Redfern Properties selected Cordjia to provide Owner’s Representation services for a proposed apartment building in Portland, Maine. The eight-story building would consist of 132 apartment units (a mix of studio, one-bedroom, and two-bedroom) with Joe’s Super Variety on the ground floor. Cordjia is assisting Redfern Properties with through the pre-design, design, bidding, construction, and closeout phases.

New Shelter and Adoption Center
Animal Refuge League of Greater Portland, Westbrook, Maine

The Animal Refuge League of Greater Portland (“ARLGP”) selected Cordjia to provide comprehensive Owner’s Representative services for the construction of a new 25,000 square foot new shelter and adoption center in Westbrook, Maine. This new facility will house animal operations including kennels, lab space, clinic spaces, and other support, staffing and ancillary spaces that are necessary to the operations of the shelter. Cordjia is working directly with the Executive Director, the Director of Operations, and the Development Director of the ARLGP, in conjunction with the Building Committee. Further, Cordjia is assisting the ARLGP with wayfinding/signage and donor recognition; furnishings, fixtures, and equipment; Efficiency Maine opportunities, and community, donor, and public relations.

QZAB and Energy Projects
Regional School Unit No. 74, North Anson, Maine

Regional School Unit No. 74 (“RSU 74”) was awarded Qualified Zone Academy Bonds (“QZAB”) funding for the Carrabec High School to upgrade building systems and also entered into a separate Guaranteed Energy Savings Performance Contract to be performed concurrently at all four schools in the system. These projects, along with a separate data cabling project at Carrabec High School, needed to be coordinated and integrated during the same period. RSU 74 selected Cordjia to act as their Owner’s Representative through the design, procurement, and construction phases of these projects which totaled approximately $4.73 million.
New Community Auditorium  
York School Department, York, Maine

Through a Request for Qualifications process, the York School Department (“YSD”) selected Cordjia to provide Owner’s Representative services in support of their new Community Auditorium at the York High School. The Project consist of the new construction of an auditorium consisting of 750 seats, auditorium sound, lighting, and dimming systems; A/V projection system with a large screen, a new multi-purpose room; and a new lobby/hallway. Cordjia will be assisting the YSD through the design, bidding, construction, and closeout phases.

Athletic Complex Renovation  
RSU #57, Waterboro, Maine

RSU #57 has selected Cordjia to represent their interests as an Owner’s Representative in support of its athletic complex renovation. The Project consists of a new artificial turf field, track, field lighting, new bleachers, and site work. Cordjia is providing support to define the scope and will continue to assist through the design, bidding, construction, and closeout phases.

Facilities Management  
Pen Bay Healthcare, Rockport, Maine

Pen Bay Healthcare (“Pen Bay”) selected Cordjia to provide facilities management services for the Hospital as well as over 30 additional properties they own or lease. The total square footprint of Pen Bay is over 475,000 square feet. Cordjia provided planning, design, and permitting services; project and cost management; facilities operations, maintenance, and repair; capital asset management; and facilities support services. Additional benefits of Cordjia include a reduced fee schedule, single point of contact/responsibility, direct representation of only Pen Bay’s interests, cost effective solutions, comprehensive and strategic advice, and a broad range of experience in architecture, engineering, project, and cost management.
Saco Island LP retained Cordjia to lead the strategic planning, pre-design, design, regulatory permitting and approvals, procurement of multiple bid packages, and construction administration services for the 14.4-acre Island Point Campus development located adjacent to the Saco River. The $100 million development consisted of redeveloping several former mill buildings totaling 370,000 square feet into a mixed-use commercial, retail, and residential campus, and creating a new residential housing and marina development on the Saco River. The mill buildings, which date back to 1807, are being renovated to accommodate Class “A” commercial office space, residential condominiums, residential townhomes, and a marina.

Island Point Campus
Saco Island LP, Saco, Maine

Camden National Bank retained Cordjia to lead the strategic planning, pre-design, design, permitting and approvals, procurement of multiple bid packages, and construction administration services for a major renovation of its newly acquired retail branch operations in Rockland, Maine, a three-story, 19,000 square foot masonry building that dates back to 1853. The first floor was renovated for Camden National Bank’s retail branch operations and the second and third floors were designed to accommodate either commercial offices or residences. The project also consisted of the construction of an exterior remote teller canopy to service four remote tellers and an ATM for vehicular traffic using a vacuum tube distribution system.

Spear Block Renovations
Camden National Bank, Rockland, Maine
Maine Military Authority ("MMA") retained Cordjia to provide an array of services for upgrades at two of their buildings, each approximately 108,500 square feet. Systems upgraded included the electrical distribution, lighting, fire alarm, fire suppression, and liquid petroleum gas distribution. Cordjia performed an evaluation of the existing and proposed systems; identified value engineering alternatives; and provided feasibility reports and cost estimates. After MMA determined which options best fit their goals, Cordjia was engaged to provide design and construction documents; demolition specifications; procurement; and construction administration services. Another project undertaken was structural improvements and renovations. Cordjia performed a total building structural analysis and, subsequently, provided MMA with design drawings, specifications, and procurement services for the project. Other services Cordjia provided MMA with included reviewing code requirements, developing architectural drawings and specifications; asbestos and lead abatement procurement; reviewing and overseeing building automation specifications; plumbing upgrades; roof system review and recommendations; ventilation systems for down draft table room and compressor room; and reviewing submissions to Efficiency Maine. Cordjia also performed construction administration tasks that included oversight of implementation of the master plan in both Building Nos. 7220 and 7230. A project manager was onsite Monday through Friday for the duration of the project. In an effort to maintain scope, budget, schedule, and quality, a master development schedule was maintained to coordinate all contracting trades throughout the construction. The work performed was in support of the implementation of the Master Plan Cordjia completed for MMA in 2010.

Newcastle Publick House
Newcastle Publick House, LLC, Newcastle, Maine

Newcastle Publick House, LLC asked Cordjia to carry out a major renovation. The project consisted of renovating a four-story, 9,600 square foot historic masonry building dating back to 1825. The first floor includes a restaurant and pub, the second floor has commercial offices, and the third and fourth floors include a high-end residence. The project also included the creation of an exterior dining area, as well as extensive site infrastructure to support the mixed-use development. Cordjia provided strategic planning, pre-design, design, historical permitting and approvals, procurement of multiple bid packages, and construction administration services.
Hallowell House Renovations
Hallowell House, LLC, Hallowell, Maine

Hallowell House, LLC retained Cordjia to undertake a major renovation of two existing historic buildings totaling 30,000 square feet and the construction of a new 5,000 square foot building for the Maine Public Utilities Commission. The development program included office space, public hearing rooms, and public conference facilities. Cordjia provided strategic planning, pre-design, design, historical permitting and approvals, procurement of multiple bid packages, and construction administration services.

Unit Training Equipment Site No. 1
United States Army National Guard, Auburn, Maine

The United States Army National Guard, through the Directorate of Facilities Engineering, retained Cordjia to lead the strategic planning, pre-design, design, permitting and approvals, procurement of multiple bid packages, and construction administration services for a new Unit Training Equipment Site in Auburn, Maine. Cordjia developed design-build documents, inclusive of special planning requirements, utilizing the Army’s Design Guide Criteria (DG-415-2) and Anti-Terrorist Force Protection Standards for competitive bid to contractors.

Ingersoll Arena Repurposing
City of Auburn, Auburn, Maine

The City of Auburn was interested in determining the highest and best use in connection with repurposing the Ingersoll Arena. Cordjia was selected to provide a repurposing study consisting of conducting a program development meeting with the City to refine the program and project scope; perform a high-level analysis to determine the highest and best use of the building considering the current needs of the surrounding community; review existing building and infrastructure to determine what improvements will be necessary; conduct a life safety and building code review to determine if there are areas that would require further improvements to achieve current code compliance; prepare a conceptual layout plan to verify that the desired amenities of the highest and best use fit within the existing space; and develop opinions of probable cost for construction and renovations options. The City of Auburn chose to proceed with repurposing the Arena as a multipurpose turf facility. Cordjia successfully delivered the new design for the facility inclusive of architectural, structural, HVAC, electrical, lighting, fire alarm, plumbing, and fire suppression. Cordjia also provided construction administration services for the duration of the project.
Wayfarer Marine retained Cordjia to lead the strategic planning, pre-design, design, permitting and approvals, procurement of multiple bid packages, and construction administration services for two new repair/refit buildings for boatyard operations. The new buildings consisted of a 14,720 square foot building in the lower boatyard and a new 8,400 square foot building in the Lower Bean Yard as well as extensive site infrastructure to support the two proposed buildings. The new buildings will provide Wayfarer Marine with state-of-the-art facilities to include large work bays for boat refit and repair; a machine shop; fabrication shop; carpentry shop; marine supply room; and administrative office space.

Building Improvements
YWCA of Central Maine, Lewiston, Maine

Through a Request for Proposal and interview process, the YWCA of Central Maine selected Cordjia to provide architectural and engineering services related to building improvements at their facility in Lewiston. Improvements under consideration are general building upgrades including corrective roofing measures for known roof issues, updating the locker room area, developing an expanded spectator viewing area for the pool, pool upgrades, and converting the basement level into a child care facility. Cordjia performed a thorough evaluation of the building’s systems, building operations, building envelope, and existing operational programs within the facility; evaluated the condition of building components; provided recommendations for other building improvements including energy savings measures; and performed a property condition assessment. Cordjia then created a logical phasing plan for undertaking improvements over a multi-year construction period (taking into consideration ongoing programming within the building) and produced a concept design/rendering for fundraising purposes.

Border Trust Business Center
Priority Group, LLC, Topsham, Maine

Priority Group, LLC retained Cordjia to provide owner representative services for the new Border Trust Business Center located in Topsham, Maine. The project consisted of developing a 10,000 square foot business center that includes a financial institution, business center offices, and conference facility. The project also consisted of constructing an exterior remote teller and ATM for vehicular traffic using a vacuum tube distribution system. Cordjia provided strategic planning, pre-design, design, procurement of multiple bid packages, cost management, and construction administration services.
17 Sea Street, LLC retained Cordjia to lead the strategic planning, pre-design, design, permitting and approvals, procurement of multiple bid packages, cost management, and construction administration services for two classic shingle style buildings at the head of Camden’s Inner Harbor. The Harbor Head Marina and Residences development consists of razing two existing structures that historically have been used for storage, boat service and repair, and other marine-related uses. The new buildings, which are partially constructed over water, will provide commercial marine office space on the first floor and luxury residences on the second floor.

Steamboat Landing, LLC was interested in developing a residential subdivision which will be located 275 feet from the water’s edge in Camden’s outer harbor. Cordjia provided strategic planning, pre-design, design, permitting and approvals, and cost management for the residential subdivision.

S. Flynn retained Cordjia to provide an assessment, design, procurement, and on-site construction management of a major renovation in connection with a 1907 John Calvin Stevens residential house. Cordjia delivered a detailed property condition assessment; historical permitting and approvals; coordinated construction documents; procurement services; and is currently providing on-site construction management. The Flynns asked Cordjia to deliver the project utilizing a multi-prime design-bid-build process in which they contract directly with multiple contractors or trades to complete the project. This optimized the Flynn’s control over the trades and reduces construction cost by eliminating the general contractor fee and the majority of the general conditions costs.
Building No. 8713 Reroofing Project  
Maine Military Authority, Limestone, Maine

The Maine Military Authority selected Cordjia to provide a feasibility study, design, procurement, and construction administration for a reroofing project on Building No. 8713. The original contract was for a roof section approximately 11,700 square feet, however, during our site visit we identified another area of approximately 5,000 square feet nearby, in similar condition. The Maine Military Authority subsequently asked Cordjia to perform the same services concurrently for the additional section of roof. After the completion of the initial reroofing project, Cordjia was selected for a five year roofing contract through a Request for Qualifications. A reroofing project of approximately 70,000 square feet is currently being phased, with the first 17,200 square foot phase completed and additional phases to be completed in the future. The feasibility studies included onsite investigations of existing conditions of the roof for the purpose of identifying options and alternatives for roofing system applications. Cordjia also evaluated the current structural, mechanical, electrical, plumbing, and potential hazardous material issues associated with the existing and proposed roof system alternates. Cordjia provided complete design for the new roof systems, completed the bid documents, performed procurement services, and performed construction administration services for the new roof systems.

Roofing Replacement Projects  
Maine Army National Guard, State of Maine

The Maine Army National Guard retained Cordjia to provide a roofing assessment study for seven buildings, and a subsequent roofing design for five buildings. Our scope included an on-site investigation of the existing condition of the roof systems for the purpose of identifying options and alternatives for roofing system applications. We also evaluated the current structural, mechanical, electrical, plumbing, and potential hazardous material issues associated with the existing and proposed roof system alternates. Following our assessment, Cordjia provided the design for the new roof system for five buildings, completed the bid documents, provided procurement services, and provided construction administration for the five new roof systems. Cordjia also brought any code related violations to the Owner’s attention.

Maintenance Garage Roof Replacement  
Maine Department of Marine Resources, Rockland, Maine

The Maine Department of Marine Resources (“MDMR”) selected Cordjia to perform site investigations to include destructive testing for data collection and evaluation; perform architectural and structural analysis; develop options for consideration, and make findings and considerations in connection with the approximately 6,840 square foot existing roofing system and structural system pursuant to current code requirements of the Maintenance Garage in Rockland, Maine. Cordjia subsequently provide the MDMR with design and construction administration services.
Lewiston Armory Roofing Repair  
**Maine Army National Guard, Lewiston, Maine**

On behalf of the Maine Army National Guard (“MEARNG”), the Directorate of Facilities, selected Cordjia to provide design development, construction documents, and supporting procurement services for a repair of the Lewiston Armory roof. Cordjia’s scope of work includes, but is not limited to, providing plans showing existing and proposed conditions; identifying local, state, and federal codes; and providing a final cost estimate. Cordjia will also prepare construction drawings and technical specifications sections pursuant to current code and MEARNG design requirements for civil, architectural, structural, and asbestos-containing materials abatement plan.

Norway Armory Roofing Repair  
**Maine Army National Guard, Norway, Maine**

The Directorate of Facilities Engineering, on behalf of the Maine Army National Guard (“MEARNG”), selected Cordjia to perform a feasibility study on a 6,200 square foot portion of roof at the Norway Armory. The scope of work included site investigations, destructive testing, and field analysis as follows: visit the facility to evaluate the existing conditions of the subject roofing system and its current useful life expectancy; investigate existing conditions for the purpose of identifying options and alternatives for roof system applications; evaluate current structural, mechanical, electrical, and/or plumbing issues associated with the existing or proposed roof system and alternates; and investigate the requirements for permitting and compliance with federal, state, and/or local entities. Upon completion of the aforementioned tasks, Cordjia prepared a report of findings, recommendations, alternatives, and opinion of probable cost for consideration. Cordjia was subsequently asked to provide a design and construction administration for the roof repair.

Rooftop HVAC Repairs and Building Automation System  
**National Fulfillment Center, Midwest USA**

After performing a Property Condition Assessment for a National Fulfillment Center in the Midwest, Cordjia was asked to provide additional services in connection with the rooftop HVAC repairs (45 units) and new building automation system. Cordjia prepared the specifications for the work, created and administered the contracts, and reconciled and negotiated the bid documents which resulted in savings of approximately $13,000 by bundling the scopes of work. Cordjia is also provided Owner’s Representative services inclusive of reviewing the submittals, providing status reports, reviewing work-in-place for conformance of the specifications, providing an opinion of the quality or work and reporting of the resolutions of defects, reviewing and commenting on the status of work in connection with the construction schedule, reviewing payment requisition submissions for disbursements of funds, and performing project closeout activities.
Roof Repairs
Island Institute, Rockland, Maine

The Island Institute selected Cordjia to assist with correcting roof repairs in connection with existing roof leaks. The roof was leaking under the pressure treated supports for four condensing units located on the roof. Cordjia developed performance based specifications, prequalified contractors, competitively bid the work, performed contract negotiations, and provide construction administration.

Natural Gas Boiler Conversions
City of Auburn, Auburn, Maine

The City of Auburn selected Cordjia to perform a retro-commissioning study and natural gas conversion feasibility study for Central Station, Hasty Community Center, and Public Works Highway Garage. The recommendations identified will reduce the City of Auburn’s annual energy costs by 51%, or $90,520 annually, with a payback of 3.7 years. Cordjia then provided design and procurement services for the three buildings evaluated as well as Engine No. 2 Fire Station.

Natural Gas Burner Conversions
Maine School Administration District #11, Gardiner, Maine

Maine School Administration District #11 (“MSAD #11”) wished to explore alternative heating fuels for nine buildings in their district and asked Cordjia to perform an analysis. From this initial analysis, Cordjia identified six buildings for closer evaluation and subsequently performed a feasibility analysis for replacing the existing No. 2 fuel oil burners with propane burners in anticipation of being connected to the natural gas pipeline. As a result of the propane burner feasibility study, MSAD #11 chose three buildings to convert the existing No. 2 fuel oil burners to natural gas burners (rather than propane, as gas became available earlier than expected). Cordjia provided procurement and construction administration services for the project which is predicted to reduce MSAD #11’s fuel costs by 36%, or $104,860 annually, with a payback of 9 months.
After performing a successful Retro-Commissioning study at the Kittery Visitor Information Center, the Maine Department of Transportation asked Cordjia to further evaluate the heating system which was identified as having reached the end of its useful service life. Cordjia evaluated the existing heating system and controls and made recommendations consisting of heating system options with opinions of probable costs to replace the existing boiler. The project will be completed in four phases inclusive of the feasibility study, performance based specification development, procurement support, and construction administration.

Maine School Administration District #74 (“MSAD #74) retained Cordjia, in conjunction with Maine Energy Systems and ABM Mechanical, to install eight ÖkoFen AutoPellet boilers in the four schools of MSAD #74. The installation of the pellet boilers will reduce annual energy costs by 47%, or $87,680 annually, with a payback of 4.4 years. Cordjia provided design oversight for the new boiler systems which include automatic tube cleaning, automatic ash removal, fire suppression, storage, electrical control panel to monitor and control biomass components, and vacuum transport system for delivery of wood pellets to boilers. Cordjia is providing engineering, inspections, validation, and commissioning services in connection with the work. Additionally, project management services were performed for the duration of the project which included contract coordination, schedule management, substitution management, progress reporting, submittal management, change order management, and payment requisition management. Upon completion of the installation, owner training and operation and maintenance manuals with one year warranties were delivered to MSAD #74.

Through the Directorate of Facilities Engineering, the Maine Army National Guard (“MEARNG”) selected Cordjia to perform a feasibility study in connection with the repair/upgrade of the existing No. 2 fuel oil fired heating system at Building No. 260 with a natural gas fired system. The new natural gas system will operate pursuant to the best practices which conform to the applicable codes and regulations while achieving energy savings. Cordjia will subsequently provide design drawings and specifications for the option MEARNG chooses.
Brewer Armory Heating System Changeover  
Maine Army National Guard, Brewer, Maine

As a result of the Retro-Commissioning study performed at the Brewer Armory, the Maine Army National Guard, through the Directorate of Facilities Engineering, selected Cordjia to provide site studies, design and procurement, and construction administration services for a heating system changeover. The implementation consisted of the installation of redundant natural gas fired boilers, each capable of 60% of the building heat loss load to support a hydronic heating distribution system. Building controls, new hydronic piping and insulation, a new unit heater, and new chimney lining were also installed as part of the changeover. The conversion emphasized the utilization of as much of the existing system as possible.

Norway Armory Heating System Changeover  
Maine Army National Guard, Norway, Maine

The Directorate of Facilities Engineering, on behalf of the Maine Army National Guard, selected Cordjia to further investigate a heating system changeover at the Norway Armory as a result of the Retro-Commissioning study. The existing HB Smith steam boiler was installed in the 1970s and was operating below optimal efficiency. A heating changeover required upgrading heating distribution equipment, repiping of supply and return headers, and replacing the boiler. Cordjia evaluated the existing boiler and determined it was oversized and should be replaced with a single boiler or two smaller boilers. Cordjia performed design and procurement for the replacement of the boiler, replacement of steam traps, replacement of missing pipe and tank insulation, and upgrade of existing zone temperature controls as well as construction administration.

Building No. 254 Interior Painting  
Maine Army National Guard, Bangor, Maine

On behalf of the Maine Army National Guard, the Directorate of Facilities Engineering retained Cordjia to provide design and procurement services for an interior painting project at Building No. 254 in Bangor. Cordjia performed site visits to review field conditions and determine locations of all necessary markings and signage. Designs were developed for the demolition of the existing wood and wire as well as a covering to be installed over the existing wall insulation. Cordjia prepared plans and performance based specifications for bidding, prepared 35% and 100% review set for Owner review, and provided stamped construction documents that incorporated review comments. All contractor Requests for Information were replied to and submittals reviewed.
Mattson. selected Cordjia to perform an investigation and construction administration for repairs and restoration to the exterior façade of a downtown Portland building. The building was constructed in 1912 and is on the National Register of Historical Places. The front portion, which is the subject of our assessment, is contains approximately 43,000 gross square feet of ground floor retail, office, and support spaces over six stories and a basement.

Downtown Building Exterior Façade Improvements  
Mattson., Portland, Maine

As the leading provider of internet-based business services for physician practices, athenahealth, Inc. retained Cordjia to undertake a Retro-Commissioning study to review ways to reduce their energy consumption. One of the recommendations was to install variable frequency drives on two closed loop systems that currently support the heating and cooling plan for 132,000 square feet of Class A office space. The implementation cost was $142,350, reduced by an Efficiency Maine Incentive of $62,350, and will provide an annual energy savings of approximately $106,900. The cost of the project has a predicted payback of 9 months.

Variable Frequency Drive Installation  
athenahealth, Inc., Belfast, Maine

athenahealth, Inc. retained Cordjia to perform design, procurement, installation, and on-site construction management of emergency paralleling gear to provide redundancy between two 800 kVA generators. Cordjia coordinated and delivered construction documents to include sequence of operations; installation of operational paralleling gear; ASCO transfer switch testing and certification; commissioning of installed systems; load testing of generators; and client education for operations.

Paralleling Switchgear Installation  
athenahealth, Inc., Belfast, Maine
Through the Directorate of Facilities Engineering, the Maine Army National Guard selected Cordjia to perform a feasibility study in connection with the structural feasibility for the installation of a new mega door. The mega door is to be a single bay able to accommodate a large helicopter from two existing small bay doors. The feasibility study included cost estimates for each option. Cordjia was subsequently asked to provide a design and construction administration for the new mega door.

### Skyboom Mounting Structural Review
**Maine VA Medical Center, Augusta, Maine**

The Maine VA Medical Center wished to install two Skybooms with associated mounting structure components (including a structural ceiling plate, support tube, mounting plate, and sway bracing) in one of their operating rooms. As a result, Cordjia was asked to perform a structural review to ensure it was feasible to install the Skybooms in the desired locations. Cordjia performed an onsite evaluation and provided a report with our observations and findings in connection with the proposed locations of the Skyboom mounting structure components.

### Army Aviation Support Facility Mega Door Structural Upgrades
**Directorate of Facilities Engineering, Bangor, Maine**

Through the Directorate of Facilities Engineering, the Maine Army National Guard selected Cordjia to perform a feasibility study in connection with the structural feasibility for the installation of a new mega door. The mega door is to be a single bay able to accommodate a large helicopter from two existing small bay doors. The feasibility study included cost estimates for each option. Cordjia was subsequently asked to provide a design and construction administration for the new mega door.

### Camden Smokestack Repairs
**Matt Orne, Camden, Maine**

The Camden Smokestack was built in 1933 and needed to be inspected and repaired as necessary in order to install a cellular antenna on the chimney. Matt Orne retained Cordjia to provide procurement services inclusive of reviewing the bidders submissions, perform a cost analysis, provide Notice to Proceed, and develop and execute AIA contract. At the completion of the successful procurement, Cordjia was further retained to provide Owner’s Representation throughout the execution of the repairs.
Technology Room Upgrades
athenahealth, Inc., Belfast, Maine

athenahealth, Inc. engaged Cordjia to design and perform technology room upgrades to meet their growing demands. The existing uninterrupted power supply (“UPS”), which supports the entire network, was operating at 89% and the technology room it is located in was overheating. Cordjia proposed taking advantage of a second UPS located in the same room as the existing UPS and designed a new HVAC unit to correct the overheating problem. The design consisted of installing four new electrical distribution panels in the technology room that is supported by the new standby UPS. The new UPS has batteries and capacitors installed and was re-commissioned as a second power supply to the technology room equipment. Cordjia developed as-built drawings, re-mapped all the electrical outlets, and re-distributed the outlets to ensure there is power to each rack from the two UPSs.

Statewide Real Property Capital Asset Planning & Management
Maine Army National Guard, State of Maine

The Maine Army National Guard (“MEARNG”) was interested in developing sustainable facility capital plans for 28 facilities totaling 1.1 million square feet in support of the their strategic portfolio management efforts. Cordjia performed on-site assessments of the 28 facilities and provided MEARNG with its turnkey, scalable, capital asset planning and management tool, iPlan™, which provides the foundation for informed decision-making in regards to facilities and infrastructure condition, multi-year capital budgeting, capital project planning, and functional adequacy. We optimized MEARNG’s capital and operating lifecycle budgets, streamlined facility governance processes, maintained their environmental commitments, and complied with federal regulations and reporting requirements. We also provided data integration services to support the business processes sustainability reporting to enhance the value and improve performance within the existing facility asset portfolio.

Seton Campus Due Diligence
Mattson., Waterville, Maine

Mattson. selected Cordjia to perform due diligence services for in connection with the acquisition of the Seton Campus and two supporting buildings in Waterville, Maine. The services provided included Phase I Environmental Site Assessments, a hazardous building materials survey, ALTA survey, wetland delineation, site infrastructure review, demolition pricing, and project management. Cordjia’s due diligence allowed Mattson. to have a greater understanding of the Property before making a purchasing decision.
Cordjia’s property condition assessments are fully customizable to our clients’ needs. Typically, our scope of work will involve observing representative samples of the following major independent building components and evaluating their physical conditions: mechanical, including life safety, plumbing, heating, ventilation and air conditioning; electrical, including primary and secondary distribution systems and lighting; architectural, envelope, structural; site infrastructure and parking facilities; and miscellaneous systems, including finishes, signage, security, and Americans with Disabilities Act. We complete a visual assessment for asbestos, mold, and mildew. Cordjia then provides cost estimates for repairs, correction of deficiencies, and reserves to repair or replace major building elements as needed. Our deliverable provides a capital asset planning and management tool that will provide our clients with a foundation for informed decision making in regard to facilities and infrastructure condition, multi-year budgeting, and capital project planning.

**Property Condition Assessments**

**Various, USA**

Maine General Medical Center  
Augusta East Redevelopment Company  
Augusta, Maine  
Built in various time periods  
Multiple renovations  
Combined properties consist of approximately 19 acres and 275,500+ square feet

National Fulfillment Center  
Midwest USA  
Scope included an environmental screen for asbestos-containing materials, lead-based paint, and a Phase I Environmental Site Assessment  
600,000 square feet

National Fulfillment Center  
Florida  
Warehouse and office space  
Six buildings varying in size  
580,000 square feet
Property Condition Assessments
Various, USA

National Fulfillment Center
California
Warehouse and office space
350,000 square feet

Jetport Plaza
Camden National Bank
South Portland, Maine
Multiple renovations
Divided into 11 tenant spaces
Scope included a Phase I Environmental Assessment
103,768 square feet

Commercial Office Building
Mattson., Portland, Maine
Multi-tenant commercial office building
Portions occupied by the Masonic Temple
Constructed in 1912
60,000 square feet

Amit Patel
The Ledges by the Bay
Rockport, Maine
Office building was constructed circa 1880
Motel structure was constructed in phases between 1968 and 2000
31,600 habitable square footage

Stone House
Wolfe’s Neck Farm Foundation
Freeport, Maine
Residential and education building
Original building 1917 with a two-story addition in 1922
10,156 square feet of living space
Scope included a Phase I Environmental Assessment
Property Condition Assessments
Various, USA

Building No. 7220
Maine Military Authority
Limestone, Maine
Production and warehousing facility
108,500 square feet

Building No. 8260
Maine Military Authority
Limestone, Maine
Production facility
41,300 square feet

Maine Army National Guard
Building No. 8712
Limestone, Maine
Constructed in 1987
26,486 square feet
Former Vehicle Maintenance Building

Maine Army National Guard
Solman Building
Caribou, Maine
Seven interconnected steel buildings
Approximately 48,300 square feet

Munjoy South Apartments
Camden National Bank
Portland, Maine
29 individual apartment buildings
140 units
Approximately 175,040 square feet
Property Condition Assessments
Various, USA

Appleton Village School
Maine School Union #69
Appleton, Maine
Original building 1982 with additions in 1988 and 2005
20,230 square feet
Scope included a Mechanical Systems Evaluation

City Hall
City of Auburn
Auburn, Maine
Original building 1865
Additions and remodel in 2003
46,888 square feet

Commercial Building
Cranesport, LLC, Camden, Maine
Mechanical & Electrical Systems Evaluation
Constructed in 1994
10,490 square feet

The Wellness Center
MRY Associates, LLC
Camden, Maine
Professional office and residential building
Original building 1840
Addition and remodel in 2000
10,000 square feet
Various Preservation Property Condition Assessments  
**Camden National Bank, Statewide, Maine**

Camden National Bank has engaged Cordjia to perform Property Condition Assessments at a number of properties throughout the State for the purpose of preservation. The scopes consist of establishing a limited baseline physical condition of representative samples of the major independent building components (structural, mechanical, electrical, envelope, and site); identifying potential property preservation deficiencies that may have occurred since acquisition of the property; providing recommendations of capital or deferred maintenance improvements with an opinion of probable cost; and recommending any additional studies.

Preservation Property Condition Assessments  
**Martin Cates Inc., Belfast, Maine**

Martin Cates has engaged Cordjia to assist in performing Property Condition Assessments at a number of properties throughout the State for the purpose of preservation. The scopes consist of establishing a limited baseline physical condition of representative samples of the major independent building components (structural, mechanical, electrical, envelope, and site); identifying potential property preservation deficiencies on the Property; recommending capital or deferred maintenance improvements with an opinion of probable cost to stabilize the Properties in a condition that will not further deterioration; and recommending additional studies, if necessary.

Hurricane Sandy Property Condition Assessments  
**Mach 8, New Jersey, New York, Connecticut USA**

Mach 8 selected Cordjia to evaluate several properties in New Jersey, New York, and Connecticut for damage sustained by Hurricane Sandy for insurance purposes. Hurricane Sandy landed south of Atlantic City, New Jersey with sustained 90 mph winds. Storm surge of up to 12.5 feet above normal high tide inundated coastal areas of New Jersey and the New York City metropolitan area. Cordjia was tasked with evaluating the full extent of patent damage, itemizing, and differentiating between storm surge/wave action and wind damage.
PretiFlaherty retained Cordjia to provide master planning redevelopment study for their client, HoltraChem, located in Orrington, Maine. Cordjia performed an evaluation of the regional market in terms of the economic feasibility of developing other uses on a brownfield site. Cordjia also performed a land use and infrastructure evaluation, conducted a wetlands and habitat evaluation, performed an environmental reuse analysis, prepared conceptual site plans and architectural renderings of the proposed development, and supported environmental hearings as an expert witness.

Facilities Master Planning Study
Maine Military Authority, Limestone, Maine

The Maine Military Authority retained Cordjia to research, analyze, and develop a comprehensive facilities master plan for its operations in Limestone, Maine. The master plan provided a vision for the physical development of the Maine Military Authority rebuild operation and a detailed implementation strategy. The master plan that was developed embodied Maine Military Authority’s aspiration to become the industry benchmark for rebuild quality, cost, and production efficiency. The master plan provided a comprehensive framework to guide physical growth and change to ensure that every project undertaken by the Maine Military Authority contributes to the overall mission.

Master Planning Study
Wayfarer Marine, Camden, Maine

Wayfarer Marine, Maine’s premier refit and repair boatyard and marina, retained Cordjia to research, analyze, and develop a comprehensive master plan for its operations in Camden, Maine. The Wayfarer Marine site includes eleven buildings totaling 101,000 square feet. The property, which has a total water frontage of approximately 2,170 linear feet, is located on Camden’s inner and outer harbors. The master plan provided a vision for the physical development of Wayfarer Marine’s operation and a detailed implementation strategy. The master plan benefited Wayfarer Marine by anticipating and shaping the future of the development; recommending and prioritizing actions to be undertaken; budgeting time schedules and financial considerations; and improvement of internal and external communications.
Critical Infrastructure Vulnerability Assessment and Monitoring
Worldwide

Cordjia offers advisement on risks and opportunities related to security vulnerability, operation and safety of critical infrastructure systems supporting international sporting events specific to:

- Capabilities, procedures, and practices of the venue management team, security personnel, external support organizations and vendors
- Life and fire safety requirements and systems
- Power generation systems
- Public address system with mass override capability
- Fire alarm systems
- Broadcast OB van infrastructure and media cabling systems
- Closed caption television systems ("CCTV")
- Mechanical and electrical distribution systems
- Uninterrupted power supply systems
- Communications and information technology systems
- Field lighting controls and systems
- Scoreboard controls and systems
- Potable water systems
- Sanitary systems
- Public utility electrical systems
- Stadium control room integrated systems
- Structural systems (if necessary)

Competitions Event Management Handbook
The Fédération Internationale de Football Association ("FIFA") selected Cordjia to develop a Power Supply Chapter as a baseline for all FIFA stadiums. The Chapter includes the following sections: Power Supply, Utility Power Source Reliability, Power Load Classification, Stadium Electrical Substations, Emergency Power Supply System, Reliable Utility Power Source, Unreliable Utility Power Source, and Technical Broadcast Compound Power. The Chapter will streamline the technical preparation of stadiums for various FIFA events including the World Cup.
Critical Infrastructure Vulnerability Assessment and Monitoring Worldwide

FIFA U-20 World Cup South Korea 2017
Cheonan
Daejeon
Incheon
Jeju
Jeonju
Suwon

FIFA Futsal World Cup Colombia 2016
Bucaramanga
Cali
Medellin

FIFA Women’s World Cup Canada 2015
Edmonton
Moncton
Montreal
Ottawa
Vancouver
Winnipeg

FIFA U-17 World Cup Chile 2015
Chillán
Concepción
Coquimbo
La Serena
Puerto Montt
Santiago
Talca
Viña del Mar

FIFA U-20 World Cup New Zealand 2015
Auckland
Christchurch
Dunedin
Hamilton
New Plymouth
Wellington
Whangarei
Critical Infrastructure Vulnerability Assessment and Monitoring
Worldwide

FIFA U-17 World Cup United Arab Emirates 2013
Abu Dhabi
Al Ain
Dubai
Fujairah
Ras Al Khaima
Sharjah

FIFA U-20 World Cup Turkey 2013
Antalya
Bursa
Gaziantep
Istanbul
Kayseri
Rize
Trabzon

FIFA U-20 World Cup Colombia 2011
Armenia
Barranquilla
Bogota
Cali
Cartagena
Manizales
Medellin
Pereira

FIFA U-17 World Cup Nigeria 2009
Abuja
Bauchi
Calabar
Enugu
Ijebu Ode
Kaduna
Kano
Lagos
Warri

FIFA U-17 World Cup Egypt 2009
Alexandria
Cairo
Ismailia
Port Said
Suez
Building Automation Control System Conversions
Maine Army National Guard, Statewide, Maine

Through the Directorate of Facilities Engineering, the Maine Army National Guard selected Cordjia to convert existing building automation control systems (“BACS”) to a Niagara AX platform with a network of freely programmable open protocol BACnet digital controllers at four facilities located in Augusta and Bangor. Cordjia performed baseline facility assessments, performed functionality testing, and provided options for conversions. Cordjia subsequently provided design, procurement, and construction administration services for the installation of the new BACS.

Armed Forces Reserve Center Building Automation
Oak Point Associates, Brunswick, Maine

Oak Point Associates selected Cordjia to provide building automation system services in connection with the new 56,000 square foot Maine Army National Guard Armed Forces Reserve Center in Brunswick, Maine. Cordjia reviewed the issued for bid plans and specifications and providing a detailed summary of scope changes for the sequence of operations and other control points to ensure that the system is in compliance with the Department of Defense, Veterans and Emergency Management’s requirements. Cordjia also developed a building automation system diagram, provided an opinion of probable cost for the additional work to implement the identified revisions, and reviewed the revised plans and specifications.

Weapons of Mass Destruction Building Automation
Oak Point Associates, Waterville, Maine

The Maine Army National Guard wished to add a new Ready Bay to its Weapons of Mass Destruction in Waterville, Maine. The project architect, Oak Point Associates, selected Cordjia to provide building automation system services for the project. Cordjia reviewed the construction plans and specifications (inclusive of sequence of operations and building automation control points that are not part of the sequence of operations) and provided a detailed summary of scope changes to ensure they comply with the requirements of the Department of Defense, Veterans and Emergency Management. Cordjia provided an opinion of probable cost for the additional work associated with the revisions identified and reviewed the revised plans and specifications. Cordjia also provided Oak Point with a building automation system diagram.
The Maine Army National Guard, through the Directorate of Facilities Engineering, retained Cordjia to determine integration requirements for a Tridium based building automation control system. Cordjia provided a feasibility study that evaluated the current equipment operations, schedules, and requirements to be integrated with Tridium controls to determine the most efficient scheduling of equipment. Subsequently, Cordjia delivered building automation drawings and specifications inclusive of Tridium control system installation and integration to the Directorate of Facilities Engineering’s network as well as sequence of operations including equipment monitoring points. The building automation system is anticipated to reduce energy consumption by 52% annually with a payback of 1.9 years. Cordjia also provided construction administration services for the installation of the new system.

Joint Forces Headquarters Building Automation
WBRC Architects Engineers, Augusta, Maine

WBRC Architects Engineers (“WBRC”) selected Cordjia to design the building automation system (“BAS”) for the new Joint Forces Headquarters (“JFHQ”) to be constructed in Augusta, Maine. The JFHQ will be a Readiness Center supporting all elements of the Maine Army and Air National Guard. The BAS will be a direct digital control system for providing lower operating costs and ease of operation. Microprocessor PID controllers will monitor and adjust building systems to optimize their performance and the performance with other systems to minimize overall power and fuel consumption of the facility.

Tridium Niagara Supervisor Building Automation Specifications
Maine Army National Guard, Statewide, Maine

The Maine Army National Guard desired a specification integrating the Tridium Niagara Supervisor Specification for the WMD/CST Building Controls Project that can also be used for future projects in which they specify the Tridium Niagara platform. Cordjia was selected to provide the specification for use by contractors on the protocol and architecture of the Niagara Supervisor program installed on the Department of Defense network. This specification will ensure future projects installed on the supervisor will be programmed in the same manner as existing equipment and locations. Cordjia developed written specification for the integration of additional locations, developed programming file architecture and naming conventions for programming strings and application specific code, and incorporated existing automation standards manual and created definitions for acronyms currently implemented in existing buildings.
Commissioning and Functional Testing
Various, Maine

Commissioning, by definition, is a quality assurance process. The intent of commissioning a building is to demonstrate that the construction was properly done and that the performance of the finished product matches the Owner’s requirements. Commissioning services consist of systematically documenting that the specified components and systems have been installed and initiated properly. Cordjia performs functional tests to verify and document proper operation of such components and systems. Cordjia coordinates with the architect, engineer, contractors, and the Owner on scheduling and integrating activities into the overall project schedule for the commissioning scope.

Maine Army National Guard
Bangor Armed Forces Reserve Center
Bangor, Maine
HVAC systems
Plumbing systems
Electrical systems
Fire protection systems

Maine Army National Guard
Lewiston Armory
Lewiston, Maine
HVAC systems
Plumbing systems
Electrical systems
Fire protection systems

Maine Army National Guard
Augusta Armory
Augusta, Maine
HVAC systems
Plumbing systems
Electrical systems
Fire protection systems
Commissioning and Functional Testing
Various, Maine

Maine Army National Guard
Sanford Armory
Sanford, Maine
HVAC systems
Plumbing systems
Electrical systems
Fire protection systems

Colby Company Engineering
Calais Armory
Calais, Maine
HVAC systems
Plumbing systems
Electrical systems
Fire protection systems

Maine Army National Guard
Building No. 34/39
Augusta, Maine
HVAC systems

Maine Army National Guard
Field Maintenance Shop No. 3
Bangor, Maine
HVAC systems
Retro-Commissioning
Various, Maine

Retro-commissioning is a process that seeks to optimize how existing building equipment systems function together through a detailed analysis of mechanical, electrical, and control systems. Cordjia’s retro-commissioning solution begins with the collection of operational data and functional testing of building systems to identify flaws in operations. Cordjia then develops a comprehensive report on existing conditions and makes recommendations to improve reliability, efficiency, and comfort. If the client chooses to implement the recommendations, Cordjia develops an implementation plan, implements the improvements, verifies results, develops a final report, and provides training. Our retro-commissioning delivers our clients a solution to reduce their energy consumption that will provide meaningful cost savings, payback, and lower operating costs.

Knox Mill
AHP Camden, LLC
Camden, Maine
45,000 square feet
Estimated reduction in annual energy costs: 30%
Payback: 2 months (inclusive of an Efficiency Maine incentive)

Lincolnville Central School
Maine School Union #69
Lincolnville, Maine
47,000 square feet
Estimated reduction in annual energy costs: 27%
Payback: 5 months (inclusive of an Efficiency Maine incentive)

Camden Place & The Inn at Camden Place
Camden Place, LLC
Camden, Maine
20,820 square feet
Estimated reduction in annual energy costs: 20%
Payback: 1.2 years (inclusive of an Efficiency Maine incentive)

Operations Building
Island Institute
Rockland, Maine
19,500 square feet
Estimated reduction in annual energy costs: 22%
Payback: 1.8 years (inclusive of an Efficiency Maine incentive)

Rockland Public Library
City of Rockland
Rockland, Maine
20,280 square feet
Estimated reduction in annual energy costs: 21%
Payback: 1.3 years (inclusive of an Efficiency Maine incentive)
<table>
<thead>
<tr>
<th>Building Name</th>
<th>Address</th>
<th>Square Feet</th>
<th>Energy Cost Reduction</th>
<th>Payback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camden Public Library</td>
<td>Camden, Maine</td>
<td>13,500</td>
<td>12%</td>
<td>1.3 years</td>
</tr>
<tr>
<td>Rowe Center</td>
<td>Hanley Center</td>
<td>Maine Central Institute, Pittsfield, Maine</td>
<td>21,000</td>
<td>16%</td>
</tr>
<tr>
<td>Bristol Consolidated School</td>
<td>Alternative Organizational Structure 93, Pemaquid, Maine</td>
<td>25,750</td>
<td>20%</td>
<td>2.2 years (inclusive of an Efficiency Maine incentive)</td>
</tr>
<tr>
<td>Hanley Center</td>
<td>Camden National Bank</td>
<td>Rockport, Maine</td>
<td>25,750</td>
<td>16%</td>
</tr>
<tr>
<td>Bangor Branch</td>
<td>Camden National Bank</td>
<td>Bangor, Maine</td>
<td>26,000</td>
<td>16%</td>
</tr>
<tr>
<td>Main Office</td>
<td>Camden National Bank</td>
<td>Camden, Maine</td>
<td>15,750</td>
<td>32%</td>
</tr>
</tbody>
</table>
Retro-Commissioning
Various, Maine

Mount Desert Island YMCA
Bar Harbor, Maine
35,000 square feet
Estimated reduction in annual energy costs: 25%
Payback: 1.1 years (inclusive of an Efficiency Maine incentive)

Carrabec High School
Carrabec Community School
Garret Schenck Elementary School
Maine School Administrative District No. 74
Estimated reduction in annual energy costs: 18%
Payback: 1.6 years (inclusive of an Efficiency Maine incentive)

Armed Forces Reserve Center
Maine Army National Guard
Bangor, Maine
71,175 square feet
Estimated reduction in annual energy costs: 47%
Payback: 2.3 years (inclusive of an Efficiency Maine incentive)

Penobscot Bay YMCA
Rockport, Maine
Estimated reduction in annual energy costs: 18%
Payback: 1.2 years (inclusive of an Efficiency Maine incentive)

Municipal Building
Town of Camden
Camden, Maine
41,800 square feet
Estimated reduction in annual energy costs: 12%
Payback: 2.8 years (inclusive of an Efficiency Maine incentive)
Retro-Commissioning
Various, Maine

Central Maine Medical Center
Lewiston, Maine
579,000 square feet
Estimated reduction in annual energy costs: $64,750
Payback: 6.2 years (inclusive of an Efficiency Maine incentive)
Only select equipment evaluated

Wellness Center
Central Maine Medical Center
Lewiston, Maine
105,830 square feet
Estimated reduction in annual energy costs: 33%
Payback: 3.2 years (inclusive of an Efficiency Maine incentive)

College of Nursing, Data Center, & Patrick Dempsey Center for Cancer Hope & Healing
Central Maine Medical Center
Lewiston, Maine
119,525 square feet
Estimated reduction in annual energy costs: 7%
Payback: 2.8 years (inclusive of an Efficiency Maine incentive)

Bryand Global Sciences Center
University of Maine
Orono, Maine
55,000 square feet
Estimated reduction in annual energy costs: 35%
Payback: 1.9 years (inclusive of an Efficiency Maine incentive)

Sawyer Environmental Research Center
University of Maine
Orono, Maine
31,100 square feet
Estimated reduction in annual energy costs: 35%
Payback: 4.5 years (inclusive of an Efficiency Maine incentive)
Retro-Commissioning
Various, Maine

Bass Building
University of Maine System
Orono, Maine
75,800 square feet
Estimated reduction in annual energy costs: 40%
Payback: 4 years

Abromsom Center
University of Southern Maine
Portland, Maine
33,844 square feet
Estimated reduction in annual energy costs: 14%
Payback: 5 months (inclusive of an Efficiency Maine incentive)

Bangor Y
Bangor, Maine
56,778 square feet
Estimated reduction in annual energy costs: 17%
Payback: 1.5 years (inclusive of an Efficiency Maine incentive)

Gardiner Area High School
Maine School Administrative District No. 11
Gardiner, Maine
126,360 square feet
Estimated reduction in annual energy costs: 14%
Payback: 1.8 years (inclusive of an Efficiency Maine incentive)

Visitor Information Center
Maine Department of Transportation
Kittery, Maine
6,000 square feet
Estimated reduction in annual energy costs: 31%
Payback: 2.8 years
Retro-Commissioning
Various, Maine

Ferry Terminal
Maine Department of Transportation
Rockland, Maine
Square feet
Estimated reduction in annual energy costs: 22%
Payback: 15 months

Main Office
The Bank of Maine
Gardiner, Maine
28,750 square feet
Estimated reduction in annual energy costs: 25%
Payback: 2 years (inclusive of an Efficiency Maine incentive)

Mayo Regional Hospital
Dover-Foxcroft, Maine
76,685 square feet
Estimated reduction in annual energy costs: 37%
Payback: 11 months (inclusive of an Efficiency Maine incentive)

14 Military Facilities
Maine Army National Guard
Statewide, Maine
500,000+ square feet
Estimated reduction in annual energy costs: 18%
Payback: 6.6 years
Only select equipment evaluated

Finance Authority of Maine
Augusta, Maine
19,170 square feet
Estimated reduction in annual energy costs: 41%
Payback: 2 months (inclusive of an Efficiency Maine incentive)
Energy Management
National Fulfillment Center, Midwest

A national fulfillment center wished to determine the baseline annual electrical consumption in connection with major building systems. They retained Cordjia to perform this investigation as well as providing Owner’s Representative services in connection with the implementation of selected energy management initiatives. Initiatives completed, in process, or being reviewed include reprogramming the building automatic control systems in order to achieve nighttime ventilation cooling (forecast annual savings: $13,250 – simple payback: 4 months); repair rooftop mechanical units (forecast annual savings: $22,000 – simple payback: 9 months); retrofit lighting fixtures (verifiable annual savings $210,888 – simple payback: 13 months); building thermal destratification (forecast annual savings: $73,500 – simple payback: 8.5 years); install daytime lighting sensors (forecast annual savings: $24,780 – simple payback: 8 months); and electrical meter power factor correction (forecast annual savings: $11,280 – simple payback: 18 months).

Grants to Green/ASHRAE Level II Audit
Island Institute, Rockland, Maine

The Island Institute wished to obtain funds through the “Grants to Green Maine” program which requires that an ASHRAE Level II Audit be performed. Cordjia was selected to conduct the audit and the Island Institute was subsequently awarded $82,000 in grant monies. Cordjia has been further retained to provide Owner’s Representation through the procurement and construction administration phases.

Great Salt Bay Community School Energy Conservation Analysis
Alternative Organizational Structure 93, Damariscotta, Maine

Selected by AOS 93 through a Request for Qualifications, Cordjia performed an Energy Conservation Analysis of the Great Salt Bay Community School to identify opportunities to improve building performance, reduce energy costs, and improve occupant comfort. The annualized savings of all identified energy conservation measures totals $36,560 which equates to an approximately 43% reduction at current energy rates.
Bristol Consolidated School Alternative Boiler Fuel Analysis and Upgrade

Alternative Organizational Structure (“AOS”) 93 was interested in identifying if their existing boiler plant could be upgraded to reduce annual energy costs through the use of alternative fuels for the Bristol Consolidated School. Cordjia was asked to perform an alternative boiler fuel analysis. After developing opinions of probable costs, predicted annual savings, and anticipated paybacks, AOS 93 chose to proceed with a propane boiler upgrade. The conversion is anticipated to save approximately $23,200 annually with a payback of 4.5 to 5 years.

Gardiner Area High School Electrical Demand Analysis

Maine School Administrative District #11 (“MSAD #11”) desired to reduce their monthly electrical demand charges at the Gardiner Area High School in Gardiner. Therefore, they selected Cordjia to perform an electrical demand analysis. The analysis involved installing electrical monitoring equipment on the main distribution panels and major equipment to identify demand charge contributing elements and identifying measures to minimize the impact of electrical components for the reduction of electrical demand charges. Cordjia provided MSAD #11 with a written report of our observations and findings; potential equipment upgrades and operational opportunities to reduce electrical demand charges. The opportunities identified are anticipated to reduce the demand costs by approximately 32% or $7,500 annually with a payback of 2 months.

Renewable Energy Study

United States Army National Guard, State of Maine

The Maine Army National Guard, through the Directorate of Facilities Engineering, retained Cordjia to perform a Retro-Commissioning study, inclusive of renewable energy sources, at four military installations in Auburn, Augusta, Bangor, and Caswell, Maine. The installations are comprised of forty-three buildings. The renewable energy study consisted of identifying both renewable/alternative energy solutions and energy conservation measures to achieve a 30% reduction in overall energy costs. Renewable energy solutions evaluated included wind, solar, geothermal, biomass, and fuel cell systems. Cordjia identified several energy solutions that are feasible to achieve the 30% reduction in overall energy savings.
Central Maine Commerce Center Alternative Energy Study
Central Maine Commerce Center LLC, Augusta, Maine

The Central Maine Commerce Center retained Cordjia to perform a Retro-Commissioning study and provide an alternative energy solution assessment focusing on cogeneration, wood pellet, and gas boiler conversion assessments, wind energy analysis, and photovoltaic (solar) energy. We worked with the client to identify applicable grants for installation of systems.

Boiler Efficiency Evaluation
The Jackson Laboratory, Bar Harbor, Maine

The Jackson Laboratory selected Cordjia to evaluate the efficiency of the new B & W / Petro Kraft wood powder boiler located at their facility in Bar Harbor, Maine. The boiler was first started in June 2011 and has been “on line” providing steam to the facility since August 2011. The evaluation of the boiler efficiency involved the collection of operational data, verification of fuel heating value, and fuel flow to the two burners. We performed testing and observations over a four day period and collected data at varying boiler loads. We determined fuel flow by collecting the wood powder to the burner by rotating the metering screw and weighing the quantity of wood powder. We also monitored flue gas throughout the efficiency test with a Flue Gas Analyzer.

Bolduc Correctional Facility Solar Hot Water Assessment
Maine Department of Corrections, Warren, Maine

The Maine Department of Corrections retained Cordjia to perform a Solar Hot Water System Energy Assessment of the Bolduc Correctional Facility in Warren, Maine. The Maine Department of Corrections wished to determine if a solar hot water system is feasible at this site. Through a Retro-Commissioning study, it was determined that the installation of a solar hot water system is considered feasible for the facility. The installation of a solar water heating system is expected to offset $7,500 in fuel costs annually and have a payback of 7.2 years.

Maine State Prison Window Energy Assessment
Maine Department of Corrections, Warren, Maine

The Maine Department of Corrections retained Cordjia to perform an energy opportunities assessment of the window assemblies at the Maine State Prison in Warren, Maine. Our Retro-Commissioning study findings included probable cost for identified repairs and capital improvements and a simple payback.
While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, regulatory permitting and approvals, procurement of multiple bid packages, construction administration services, and supported facility operations for the development of the Belfast Operations Campus. The 170-acre campus consisted of constructing eight Class “A” office buildings totaling 450,000 square feet, a 21,000 square foot fleet vehicle building, a 32,500 square foot controlled environment storage warehouse, an 11,000 square foot daycare facility, and a 5,500 square foot facilities building, as well as significant site infrastructure to support the campus. The campus has a 3,000 square foot mission critical data center and several generator back-up facilities that support the entire campus. The campus supports 3,500 people and is master planned for additional buildings and site improvements.

**Belfast Operations Campus**  
**MBNA (now Bank of America), Belfast, Maine**

While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, extensive regulatory permitting and approvals, procurement of multiple bid packages, construction administration services, and supported facility operations for the development of the Point Lookout Campus in Northport, Maine. The 390-acre Point Lookout Campus was constructed as a corporate retreat and conference center. The facility offers a variety of amenities including two state-of-the-art conference facilities, education classrooms, fitness center, bowling facility, independent residential cabins, commercial kitchen and banquet facilities, warehousing facilities, and extensive site infrastructure throughout the campus. Additionally, there is a synthetic grass regulation soccer field, natural grass softball field, and walking and hiking trails.

**Point Lookout Campus**  
**MBNA (now Bank of America), Northport, Maine**

While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, extensive regulatory permitting and approvals, procurement of multiple bid packages, construction administration services, and supported facility operations for the development of the Knox Mill Campus in Camden, Maine. The development consisted of renovating several former mill buildings totaling 200,000 square feet, daycare facility, warehouse, and several guest houses. The campus supported 1,000 people and was master planned for additional buildings and site improvements.

**Knox Mill Operations Campus**  
**MBNA (now Bank of America), Camden, Maine**
Rockland Operations Center  
**MBNA (now Bank of America), Rockland, Maine**

While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, regulatory permitting and approvals, procurement of multiple bid packages, construction administration services, and supported facility operations for an operations building in Rockland, Maine. The eighteen-acre development consisted of a two-story, 85,000 square foot Class “A” office building, seaside boardwalk, boathouse, pier, open air pavilion, a 9,000 square foot daycare, and a 3,500 square foot residential guest property. The campus supports 1,000 people and is master planned for additional buildings and site improvements.

University of Maine Hutchinson Center  
**MBNA (now Bank of America), Belfast, Maine**

While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, regulatory permitting and approvals, procurement of multiple bid packages, construction administration services, and supported facility operations for the development of a new regional campus for the University of Maine. The development consisted of constructing a one-story, 19,000 square foot education facility as well as construction of significant site infrastructure to support the University of Maine System. The program included laboratories, classrooms, library, theatre, cafeteria, and dining area. The development was master planned for an additional building and parking.

Lincolnville Central School  
**MBNA (now Bank of America), Northport, Maine**

While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, regulatory permitting and approvals, procurement of multiple bid packages, and construction administration services for construction of the temporary Lincolnville Central School. The 1940’s era Lincolnville Central School was permanently closed in the summer of 2000 when testing revealed the presence of mold in the air. As a result of the closure and under an extremely tight timeline, a new school was built on the Point Lookout Campus in Northport. The project consisted of a one-story, 28,000 square foot building to accommodate kindergarten through 8th grade school. This project was completed within budget requirements and was designed, permitted, constructed, commissioned, and delivered within a schedule of 54 days.
While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, regulatory permitting and approvals, procurement of multiple bid packages, and construction administration services for the development of a new residential campus. The 30-acre, 120,000 square foot residential community consisted of constructing 46 residential units that included duplexes, townhouses, garden style apartments, and a clubhouse with exterior recreational area that incorporated a tennis court, basketball court, horseshoes, and covered picnic area.

**Belfast Residences – Springbrook Hill**  
**MBNA (now Bank of America), Belfast, Maine**

While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, regulatory permitting and approvals, procurement of multiple bid packages, construction administration services, and supported facility operations for the development of the Point Lookout Fitness Center. The facility is a two-story, 40,000 square foot building that includes a basketball court, handball/racquetball courts, virtual golf, locker rooms, offices, a meeting room, daycare, fitness center, and evaluation room. The site also includes outdoor tennis courts, running path, a café, and 110 parking spaces.

**Point Lookout Fitness Center**  
**MBNA (now Bank of America), Northport, Maine**

While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, regulatory permitting and approvals, procurement, and construction administration for the development of several athletic facilities. The artificial turf soccer field included bleachers, public restrooms, access walkways, and parking facilities to the site. The ball fields consist of a regulation Little League baseball field, several softball fields, announcers’ booth, bleachers, a concession stand, public restrooms, and a utility building.

**Recreational Athletic Fields**  
**MBNA (now Bank of America), Belfast and Northport, Maine**
While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, regulatory permitting and approvals, procurement of multiple bid packages, construction administration services, and supported facility operations for the development of the Atlanta Operations Center. The development consisted of renovating a two-story, 255,000 square foot warehouse to class “A” office space as well as construction of significant site infrastructure to support the facility. The campus supports 2,100 people and is master planned for additional buildings and site improvements.

**Atlanta Operations Center**  
**MBNA (now Bank of America), Atlanta, Georgia**

While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, regulatory permitting and approvals, procurement of multiple bid packages, construction administration services, and supported facility operations for the development of several Class “A” commercial office buildings and parking structures.

**Cleveland Operations Center**  
**MBNA (now Bank of America), Cleveland, Ohio**

While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, regulatory permitting and approvals, procurement of multiple bid packages, construction administration services, and supported facility operations for the development of the Canada Operation Center in Ottawa, Canada. The development consisted of renovating the eight-story, 212,000 square foot James Naismith Building and the eight-story 140,000 square foot 1595 Telesat Court Building. The campus supports 2,500 people and is master planned for additional buildings, six-story parking garage, and other site improvements.

**Canada Operations Center**  
**MBNA (now Bank of America), Ottawa, Canada**

While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, regulatory permitting and approvals, procurement of multiple bid packages, construction administration services, and supported facility operations for nine telesales sites in the United States. The telesales sites generally consisted of buildings that were between 10,000 and 35,000 square feet and would support between 150 to 500 people.

**Telesales Sites**  
**MBNA (now Bank of America), United States**
While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, regulatory permitting and approvals, procurement of multiple bid packages, construction administration services, and supported facility operations for the development of a twenty-acre corporate headquarters campus in Chester, England. The campus consisted of developing five Class “A” commercial office buildings totaling 386,500 square feet, a mission critical data center, a credit card and payment processing facility totaling 148,000 square feet, a fitness center totaling 22,000 square feet, and recreational fields and walking trails. The campus was capable of supporting 3,500 people and is master planned for additional buildings and site improvements. Throughout a five year period, we managed thirty-two major projects and numerous small projects totaling approximately $250 million.

Chester Operations Center
MBNA (now Bank of America), Chester, England

While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, regulatory permitting and approvals, procurement of multiple bid packages, construction administration services, and supported facility operations for the development construction of an operations center in Carrick-on-Shannon, Ireland. This project consisted of constructing a two-phase, 120,000 square foot operations center with extensive site infrastructure including surface parking and a two-story 400 vehicle parking structure. The campus supports 1,400 people and is master planned for additional buildings and site improvements.

Carrick-on-Shannon Operations Center
MBNA (now Bank of America), Carrick-on-Shannon, Ireland

While working with MBNA America, the management team of Cordjia led the strategic planning, pre-design, design, regulatory permitting and approvals, procurement of multiple bid packages, construction administration services, and supported facility operations for the development of the Madrid Operations Center. The development consisted of constructing a six-story, 145,000 square foot building in Madrid, Spain. The building program included office space, technology data center, café, dining facilities, underground parking, and site infrastructure. The completed building was capable of supporting 1,300 people and is master planned for additional buildings and site improvements.

Madrid Operations Center
MBNA (now Bank of America), Madrid, Spain