MRC/FIBERIGHT PROCESSING FACILITY
LIST OF DELIVERABLES

Deliverable #17:

17. *Provide additional information to address technical ability related to process system design. A written description of how and who is involved in the process design may address the questions.*

Fiberight has provided the following information to supplement the original Technical Ability submittal in the Chapter 409 License Application. This additional information reflects technical expertise specific to process design and operation.

The Fiberight team is the same team responsible for the design and operation of the Lawrenceville, Virginia facility. Resumes for the primary individuals responsible for process design and engineering are attached. In addition to experienced Fiberight engineering professionals, the process design and project will be reviewed by AMECFW per the attached Engineering/Construction Management Scope.

Alan Iantosca
Fiberight, Project Team Leader & VP of Engineering

Professional Experience
Business Development Executive with the ability to build a winning team, develop strategies, set strategic direction and develop and close the complex deal within that strategy. Consistent record of improving profits through creative and effective asset and cost management. Solid business, engineering and operating background with proficiency in analyzing commercial arrangements for upside potential. Skilled in creating positive relationships with both internal and external customers and negotiating with win-win results. Also experienced in organizational development, acquisitions and new venture start-ups.

Fiberight LLC LLC, **2011 – Present**

EMC, O'Fallon, MO 2007 – 2010

Vice President / General Manager, Energy Market Sector / Eastern Region
Worked as an independent contractor, responsible for the development and execution of the energy market sector strategy and the eastern region strategy to identify, develop and win industrial and municipal opportunities providing water and wastewater services to identified / targeted customers. Coordinated the overall management and P&L for all existing and future opportunities in the eastern region. Won and renewed multiple water and wastewater contracts in the energy market sector and in the eastern region.

- Introduced EMC to DuPont, Bayer Material Sciences, Linde, ConocoPhillips, CITGO, Sunoco, BP and Valero through previous relationships resulting in obtaining exclusive development positions with Bayer, BP, Citgo, Linde and Sunoco and participation in competitive situations with ConocoPhillips and Valero.
- Annually developed over ten projects with customers in the eastern region and energy market sector.
- Managed seven industrial facilities supplying water and wastewater services in the refining, chemicals and food industries.

THE BOC GROUP, Murray Hill, NJ 2000 – 2007

Global Vice President, Business Development / VP Major Tonnage Projects
Directed global business development activities and teams to win identified major targets mainly in the petroleum, chemicals and metals sectors, including both grass root projects and acquisitions.

- Won and executed four hydrogen supply and one air separation project from US$12M – US$130M.
- Represented BOC in successful contract development for US$255M ASU / Power Project in Mexico.
- Annually developed over 10 projects in various stages, ranging from $10M to over $750M.
- Negotiated Strategic Alliance Agreement with number 1 independent refining company in US.
- Completed successful construction and start-up of 2 $20M Air Separation Unit (ASU) Projects.
- Initiated formation of project consortiums to bid $200M / $750M ASU / Power Projects in Venezuela.
- Led change management process for implementation of new BU strategy / operating model for US.

AMERICAN REF-FUEL COMPANY, Houston, TX 1988 – 2000

General Manager, Essex County Resource Recovery Facility, Newark, NJ 1995 – 2000

Directed operations of the $350M Essex County Resource Recovery Facility, annual gross revenues of $65M. Responsible for P&L, facility staff of 100 employees, organizational and business development, asset improvement, customer, government, regulatory and media relations.

- Analyzed/restructured business deal with EBT improvement of 24%/year for five consecutive years.
- Operated facility at 8% increased throughput while maintaining maintenance costs at original level.
- Piloted safety process optimization and cost management systems which became company standard.
- Initiated sustainable cost reduction program cutting annual cost by $0.5M en-route to $1M.
- Obtained OSHA VPP Star Site certification achieving 13 months without an OSHA recordable injury.
- Recognized in company for leadership, teamwork and empowerment skills.

Alan Iantosca
Fiberight, Project Team Leader & VP of Engineering

AMERICAN REF-FUEL COMPANY, Houston, TX 1988 – 2000

Manager, Operations, Houston, TX 1994 – 1995
Key member on due diligence teams for acquisition of two Ref-Fuel facilities. Coordinated operations input and lessons learned in the design of the Niagara, NY facility $150M construction retrofit.

Head of Engineering, Birmingham, UK 1992 – 1994
Key member of ex-patriot team and Operating Committee Member starting up WTE joint venture with English power company. Directed all company engineering and environmental activities.

Manager, Operations Support, Houston, TX 1991 – 1992
Liaison between the operations Department and the Corporate Office including support of existing projects and new development activities.

Start-up Manager, Newark, NJ 1989 – 1991
Structured and executed a safe, environmentally sound, cost effective and on schedule start-up of the Essex County Resource Recovery Facility (ECRRF), the largest WTE facility in New Jersey.

Operations Project Manager, NY, NY 1988 – 1989
Lead member on design team for the ECRRF providing operating / business input and guidance to the team ensuring a design with the lowest possible evaluated capital cost while facilitating efficient operations and ease of construction and maintenance.

AIR PRODUCTS AND CHEMICALS, INC., Allentown, PA 1979 – 1988

Assistant Production Manager 1984 – 1988
Managed 5 domestic and 5 international tonnage air separation plants providing pipeline gases and bulk liquids via pipeline and bulk tanker to the steel and electronic industries and also a LNG peak shaving facility. Involved in formation / growth of international joint ventures in Korea, Thailand and Malaysia.

Design Engineer / Operations Mechanical Engineer 1979 – 1984
Designed and executed new and retrofit asset improvement projects up to $1M. Involved in the design, construction, start-up and repair of various plants and systems in the U.S. and overseas. Performed staff function in piping stress analysis, plant HVAC design / specification and design, specification and procurement of packaged process and utility systems.

EDUCATION

BS, Mechanical Engineering, Villanova University, Villanova, PA
Continuing Business Education, Columbia University, New York, NY

Nick Thompson,
Fiberight, MD FIberight Ltd/Vice President Technology Fiberight LLC

Project Team Role:
As the Vice President of Technology, Mr. Thompson will have overall responsibility for technical aspects of the process and products as well as will coordinate the ongoing research and development activities with the engineering of the demonstration to commercial scale plant.

Education / Training
University of Bath, United Kingdom, Bachelor of Chemical Engineering, 1984.

Professional Experience
Nick Thompson is a Chemical Engineer who has worked in a variety of manufacturing sectors including food, chemicals and building materials for over 20 years. During this time he has progressed from direct line management through general manufacturing management and finally to full profit and loss accountability. As a result of the various roles he has had direct responsibility for all operational aspects including Health and Safety, procurement, capital investment, maintenance, quality assurance, product development and human resources.

Past Experience
Mr. Thompson's career has included a number of plant start ups and business process re-engineering activities, generally based around capital investment programs, where he has had direct project management responsibility for all aspects including engineering design, equipment procurement and installation. He has always delivered added value through improved productivity, and product quality using modern manufacturing systems whilst ensuring that the capital investment programs have been delivered on budget and on time. He has also led several projects to develop innovative new products which gained the companies involved significant market advantage. Mr. Thompson has worked on a number of initiatives involving the introduction of recycled materials in established manufacturing processes.

Professional
Nick Thompson is an experienced executive with both commercial and technical experience. During 25 years in the UK manufacturing arena he has been responsible for all aspects of operations including a number of startups of large scale production facilities and has been instrumental in managing market focused product and process development to add value to the operations under his control. He has also been focused on improving the management of these facilities, with a particular focus on quality were he has been instrumental introducing ISO 9001 based quality management systems into a number of plants.

Relevant Project/Positions Listing

Fiberight **2008 to present**	As Chief Technical Officer for Fiberight, full responsibility for the development of the Fiberight process including • Initial development of enzymatic approach for the conversion of recovered pulps to cellulose through a series of lab, pilot and pre-commercial demonstrate projects • Development of the counter current washing process to ensure high quality pulps suitable for enzymatic • Development of the use of high throughput Anaerobic digestion as a means of both water treatment and production of biogas • Responsibility for managing the design and subsequent operation of the Lawrenceville Demonstration Plant • Responsible for the technology transfer of the outcomes from the Lawrenceville Demonstration Plant to the full scale plant designs • Responsible for all R&D ongoing activity in the company
Excel Industries Ltd. Ebbw Vale, UK **2001-2008**	As CEO responsible for re-engineering the entire structure of the business after purchase by private equity group. This included development of sales force, relocating production, introduction of new technology and products, services. Increased the turnover by 150% over the period. The key projects involved site identification, design, procurement, installation of two new processing lines for cellulose insulation and technical cellulose products. Development of new product and technology for the production of pelletized SMA fibers for the Asphalt industry allowing Excel to increase its market share from 25% to 65%. Development of news Sales and Marketing Structure for the Insulation business which increased revenues by 50% in this area of the business.

Kronospan, Chirk, UK **1995-2001**	As General Manager- Chemicals responsible for the resin production business unit, within a $200M chipboard and MDF production plant. Also responsible for MDF and chipboard technical support and quality control functions. Designed and implemented an upgrade of the resin production facility increasing the capacity by 50% ensuring the plant was self sufficient in low cost resins for MDF and chipboard production. Managed the development of sales of excess formaldehyde from the plant. Introduced new resin technology to reduce cost and increase capacity of paper laminates. Developed an integrated supply chain for waste timber for the production of chipboard. Developed a new resin system for the production of MDF for laminate flooring and introduced throughput the Kronospan group in Europe this innovation improved the product quality and created savings of $20M per annum.
John Cotton Ltd. Mirfield **1993-1995**	As Operation Director was responsible for all aspect of production in $50M non-wovens textiles. Supervised the modernization with fire retardant chemicals addition systems reducing the costs of the operation by 20%. Also responsible for the introduction of new air quality management processes to ensure compliance with local emissions standards. Re-engineered and relocated non-woven abrasives line leading to reduced costs and improved quality, this allowed company to divest this unit
Knauf Plasterboard, Various UK **1987-1993**	As General Manager- Operations, responsible for all aspects of production for Knauf UK including purchasing, Production, logistics, quality, safety and product development. 1987 - Part of the start-up team for the Knauf's first Plasterboard Plant in Sittingbourne, UK. 1989 - Responsible for all aspects of new Plasters Production Plant including design, procurement, construction and startup. 1989 - Parachuted into a failing operation in Immingham, UK and completed turnaround resulting in the plant being the lowest cost producer in the group. Integrated a secondary lamination business into the Immingham business unit requiring introduction of new equipment, production processes and technology. Led the team that introduced new gypsum sources derived from power station flue gas desulphurization plant and chemical waste streams. Introduced production of fireboard technology to Knauf's UK plants
National Starch and Chemicals, Tilbury, UK **1984-1987**	Production Manager of Starch Modification Facility, restructured packaging and logistics functions. Introduced new products to the plant. Developed a new quality system leading to a 98% reduction in rejects.

Peter Speller, CEng FIChemE
Senior Process Engineer

Project Team Role:
As the Senior Process Engineer, Mr Speller will have overall responsibility for process engineering aspects of the project, principally ensuring the accuracy of the primary process engineering deliverables: mass and energy balance, process flow diagrams, and process and instrumentation diagrams. He will monitor the ongoing research and development activities to ensure that any impacts on the process engineering design are captured in a timely manner.

Education / Training
University of Bath, United Kingdom, Bachelor of Chemical Engineering, 1984.
Chartered Engineer, Institution of Chemical Engineers (UK), 1989.
University of Manchester, United Kingdom, Master of Integrated Pollution Management, 1994.
Fellow of the Instiution of Chemical Engineers (UK), 2001.

Professional Experience
Peter Speller is a Chartered Chemical Engineer who has worked in a variety of sectors including synthetic fibers, fine chemicals, silicones, and resource efficiency for over 25 years. During this time he has progressed from process development and plant support, to process engineering management, including significant periods of plant commissioning, start-up and plant management. He set up a small UK consultant engineering company, where he continues to be active in process development, process safety, and resource efficiency. He was on the editorial board of the IChemE's publication "Loss Prevention Bulletin", which reviews incidents and accidents in the process industries and makes recommendations for improving safety culture across the industry.

Past Experience
Mr. Speller's career has spanned a wide range of roles and industries, following the technical strand from R&D through process development, commissioning and plant support. His strengths are in technical detail and management of technical processes and personnel, but his exposure to operating environments and plant management results in solutions to problems and issues are pragmatic albeit backed up with the necessary theory. He has kept abreast of developments in the resource efficiency sector, especially those concerned with novel processes for recovering value from waste. His experience at high hazard sites and his subsidiary environmental qualifications has made him fully aware of these aspects of chemical manufacturing plants.

Relevant Project/Positions Listing

Cox and Speller **Cardiff, UK** **2001-**	Partner in small firm of consultant chemical engineers specialising in process development, safety and environmental issues. Assignments have included: • HAZOP study chairman for RFCC unit at Tema Oil Refinery, Ghana • Design of novel process for the recovery of radioactive carbon-14 from radiochemical wastes • Design of butane injection system for gasoline upgrading • Post-commissioning improvements to a large polypropylene manufacturing facility • Due diligence for a number of advanced combustion (pyrolysis, gasification) processes for waste valorisation • Author of report for Scottish government on the conversion of waste plastics to oil products. • Desk studies for conversion of waste into transport fuels via gasification • Environmental due diligence for acquisition of fuel terminals and filling stations • Technical expert for European Bank for Reconstruction and Development in halogen production industries, with assignments in Azerbaijan and Crimea.
Dow Corning Ltd. **Barry, UK** **1997-2001**	Recruited as a commissioning engineer for the companies expansion of their basic silicones manufacturing plant. Commissioned the silicones distillation train, with no lost time accidents and started up and on-specification within 24 hours of feeds on. Managed commisioning team for plant producting novel silicones, overcoming a number of post-commissioning issues, increasing on line time from 15% to 65%. Appointed Team Leader for the site services and utilities area with responsibility for all utilities and waste treatment proceses, including coordination with off-site CHP provider. Awarded company prize for reduction in discharges from the plant to river and reduction

	in waste disposed of off-site, both as a result of process improvements.
Great Lakes Fine Chemicals Ltd, Widnes, UK **1989-1997**	As Process Engineering Manager for a major hazard batch fines chemicals manufacturing plant, was responsible for all process engineering aspects of revenue and capital projects on site, managing a team of chemical and plant engineers to ensure all works were performed to relevant in-house and national codes. Responsible for development and implementation of capital plan, including participation in the companies product introduction stage and gate process. Coordinated company response to major change in UK environmental legislation, ensuring all environmental permits were in place in a timely manner, and were structured so that most new products could be introduced without the need for re-permitting.
Courtaulds plc, Coventry, UK Grimsby, UK Calais, France **1984-1989**	As Research Team Leader, responsible for team of engineers involved in all process engineering aspects of R&D and plant support for Courtaulds' acrylic fibres manufacturing sites in UK, France and Spain. Designed and commissioned novel process for purification of aqueous solvents using large-scale chromatography. Responsible for development and technology transfer of novel method of acrylic polymer production.

AMECFW Engineering/Construction Management Scope - Overview

- Fiberight to provide engineering to FEL-3/4 level
  - Utilizing Fiberight resources
  - Utilizing specialty component/vendor engineering

- AMECFW to assist in completion of FEL-4 level engineering
  - Provide third party review of Fiberight engineering
  - Provide system integration engineering
  - Provide full electrical system design

- Fiberight to Select a General Contractor (GC)

- Plant to be supplied and erected through multiple separate contracts/sub-contracts
  - Site work and underground utilities
  - Building foundations
  - Building supply and erect
  - Concrete Package
  - Pre-fabricated piping and modular pipe racks
  - Equipment setting
  - Structural steel supply and erect
  - Electrical and instrumentation contractor
  - Free-standing equipment packages (Supply & Erect)
    - Materials Recovery Facility (MRF)
    - Biomass Boiler

- AMECFW to provide Construction Management Service (CM)
  - On-site construction management team acting as the owner's agent
  - Collective/integrated team to complete the project on time and within budget
    - Owner provided engineering
    - AMECFW engineering
    - AMECFW CM
    - Equipment suppliers engineering and construction
    - Major Contractors and Subcontractors

AMECFW Construction Management Scope of Services

- CM services to be provided by AMECFW
  - Safety
    - On-site safety representative to oversee site-wide safety program
    - Program developed by incorporating all party's safety requirements
      - Fiberight, CM and GC as the primary parties on site
    - Take lead in development of the site program
    - Responsibility for program compliance
      - Daily monitoring and weekly site safety meetings
  - Contract Scoping
    - Fiberight has arrangements with various equipment suppliers/contractors
    - CM will assist owner with preparation of all contract packages
    - Review bids for scope adherence and competitiveness
    - Assist with procurement process for construction packages
  - Preparation of Contract Packages
    - CM will ensure proper coordination/interface is obtained in all packages
    - CM will assist with creation of construction package RFP documents
      - To ensure all site roles are defined and accounted in scopes of work
    - Review Proposals/Bids in conjunction with Fiberight
      - Ensure that the proposed scope has been completely covered
      - Ensure complete installation with proper interfaces between vendors
    - Procurement of contract packages
      - CM will assist w/procurement of the various construction and material vendor packages.
      - The procurement activities will vary depending on equipment/service
  - Project Schedule
    - Preliminary project schedule developed by Fiberight
    - Incorporate detailed engineering, procurement and construction
    - Review current schedule/develop Level 2 schedule w/Fiberight
      - Develop Level 3 schedule required for project construction
      - Monitor actual on-site construction and report progress
      - Develop Level 4 schedule with GC/Contractors/Subcontractors
      - Develop work around schedules/corrective plans as required
  - Cost control
    - CM will review the current budget for the project
    - CM will assist the owner with development of a baseline project budget
    - Agreed budget establishes basis of cost control to be monitored by the CM
    - Deviations to the budget will be reported to the owner
    - For budget deviations CM will provide
      - Detailed explanations
      - Optional mitigation plans

- Risk
  - Develop detailed risk identification/mitigation procedures with Fiberight
  - CM to establish risk procedure with Fiberight
    - To ensure all risks to the project are accounted for
    - Proper plans are in place to minimize project cost/schedule risk
- Quality Assurance
  - CM will work with Fiberight to establish the site quality plan for the project
  - Plan will consist of
    - Control measures required for each contractor to complete their work
    - Procedures for quality assurance performed by the CM
    - Hold points, notifications, training and test documents
    - O&M manuals for each portion of the project
- Contractor/Site Monitoring
  - CM will be responsible for oversight of the day to day activities on the site
  - In addition to any listed above, the day to day site responsibilities include
    - Daily reporting
      - Site conditions
      - Contractor activities and earned value progress
      - Issues – identified and or resolved
      - Safety incidents
    - Contractor coordination
      - Daily Planning
      - Weekly planning
    - Site meetings with onsite contractors
      - Safety meetings
      - Coordination meetings
      - Schedule meetings (weekly and monthly)
      - Monthly owner's update
    - Reports preparation
      - Monthly owner reports
      - Safety incident reports
      - Quality reports
    - Process pay requests
      - Make approval recommendation for all contractor payments
    - Change order management
      - Identify
      - Process
      - Estimate
      - Negotiate
      - Recommend action to owner

Construction Management Scope of Services Description

AMECFW proposes to provide a full-time on-site project team to assist Fiberight in the construction of the new plant. Many of the listed activities are already underway or have been completed. The final Scope of Services will be provided beginning two weeks after a formal notice to proceed and be maintained up to plant commissioning.

The following is intended to clarify AMECFWs activities during the various phases:

Pre-Construction Phase

- Site Specific Safety Plan - Develop a site specific safety plan that incorporates the safety rules of Fiberight, AMEC and GC.
    - The plan will include the following, as a minimum, and will be included in each contractors contract to ensure acceptance and willingness to comply:
        - Initial on-boarding requirements (new hire orientation)
        - Ongoing safety training and documentation
        - Minimum PPE requirements
        - Drug testing criteria
        - Pre-task safety planning
        - JSA – Job Safety Analysis for each work activity
        - Daily safety tool box talks
        - Weekly all hands safety meeting
        - Safety Committee
        - Site inspections and follow-up
        - Monthly management reporting criteria including site goals/monitoring
- Construction Management Execution Plan – AMEC will prepare a Construction Management Execution Plan which will support the overall Project Management Plan for the project. This plan will provide a project specific statement of work and work plan defining how the CM group will be organized, perform and execute the CM responsibilities for the project.
- Schedule – AMEC proposes taking the lead in developing a master project schedule. Working with Fiberight's current schedule, engineers, current selected vendors, and contractors, the AMECFW CM team will fully develop level 2 and level 3 detailed schedules for use during the construction of the project. The baseline schedule will be developed in Primavera which is fully compatible with Project. AMECFW will regularly provide the maintained schedule data to Fiberight in Project format for integration with their NavisWorks tool. The baseline project schedule must be agreed by all parties. Once agreed and prior to AMECFW CM mobilizing to the site, the schedule will be updated every other week via conference call with the engineers and active site contractors.

- Contractor Pre-qualification – Typically AMEC would identify Contractors for selection, solicit pertinent information from potential contractors, review information received and make recommendations of suitable contractors. For this project Fiberight will perform those duties to pre-qualify new contractors not yet selected.
- Procurement Strategies – Review the current procurement strategies and contracted scopes for gaps and develop and implement strategies for those gaps.
- Constructability Reviews – Currently AMECFW has been requested to assist in constructability reviews and will do so from their Minneapolis office. Once the CM services are contracted, the AMECFW CM team will be included in future constructability reviews.
- Value Engineering and Constructability Analysis – Although many of the activities listed herein may be underway or completed, the AMECFW construction personnel will review the current engineering to provide additional input (as necessary) into:
    - Economical materials and methods of construction.
    - Sequences of construction to enable the efficient installation of process equipment,
    - The best approach to engineering and construction packages to meet the schedule of the project.
    - Work packages to meet the labor and contractor availability of the area.
    - A plan for site utilization including temporary roads, office areas, parking areas and lay-down areas.
- Bid Package Review of Contractor Proposals – CM team will evaluate the contractor's proposals for the respective scope of work packages to ensure that the cost of the work is within the project budget. Identify variances so that corrective action can be taken.
- Baseline Estimate – A high level base line estimate has been developed between Fiberight and AMEC. A more detailed base line estimate (project specific) will need to be developed for financial tracking of the project and comparative analysis of bids.
- Quality Assurance Plan – Develop a QA plan specific to the project. AMEC will work with Fiberight and the engineering team to develop a QA and QC plan that will meet the requirements for inspection, testing and reporting for the project. This plan will be in compliance with Fiberight and AMEC procedures, instructions, and forms and will identify site specific requirements.
    - The project quality program will clearly establish the authority and responsibility of those responsible for the QA Program. Persons performing quality functions will have sufficient and well-defined responsibility and authority to enforce quality requirements; to identify, initiate, recommend, and provide solutions to quality problems; and to verify the effectiveness of the solutions.

- As a minimum, the site quality plan for the project includes implementing procedures, instructions, and check-lists (which may include but not be limited to):
    - Test & Inspections
    - Quality Audits
    - Equipment Preservation
    - Preventative Maintenance
    - Nondestructive Examination Control
    - Control of Special Process including: Welding, NDE Processes and PWHT.
    - Non-Conformance Control
    - Material Control
    - Document Control and Record Retention

- Bid Documents – If requested, AMECFW will assist Fiberight with the preparation of the various documents associated with final construction bid packages for the project. Documents may include; the Invitation to Bid Letters, the Form of Proposal, the General Conditions, Supplementary Conditions, bid form, pricing Instructions and specific Scope of Work describing in detail the project requirements for construction.
    - AMECFW will identify specific site expectations for all contractors relative to the expected behaviors on site and the relationship between contractors and CM representatives. This will be incorporated in all contracts.
- Bid Document Management – AMECFW can provide assistance to the owner with bid document management if requested.
- Pre-Bid Conferences – by Fiberight.
- Addenda - Review all addenda during the bid phase and make recommendation for inclusion in the bid documents.
- Solicitation – by Fiberight.
- Bid Evaluation - Evaluate the bids for completeness, full responsiveness, and price, including alternate prices and unit prices. Make a recommendation as to the completeness of the contractor's proposal and the necessary contracting strategy.
- Construction Contract Negotiations – Assist Fiberight with contract negotiations to ensure completeness of the contract relative to the desired overall project criteria.
- Construction Contracts – All contracts will be prepared and executed by Fiberight.

Construction Phase

- Safety – AMECFW to provide a full time safety person on site to ensure adherence to the site specific safety program. Conduct a weekly site safety meeting for all personnel on site.
    - Rigging and Heavy Lifts – Any contractor performing rigging or heavy lifting will be responsible for planning and performing heavy lifts according to their plan and applicable site safety criteria. The AMECFW CM Team will monitor the contractor's compliance with its plans.
    - AMECFW CM will have authority to remove contractor personnel from the site for failure to comply with the site safety rules and policies.
- Project Staff - Maintain a competent staff at the construction project site and establishing and implementing an on-site organization and lines of authority so that the work on the project may be accomplished timely and efficiently. The project staff will be as indicated on the attached Organization Chart and the accompanying Staffing Plan.
- Construction Schedule - Monitor, update, coordinate the contractors and take action to achieve adherence with the schedule. The project schedule will be updated weekly by the AMECFW CM team and supplied monthly to Fiberight as part of the monthly project update. The monthly report will include reconciliation to all changes that occur within the given month.
- Coordination Meetings - Conduct routine progress meetings with the contractors to sequence their activities, avoid interferences, determine progress and take corrective action. Meetings will typically include a plan of the day, weekly contractor, and monthly owner's meeting.
- Progress Reporting - Implement, maintain and prepare regular progress reports concerning costs, schedules, quantities, progress, and changes/extra Work orders relative to the construction project. Submit to Fiberight a monthly report containing schedule reviews, change order summaries, potential change orders, potential claims, critical RFI's, digital photographs of the project progress, owner activities and efforts on project schedule, and a recovery plan if the project is behind schedule.
- Materials Coordination and Delivery – Monitor the fabrication, delivery and receiving of key material components to ensure an uninterrupted flow of the work. For owner furnished material ordered directly, assist the owner with monitoring and expediting the fabrication and delivery.
- Field Coordination – Using qualified construction coordinators / inspectors, coordinate work being performed by the contractors. Coordinate the work so that the project can be delivered on schedule. Document the performance of the contractors.
- Labor Relations and Agreement – The AMECFW CM Team will make every effort to maintain a harmonious work environment. It is recommended that all contracts include clauses to ensure a harmonious work site. AMECFW will report any incidence or issue to Fiberight for resolution.

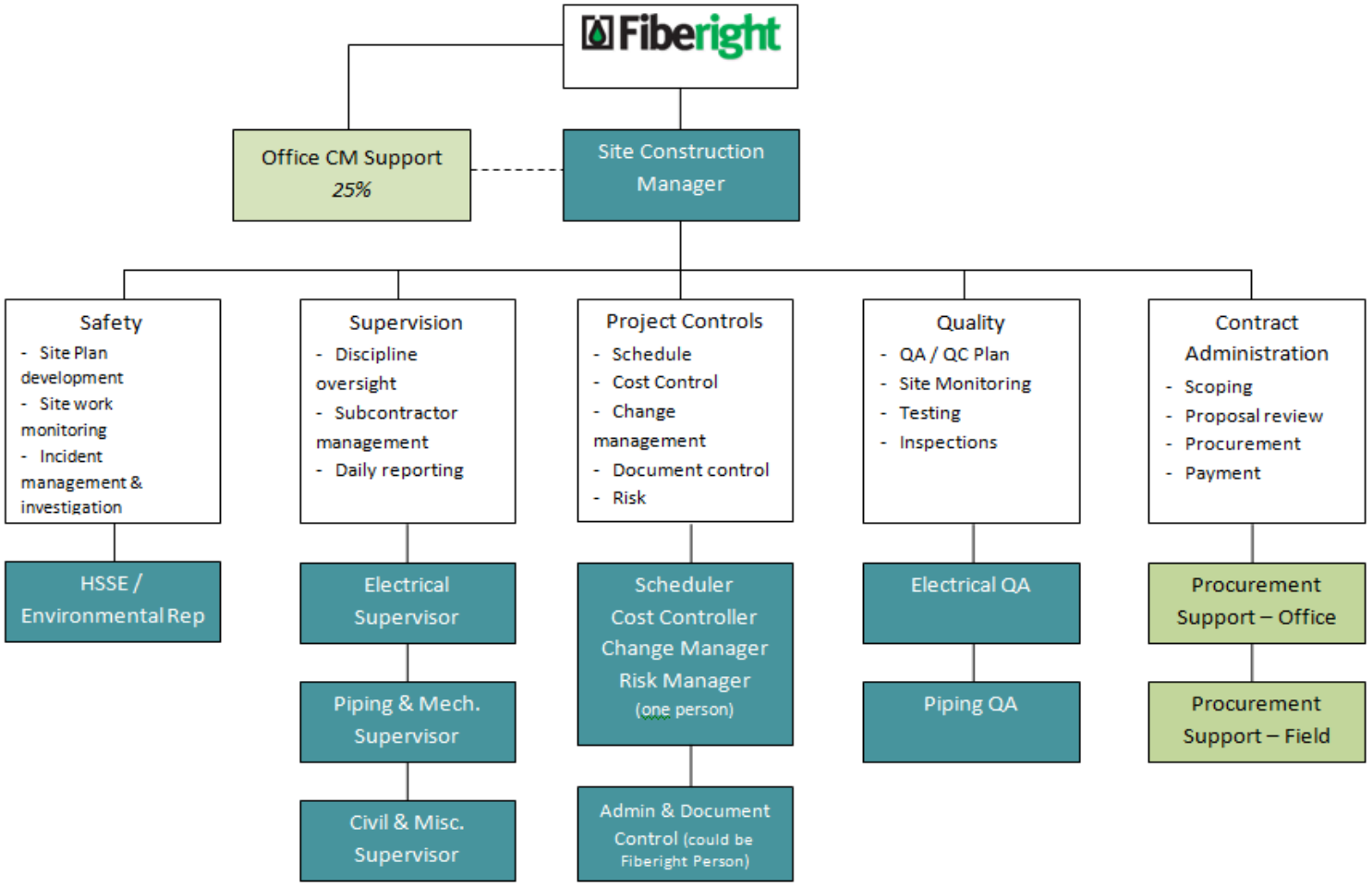
- Equipment Delivery and Installation - Coordinate equipment location and configurations with the base building components. Monitor fabrications and delivery schedules for owner provided equipment. If requested, AMECFW will assist with expediting activities, receiving, and inspections. The proposed staffing plan does not include expediting, receiving and inspections.
- Document Control – Implement a system for controlling and safeguarding all of the project documentation. Establish a project file system; process all official project correspondence; receive, track and expedite all materials submittals; maintain permanent records for transfer to Fiberight upon completion.
- Contractor Compliance with Contract Documents - Review the Contract Documents to ensure that each contractor is in general compliance with the contract documents. AMEFW CM team will be observing on a daily basis, the work, checking for use of proper materials and acceptable workmanship. Any deviation from the contract documents shall be immediately brought to the attention of the contractors and corrected.
- Utility and Services Coordination - Assist owner with the Utility Companies on the timely provision of utilities, roads and services being provided by third parties.
- Regulatory Compliance – AMECFW assumes that Fiberight has responsibility to obtain and provide to AMECFW any permit requirements for the project. Once the permits are in hand, AMECFW will monitor and coordinate compliance of all parties with permitting requirements.
- Contract Revisions - Coordinate, review and administer all necessary revisions to the Contract Drawings during construction, including the issuance of bulletins. Reviewing contractor Requests for Information (RFI) and/or Field Change Requests (FCR) and ensure that they are resolved in a timely manner.
- Scope of Work Clarifications / Change Control – Implement a system of RFI's and FCR's to document changes to the Contractors scope of work and coordinate with cost control to evaluate their impact on the other contracts and on the project budget and schedule, make recommendations to Fiberight accordingly, and ensure that change orders are processed in a timely manner.
- Quality – During construction the site specific quality plan will be carried out by the AMECFW CM team.
- Dispute Resolution - Review and evaluate all claims and disputes. Make recommendations regarding legitimacy of claims and negotiating strategy so as to minimize costs to the project.
- Construction Liaison - Serving as the liaison between Fiberight, contractors, outside public agencies, and the public to promote cooperation and assist in resolving conflicts.
- Contract Close-Out - Conduct construction contract close-out procedures including punch-list and warranty inspections. Collect all close-out documents (i.e., As-Built Drawings, Warranties, O&M Manuals, etc.) and turn them over to Fiberight.

- Project Controls System and Procedures
    - Using established AMECFW processes and procedures, implement a system of controls for progress reporting, contractor payments, cost reporting, and project documents. As part of the Construction Management Plan a section will be dedicated to Project Controls.
    - Cost control monitored continually with formal reporting and reconciliation of the actual costs to the agreed upon baseline budget. Costs will be consolidated with all contracts and along with comparison to baseline budget will be forecasted to project completion based on current contractor productivity and known risk management.
    - Change order management to include estimates, scope definition, and negotiation.
    - Invoice approval for all construction invoices submitted.
    - Risk documenting and tracking – All risks will be addressed from the beginning of the project through substantial completion. A risk register will be maintained with dedicated emphasis on mitigation strategies to minimize financial and schedule impacts.

Staffing Notes

- The following staffing is identified to cover the roles and responsibilities noted above.

Organization Chart



Notes:

1. Items in Blue are full time personnel for a defined window of time.
2. Items in Green are part time support.
3. Items in White are roles.