-19-18	12-26-18	Fabricated

### Long term service agreement structure:

See Appendix 1 for a sample service agreement.

## 6. Proposer's needs from the Tribes

Apollo will act as General contractor and will coordinate with all required trades the specific scope required for all work associated with construction activities.

Scopes we anticipate subcontracting:

- Mechanical Insulation
- Test & Balance
- DDC Controls
- Electrical Contractor
- T-bar contractor
- GWB contractor
- Framing & siding contractor
- Painting contractor

NOTE: A single contractor may cover multiple scopes of work mentioned above.

