

Covance Construction Management Staffing Plan

Chandler, Arizona

INTRODUCTION: This Construction Management (CM) Staffing Plan has been prepared for Covance to identify the critical organizational structure necessary to successfully complete the Chandler project according to the goals outlined by the Covance Project Team. The CM Staffing Plan is being provided as a tool to be used by the Owner to assist in the assembly of the Project Team and to aid the Project Team in the structuring of the Project. The primary goal of the Management Plan is to establish a uniform basis to allow all Covance Team members to organize and execute their project responsibilities to arrive at a successful outcome.

COVANCE PROJECT GOALS: The following goals were used to arrive at the recommended staffing, organization and procedures for this project:

- Covance funding approval of the Project by October 10, 2005;
- Substantial Completion of the project for the beneficial use by the internal User Groups by January 1, 2008;
- A broader use of external Team Members to take advantage of newer approaches to this Project;
- Incorporate a competitive bid process in as many areas as possible to ensure that Covance receives the best cost value for the Project;

PROJECT STAFFING PLAN:

1. **Owner Vendor and Suppliers Management:** Typical to most delivery methods, the Owner will contract directly for most FF&E items including Laboratory Casework, Laboratory Equipment, Office Furniture, Communications Infrastructure and Security installations. The Project Team will be responsible for these deliverables throughout their entire project process.

In the proposed Project Staffing Plan, the Construction Architect, Project Executive and the Facility Manager share responsibility for the initial meetings with the User Groups to understand their requirements and needs as they relate to the overall project plan. The Construction Architect and Facility Manager will work with the various User Groups, including Toxicology and Formulations to compile their FF&E requirements so that Sourcing will be able to issue accurate and detailed Purchase Orders for each of the required vendors. The Facility Manager will have the lead responsibility with ensuring that the Lab Equipment and Casework meet both the needs of the User Groups and the project requirements. The Sourcing Manager and Construction Architect will work together to structure the Purchase Orders to fit the overall project requirements including schedule, delivery and installation procedures and coordination with the General Contractor.

Project Management Team external members of the Owner's Project Team will be the Project Executive and the Project Manager. These two positions will provide the necessary balance to the Team by providing the independent Construction Management expertise required to assist the Construction Architect and other internal Team Members in the overall management of the Project.

The Project Executive will provide a high level interface with the Project Team. This individual will be responsible for the management of the full time, onsite Project Manager along with the administration of the General Contractor. The Project Executive will be far enough removed from the daily interface with the General Contractor to be able to provide a fair and impartial resolution on issues raised between the Design/Builder and Project Manager, while still being involved closely enough to understand the issues being raised.

To maintain the continuity of the management of the project, the Project Executive and Project Manager should be an intricately working team, familiar with one management system and able to work together as one. The Project Manager will be the onsite extension of the Project Executive, responsible for the day-to-day management of the General Contractor and project progress.

The Project Executive will provide the support and issue resolution to the Project Manager as an integral, yet separate check and balance to the management team.

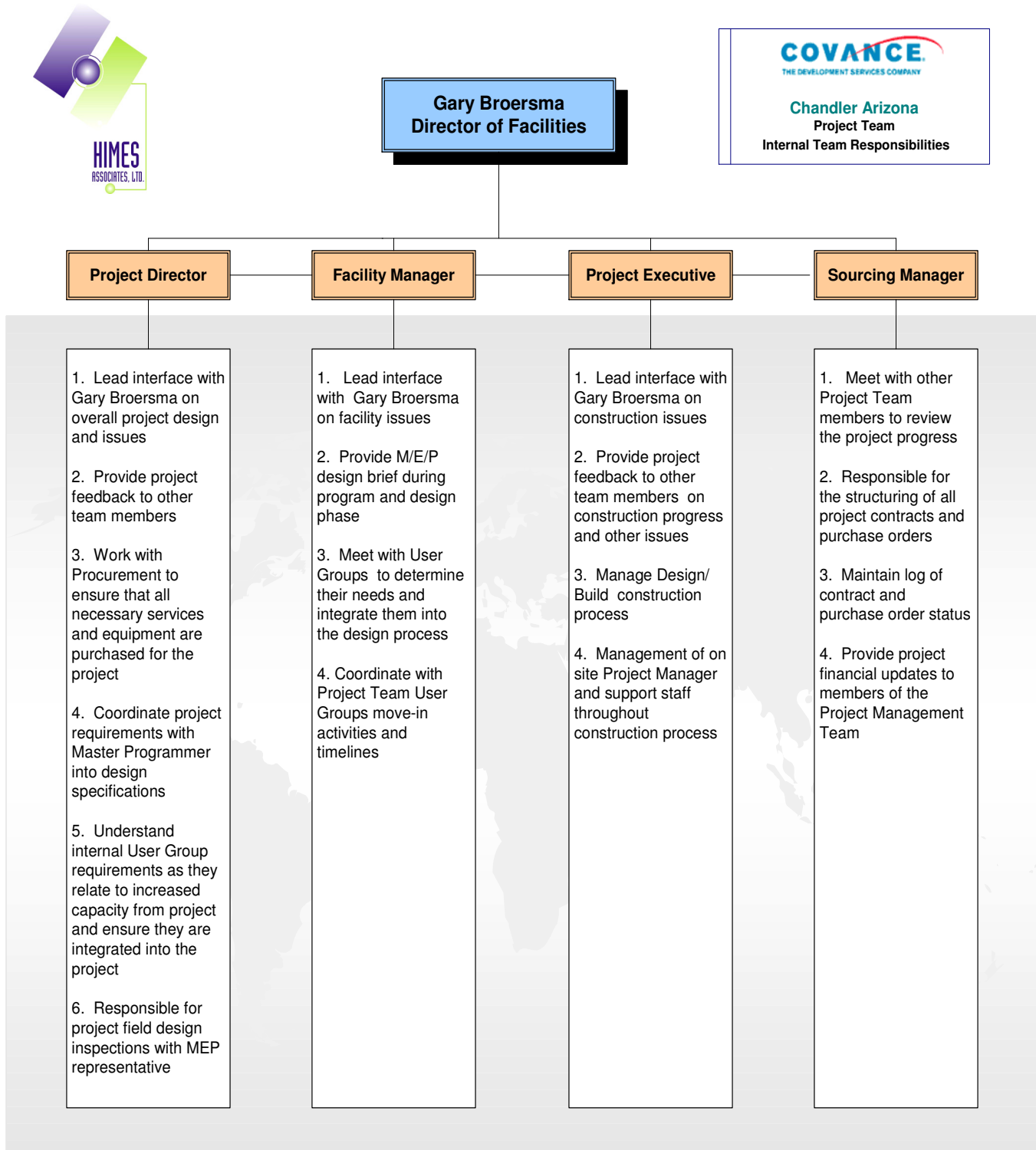
Covance Construction Management Staffing Plan Chandler, Arizona

The Security and IT integration, as compared with the traditional FF&E, will require more direct contact with the User Group in the initial set up of the project design. The Construction Architect must be able to take the User Group's requirements and specifications and successfully integrate them into the design process for the General Contractor. It is crucial to the project, that the Construction Architect be able to effectively communicate the overall project plan to the User Group, while expeditiously collecting their requirements in a format that will be able to be quickly and smoothly integrated into the design.

Final delivery and installation of all FF&E items, including the installation of the Communications and Security infrastructure will be the responsibility of the Project Executive and the Project Manager, with much of the User Group interface remaining as a function of the Construction Architect. This process will have close supervision and input from the User Group, and thus this process tends to evolve as a very time intensive process for the Project Team.

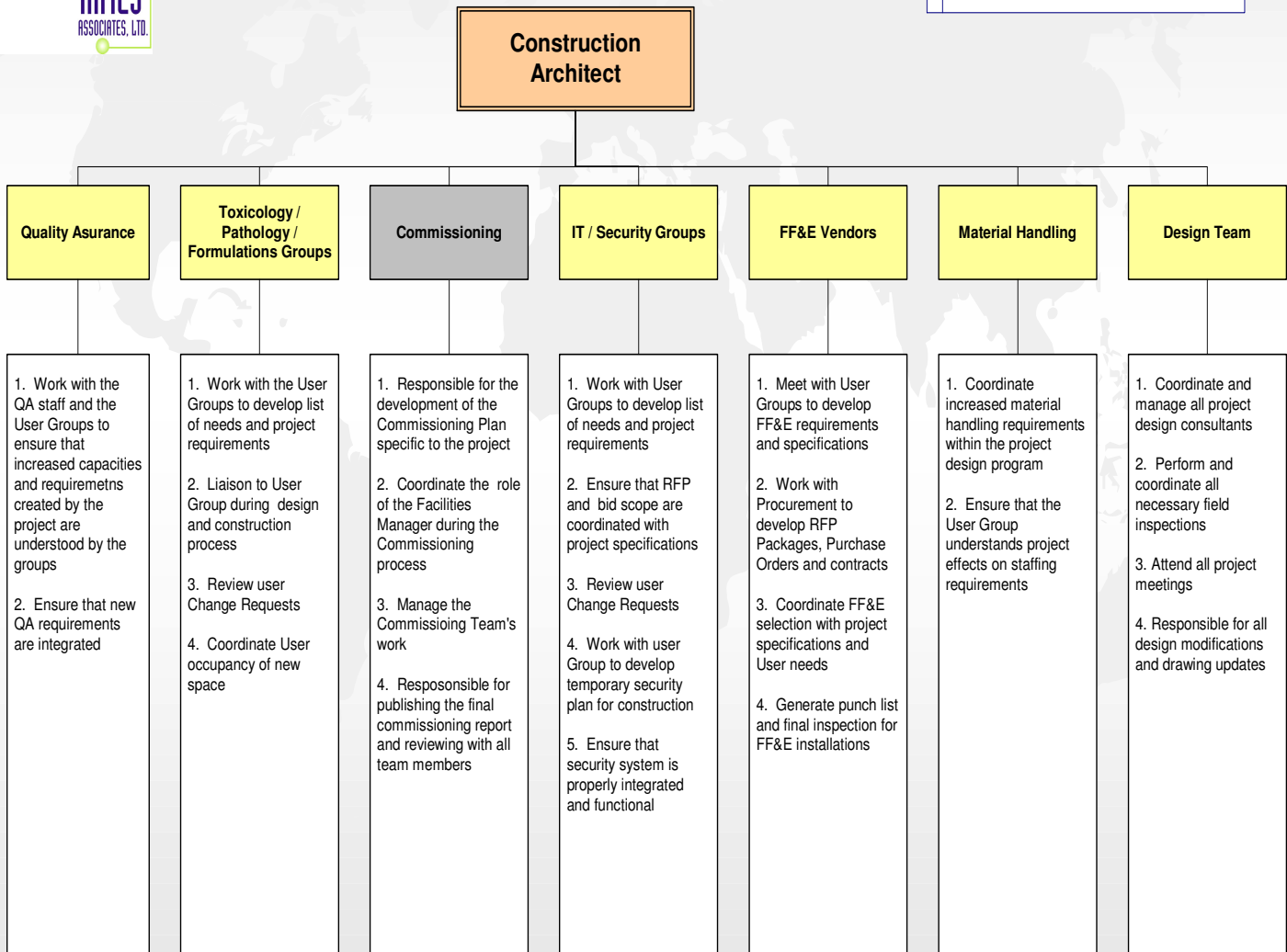
Covance Construction Management Staffing Plan Chandler, Arizona

2. **Project Staff/Project Team:** The Project Team will be lead by Gary Broersma of Covance. As Director of Facilities, Gary Broersma will be responsible for the overall management of the project and the Project Team. The Construction Architect, the Facility Manager and Project Executive will report directly to the Director of Facilities on all issues related to this project.



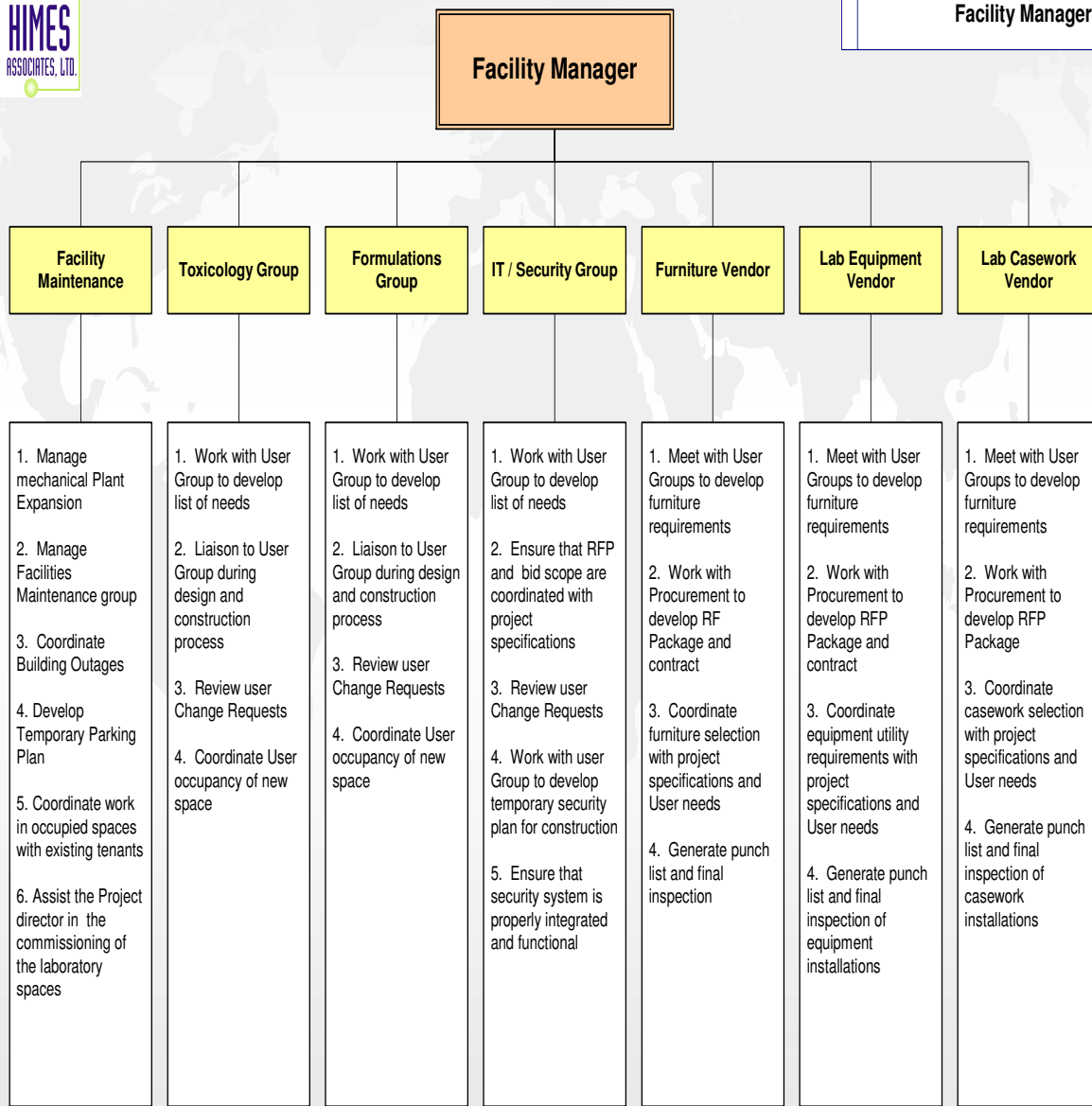
Covance Construction Management Staffing Plan Chandler, Arizona

3. **Construction Architect:** The Construction Architect will assume the primary functional lead for the Design Team and capable of facilitating communications within the entire project team; with both internal and external team members. The Construction Architect responsibilities will require excellent written and verbal communications skills, as this position will be the lead design interface on all project issues with the Director of Facilities and the Project Executive. The Construction Architect will function as the lead liaison between the User Groups and The Project Team, relating the needs of the User Groups to the Project Team, while managing the integration of these needs with the project guidelines. The responsibilities of the Construction Architect include the following areas in the responsibility matrix below:



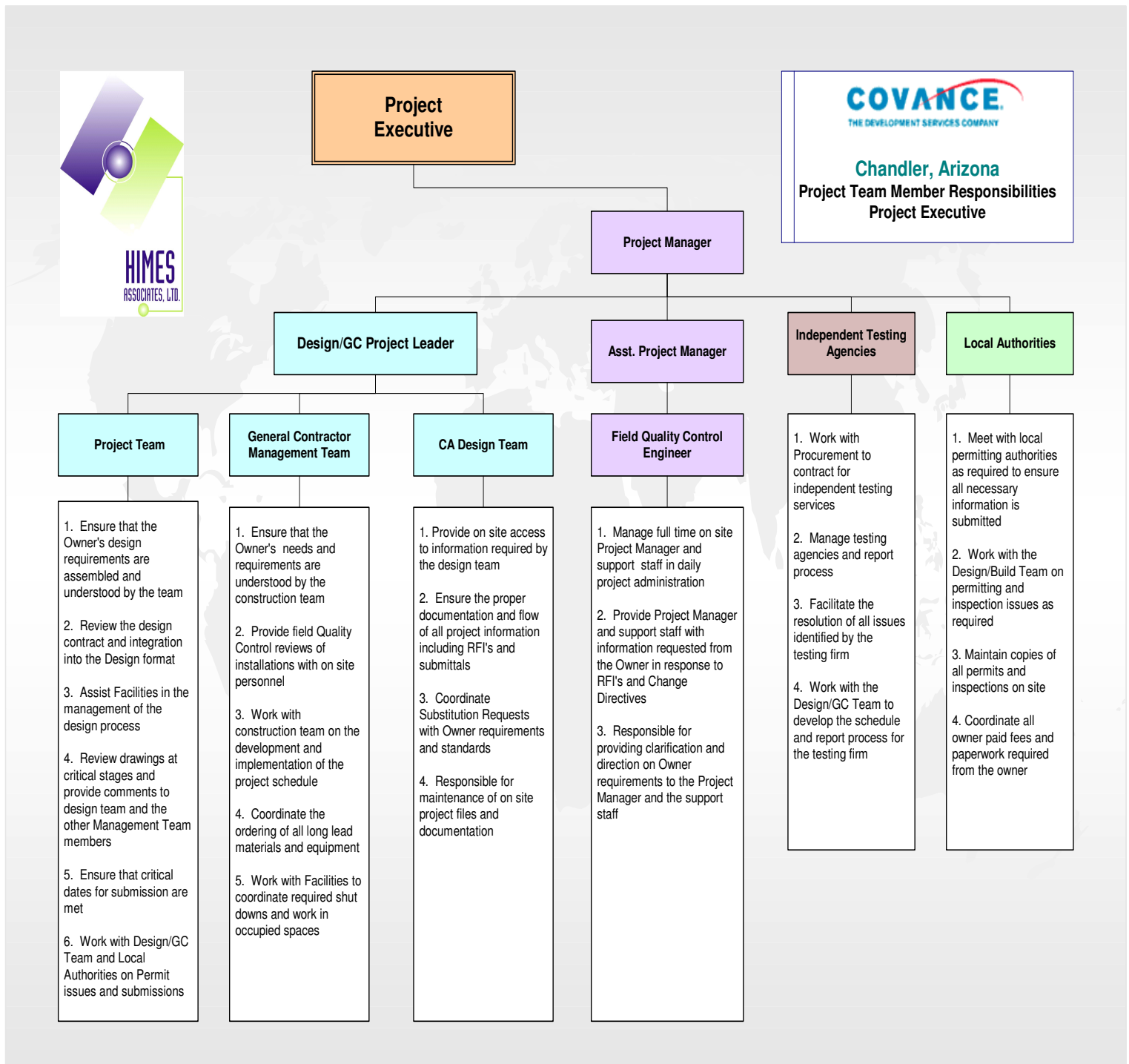
Covance Construction Management Staffing Plan Chandler, Arizona

4. **Facility Manager:** As a member of the Project Team, the Facility Manager will have the lead responsibilities for all issues related to the existing facility and for ensuring that the new project specifications and installations meet the Owner's requirements. The Facility Manager will take the lead in reporting all facility issues and concerns from the Project Team and to the Director of Facilities.



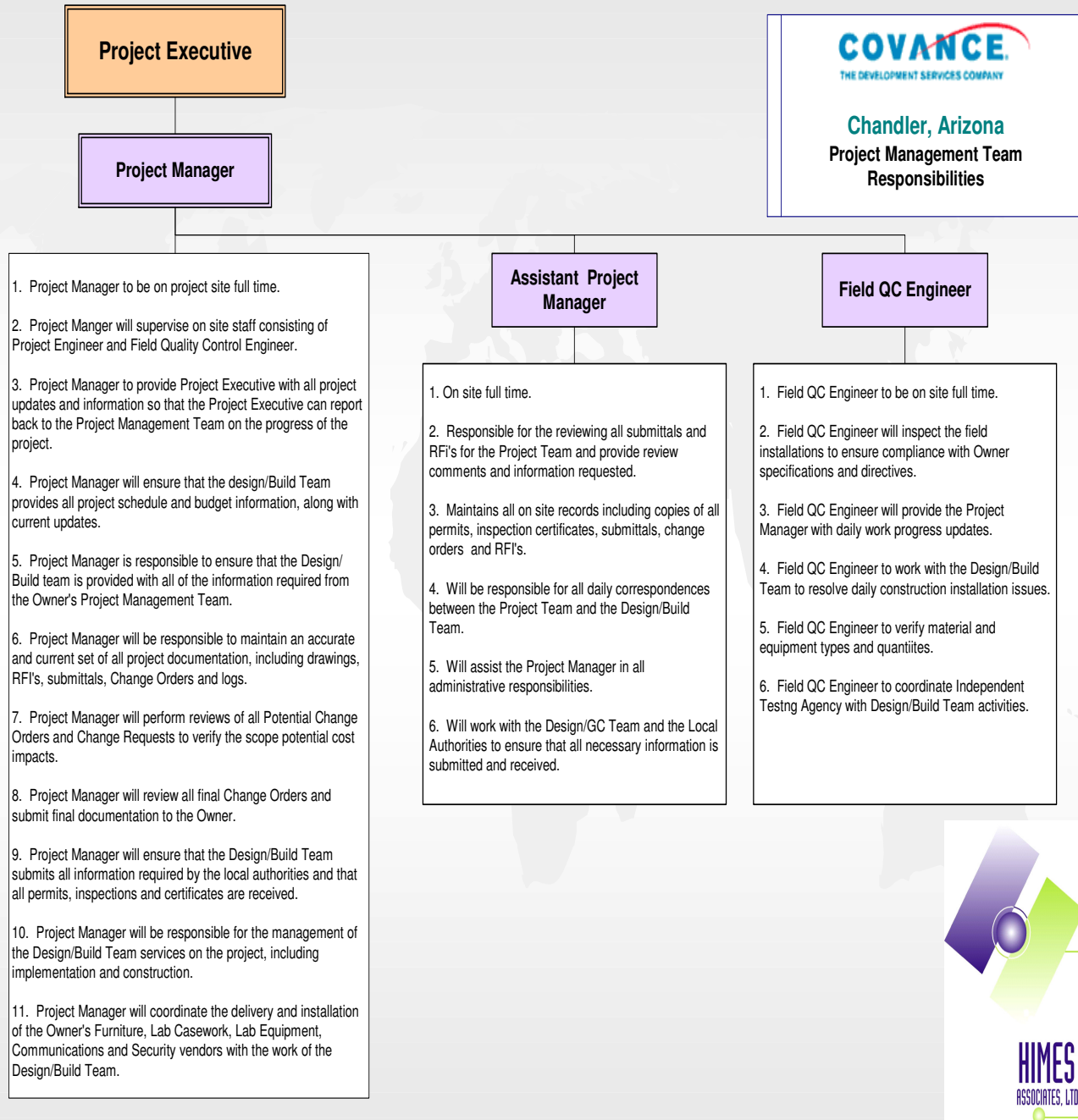
Covance Construction Management Staffing Plan Chandler, Arizona

5. **Project Executive:** The Project Executive (Michael McCormick) is the lead external member of the Project Team. The Project Executive will report directly to the Director of Facilities on the progress and status of the General Contractor and project. The Project Executive will manage the design and construction process for the Owner, and ensure that all of the local jurisdiction requirements are fulfilled. The Project Executive will manage the design and construction process through a full time onsite Project Manager and support staff, including a Assistant Project Manager and Field QC Engineer. The Project Executive will be on site as required by the Owner and project requirements but not less than one (1) full day per week plus travel time. Responsibilities of the Project Executive include:



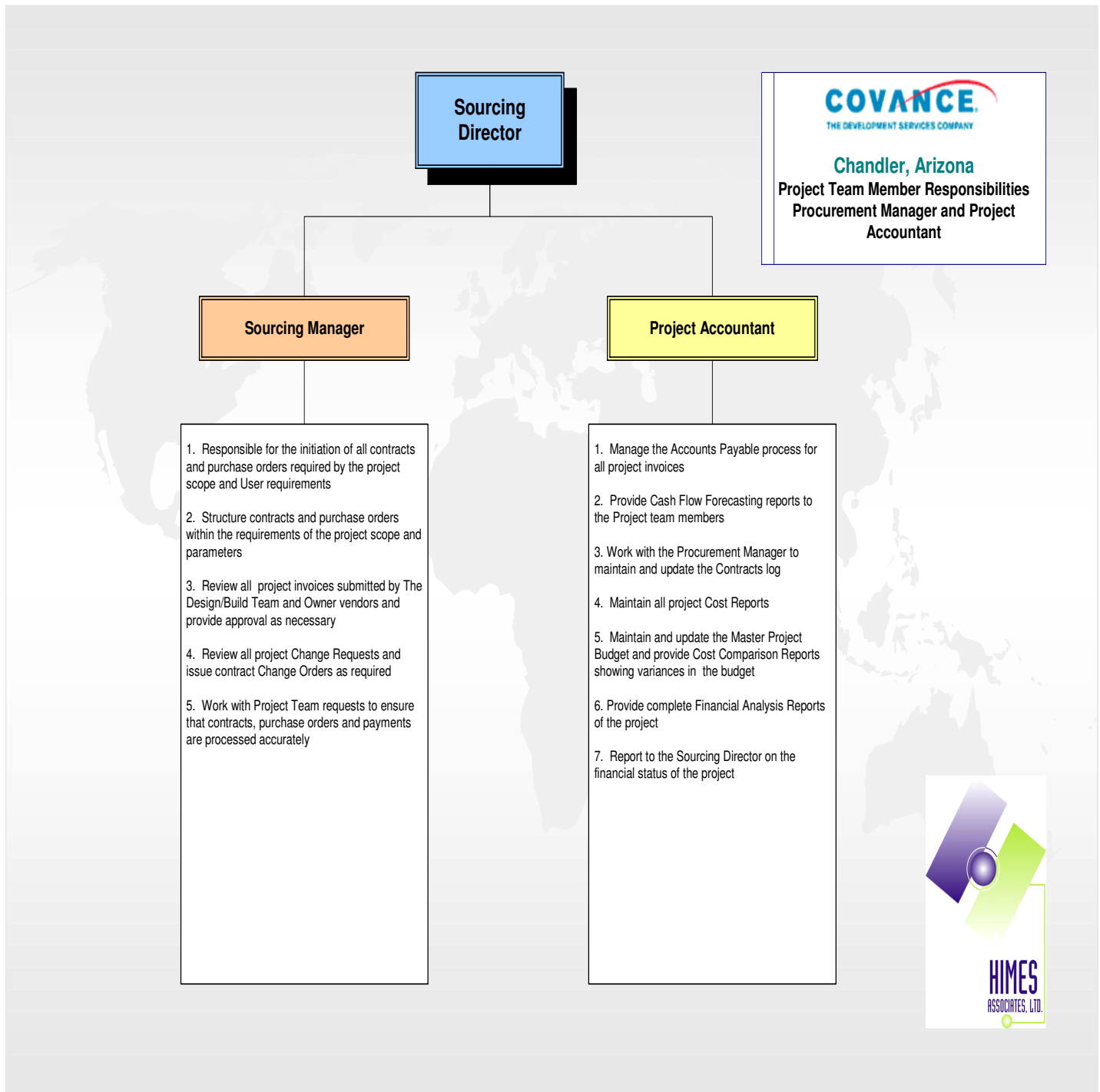
Covance Construction Management Staffing Plan Chandler, Arizona

6. **Project Manager (PM):** Full time on site functional lead for daily management of the General Contractor and represent of the owner in all construction meetings. Maintain Owner records of all project documents including RFI's, submittals, meeting minutes, change orders and other documents, supervise work of support staff, manage independent testing firm activities and reports. Provide initial review of all change proposals and RFI's, provide initial review of all submittals, and provide Project Executive with daily project updates.



Covance Construction Management Staffing Plan Chandler, Arizona

7. **Sourcing Manager:** The Sourcing Manager will represent the Director of Sourcing as a Project Team member. Though the Sourcing Manager will report directly to the Director of Sourcing, they will maintain the responsibility of providing all financial reporting to the other members of the Project Team. The Sourcing Manager will generate all contracts and purchase orders, with assistance on set up requirements provided from the other Project Team members. The Project Accountant will report directly to the Sourcing Director, providing financial status and update reports in the bi-weekly meetings, or as determined by the Sourcing Manager. Responsibilities of the Sourcing Manager include:



Covance Construction Management Staffing Plan

Chandler, Arizona

COMMUNICATION PLANS

1. **Covance Intranet:** A unique opportunity exists with the Owner's intranet and IT Group. It is recommended that the Project Team utilize the Owner's intranet as a vehicle to disseminate crucial project updates and outage information to the various Owner employees. The Project Team will need to work with the IT User Group to establish a link on the intranet that will allow the Owner employees to access the project information as determined by the Project Team. The IT User Group and the Project Team will have to establish an effective system that will facilitate the quick disbursement of current project information to the Owner employees via the intranet.

It is recommended that the Owner further try to utilize the existing intranet with the installation of a web cam to allow remote employees the ability to follow the construction progress. The final details of this information tool can be discussed with the Owner to ensure that the needs for information dissemination do not adversely affect the project construction progress.

2. **Web Based Collaborative Software:** Several opportunities currently exist to manage the Project utilizing web based software to organize and store the project documents. The use of such systems allows the project participants to have immediate access to the project documents so that the entire team has the most current information. The success of these systems is dependant on having the system available at the very beginning of the project with specific guidelines on how the system is to be utilized. Each Team member must then fully utilize the system according to the guidelines.
3. **Meeting Minutes:** Meeting minutes will be a crucial tool to ensuring that the fast track project schedule is maintained. Meeting Minutes are an official record of the project progress and become part of the contract documents. The Project Team will review and approve all meeting minute formats along with the update and distribution processes. Meeting minutes will be required for each project meeting attended by a member of the Project Team. Meeting minutes are to be distributed to all attendees and members of the Project Team within 48 hours. Minutes are to be forwarded in either hard copy or electronic format, as determined by the Project Team. The author of the meeting minutes must identify a 48hr. period for attendees to review the Meeting Minutes and provide comments and corrections that are to be incorporated into the record.

The General Contractor will be responsible for the preparation, updating and distribution of the weekly design and the weekly construction meeting minutes. Meeting minutes are to clearly show Owner Action Items with a Required Response Date along with a running update of all issues discussed. The Meeting Minutes must clearly assign a responsible party to each item of discussion, along with providing a clear method for clearing resolved items. The Minutes should show a chronological order of previous meeting minutes along with identifying when they are resolved prior to removal from the record.

As the full time onsite representative for the Project Executive, the Project Manager will maintain the Project Team meeting minutes and will be responsible for the distribution to the Team Members.

4. **Logs:** The General Contractor is required to maintain accurate and up to date logs for the following items:
 - a. Requests for Information
 - b. Submittals
 - c. Change Orders and Potential Change Orders

The Project Team will approve each Log format, to be submitted at the beginning of the project by the General Contractor. Logs are to be incorporated into the weekly project meeting minutes, allowing for discussion of the status of items on each log.

Covance Construction Management Staffing Plan Chandler, Arizona

5. **Schedule:** The General Contractor will be required to provide a Critical Path Method (CPM) schedule in Microsoft Projects format. The General Contractor is to submit an initial schedule based on conceptual floor plans for integration into the Master Project Schedule prepared as part of this Management Plan.

This Master Project Schedule will become part of the Design/Build contract signed by both the contractor and the Owner. The General Contractor will provide monthly updates to the Master Project Schedule based on actual progress and adjusted projections. Updates are to be provided in full color, 'C' size drawings along with full color 8 1/2" x 11" copies provided as part of the monthly reports. The General Contractor should provide three (3) copies of the 'C' size drawings and six (6) copies of the 8 1/2" x 11" with the monthly reports. All schedule updates are due to the Project Team by the 7th calendar day of each month, or the next working day after that day, if the 7th day is a non-working day.

Two week look-ahead update schedules are to be provided by the General Contractor in each weekly meeting. This schedule update is to be printed and made part of the meeting minutes, allowing for the Project Team to review and discuss the updates.

6. **Monthly General Contractor Reports:** The General Contractor must submit monthly reports to the Project Team. The monthly report format is to be approved by the Project Team. The monthly report should provide the following project information:

- a. Table of Contents
- b. Project Summary
- c. Summary of Events for the Report Month
- d. Project Photographs
- e. Schedule
- f. Financial Status
- g. Critical Issues / Items

Monthly reports are to be submitted on the 7th calendar day of each month, or the next working day after that day, if the 7th day is a non-working day. Six (6) fully bound, color copies should be submitted to the Project Team.

7. **Steering Committee Reports and Executive Committee Presentations:**

The Construction Architect will present Project Reports to the Steering Committee on a bi-weekly basis, or as determined by the Owner. The Construction Architect will utilize the information provided in the General Contractor's monthly reports, the General Contractor weekly project meetings and the bi-weekly Finance Committee meetings to present the following report information to the Steering Committee:

- a. Budget Update
- b. Schedule Update
- c. Design Status
- d. Construction Progress
- e. Purchasing Update
- f. Meeting Schedule

The Construction Architect will prepare a Power Point Presentation for the monthly Executive Committee meeting containing the same information reported to the Steering Committee. The Project Executive will assist the Construction Architect in the preparation of the report to the Steering Committee as well as the Power Point Presentation to the Executive Committee.

Covance Construction Management Staffing Plan Chandler, Arizona

8. **Design/Build Progress Meetings:** The General Contractor will be required to hold weekly progress meetings beginning with initial Notice To Proceed (or other contract authorization) through the final project close out as determined by the Owner and Project Team. It is recommended that these meetings closely follow the internal subcontractor meetings held by the General Contractor. Both the designer and constructor are to be represented at these meetings. The General Contractor may elect to have representatives from the major trades present at these meetings.

In these meetings, the Project Team will be represented by the Project Manager, and at the Owner's discretion, the Facility Manager and Construction Architect. Topics to be discussed at these meetings include:

- a. Review of Previous Meeting Minutes
- b. Design Status Update
- c. Construction Status Update
- d. Two Week Look-Ahead Schedule
- e. Change Order Log Review
- f. RFI Log Review
- g. Submittal Log Review
- h. Owner Action Items
- i. New Issue Discussion

9. **Owner Project Team Meetings:** The Owner's Project Team, consisting of the Construction Architect, the Facility Manager, the Sourcing Manager, and the Project Manager (Project Executive to attend via teleconference) will hold weekly meetings. Topics to be discussed at these meetings include:

- a. Owner Action Items
- b. Project Progress
- c. Financial Updates
- d. User Group Feedback and Issues
- e. Owner Issues

The meeting minutes will be maintained by the Project Manager and are to accurately record the discussions of the meeting. It is recommended that these meetings be held soon after the weekly General Contractor meetings to allow for a quicker response to Owner Action items.

10. **Finance Meetings:** Project Finance Meetings will be held on a bi-weekly basis with the Project Team, the Project Accountant and the Project Manager. The Sourcing Manager will be responsible for preparing the finance report for review by the Project Team. Information to be discussed at these meetings includes:

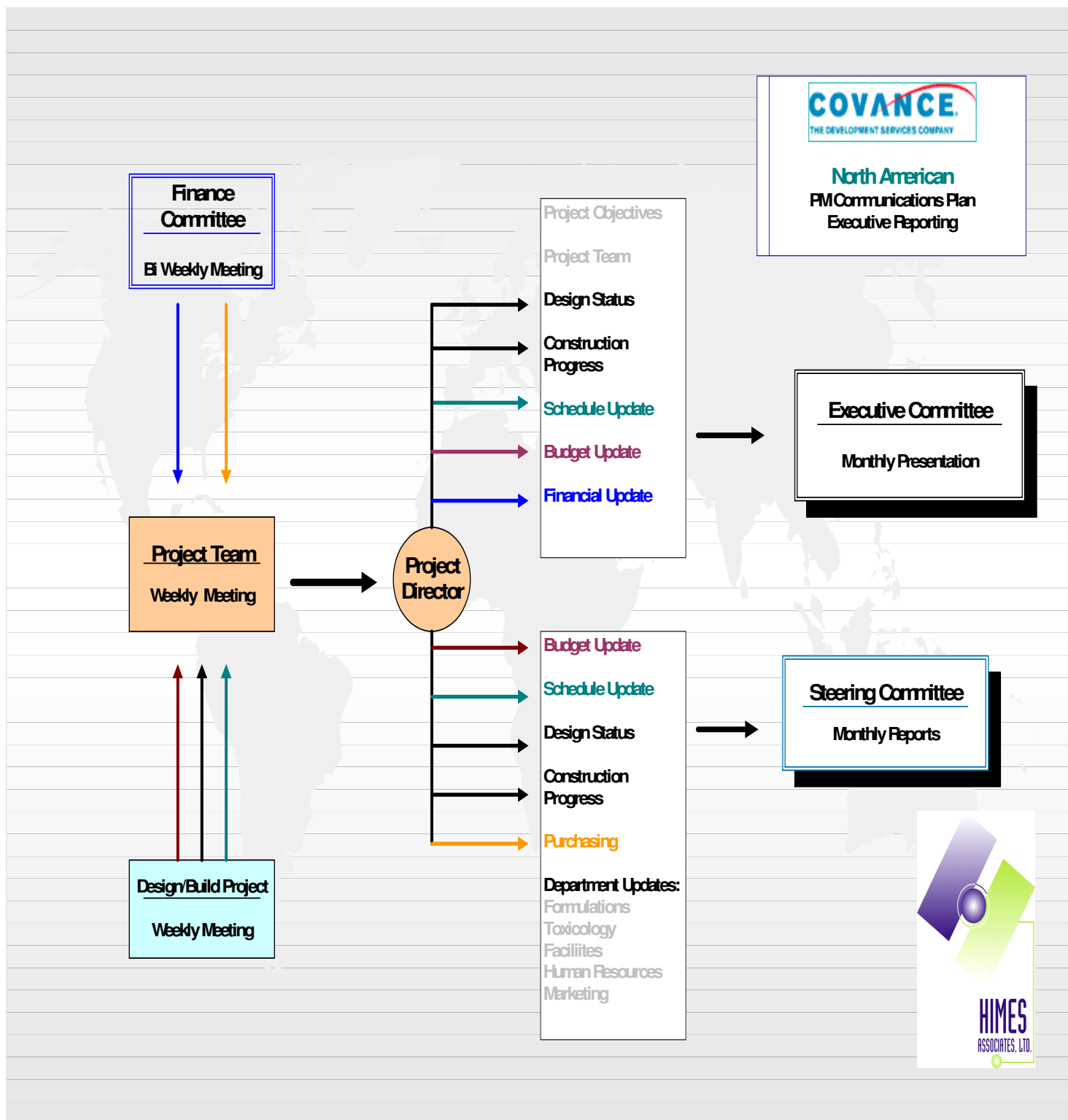
- a. Contract and Purchase Order Status
- b. Change Order Update
- c. Cash Flow Analysis
- d. Owner Project Budget/Accounting

11. **Steering Committee and Executive Meetings:** These will be identified and scheduled by the Owner. The Construction Architect will be directly responsible for representing the project and the Project Team at these meetings.

Covance Construction Management Staffing Plan Chandler, Arizona

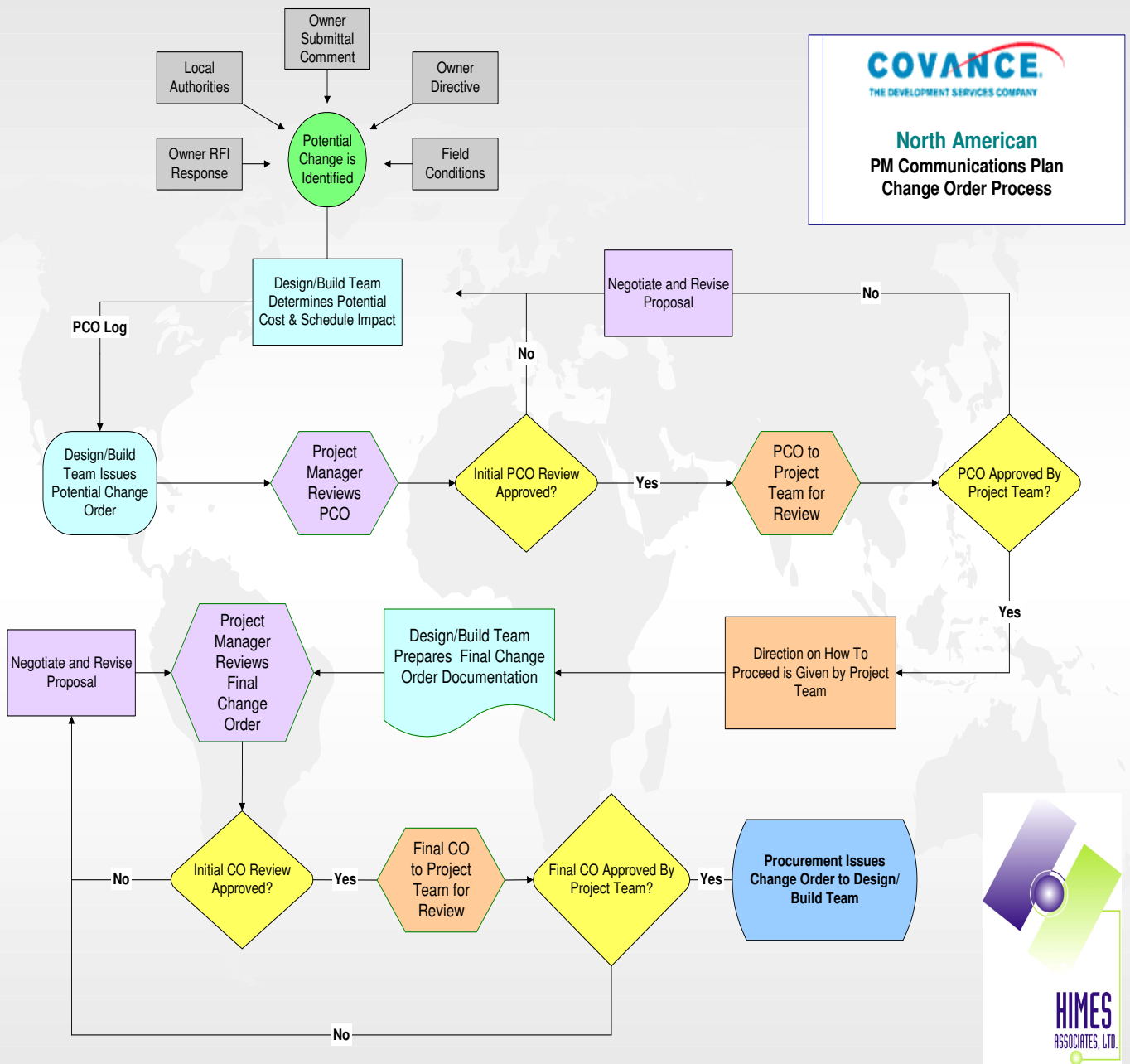
PROCESS FLOW CHARTS:

1. Communications Flow Chart:



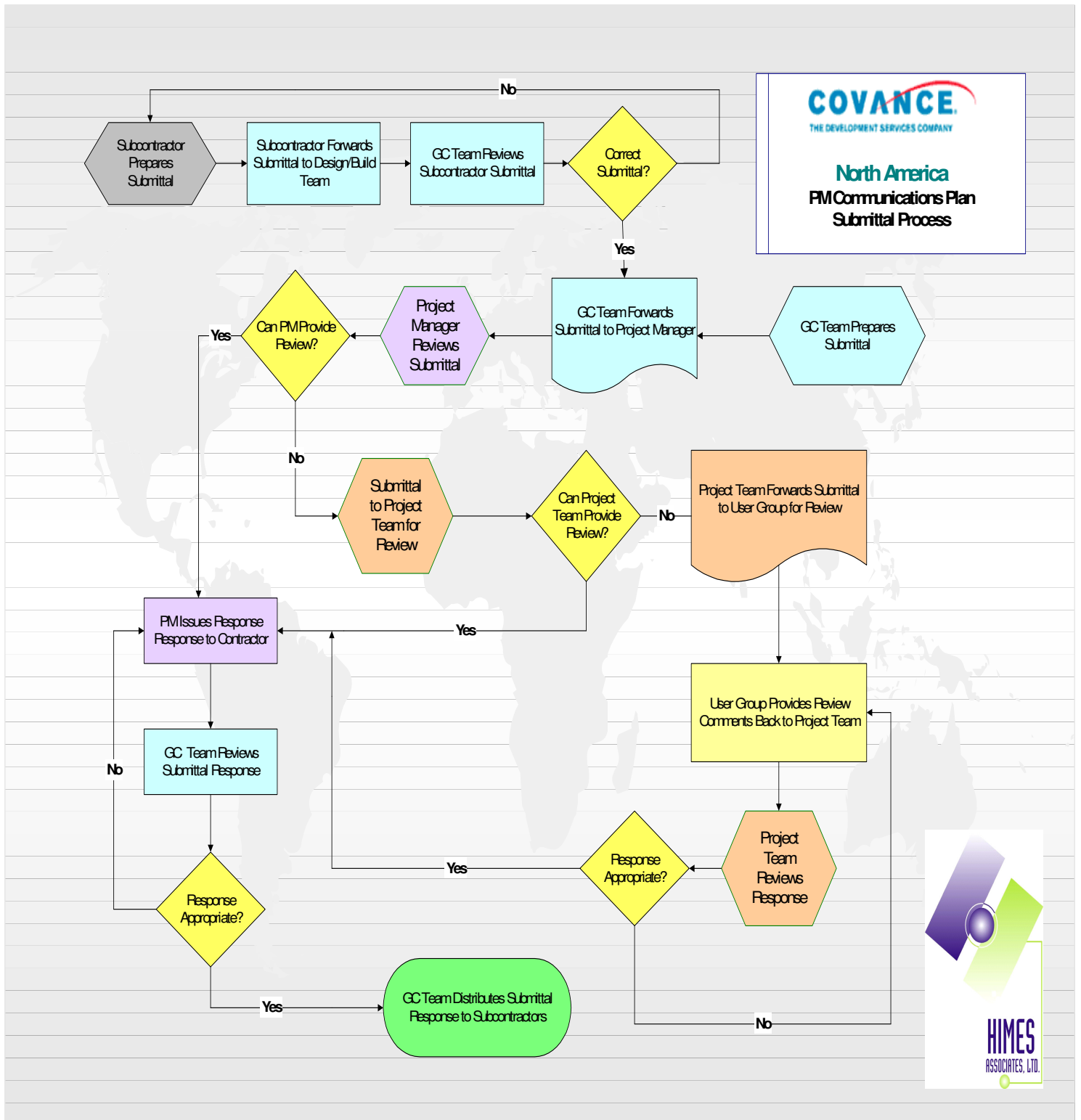
Covance Construction Management Staffing Plan Chandler, Arizona

2. Change Order Process:



Covance Construction Management Staffing Plan Chandler, Arizona

4. Submittal Process



Covance Construction Management Staffing Plan Chandler, Arizona

PROJECT BUDGET:

5. Action Steps:

- a. The Project Budget was created using the program and block diagrams issued by the Master Programming Company, Project Architect (RS&H).
- b. For the Construction pricing, the preliminary documents were sent to Kraemer Brothers Construction for pricing based on the expended costs for the North East addition, which were corrected for inflation and the growth in the building materials market.
- c. The design fees were estimated by Strang. Both companies used the preliminary project schedule to base their budget pricing upon.
- d. Covance Internal departments provided budget numbers for IT, Furniture, Laboratory Equipment and Casework.
- e. All other costs were pulled from similar budget line items in the North East addition.

6. Attachments:

- a. Detailed Master Schedule
- b. Detailed Master Budget
- c. Preliminary RS&H Block Plan
- d. RS&H Program
- e. Kraemer Budget Estimate