



## REQUEST FOR BOARD ACTION

ITEM NO. 15.

**DATE OF MEETING:** April 20, 2009

**REQUESTED BY:** Rick Benton, County Manager

**SHORT TITLE:** Resolution Approving Professional Design Services Contract for Pender Commerce Park Infrastructure

**BACKGROUND:** Requests for Proposals (RFP) for professional design services were solicited from two engineering firms with which the County currently works: McKim & Creed and Hobbs, Upchurch & Associates. The scope of work presented was to design and permit the infrastructure in Pender Commerce Park. On March 6 the Board authorized award of the services to McKim & Creed, subject to successful negotiation of a contract.

The scope of work includes design of the following components: roadway design, water distribution design, wastewater distribution design, stormwater collection and management design, lighting plan design and pedestrian facilities. The total projected task hours for the services is 1166, which includes a traffic impact analysis and traffic signal design (193 hours if required by NCDOT). As well, permit application fees will be assessed by State review agencies once the plans are submitted, estimated to be approximately \$7,500.

The recommended contract fee is \$159,000, which includes \$21,650 for a traffic impact analysis and traffic signal design, only if required by NCDOT. Funds for the contract and fees are budgeted in the Industrial Infrastructure Fund (60-407409-6010).

Mr. Thurman has reviewed the contract and is working with the company on some language provisions.

**SPECIFIC ACTION REQUESTED:** To adopt a resolution approving the professional design services contract for Pender Commerce Park infrastructure to the firm McKim & Creed in an amount not to exceed \$159,000.

**COUNTY MANAGER'S RECOMMENDATION**

Respectfully recommend approval.

    TBJ      
Initial

**RESOLUTION**

**NOW, THEREFORE BE IT RESOLVED** by the Pender County Board of Commissioners that:

a professional design services contract for Pender Commerce Park infrastructure be authorized with the firm McKim & Creed in an amount not to exceed \$159,000; subject to the review and approval of the County Attorney. The County Manager is authorized to execute any/all documents necessary to implement this resolution.

Budget Account 60-407409-6010

**AMENDMENTS:**

MOVED \_\_\_\_\_ SECONDED \_\_\_\_\_

APPROVED \_\_\_\_\_ DENIED \_\_\_\_\_ UNANIMOUS

YEA VOTES: Tate \_\_\_ Brown \_\_\_ Blanchard \_\_\_ Rivenbark \_\_\_ Williams \_\_\_

\_\_\_\_\_  
Jimmy T. Tate, Chairman                      Date

\_\_\_\_\_  
ATTEST                                      Date



ENGINEERS

SURVEYORS

PLANNERS

April 2, 2009

PW090170

Mr. Rick Benton, County Manager  
Pender County  
Post Office Box 5  
805 South Walker Street  
Burgaw, NC 28425

**RE: Proposal for Professional Land Planning, Consulting Engineering,  
and Survey Services for Pender Commerce Park**

Dear Mr. Benton:

McKim & Creed, PA (the "Engineer") is pleased to submit this letter proposal and agreement (the "Agreement") to Pender County (the "Client") for providing professional consulting engineering services associated with development of the Pender Commerce Park. Our project understanding, scope of services, schedule, compensation and terms of the Agreement are included herein.

#### **PROJECT UNDERSTANDING**

Pender County owns approximately 378 acres on US 421 in the southwest portion of the County, which has been dedicated for the construction of a water treatment plant, a wastewater treatment plant, and the Pender Commerce Park. The Pender Commerce Park (park) will encompass approximately 200 acres of this tract and will be designed to attract industrial and commercial interests to the US 421 corridor in Pender County. McKim & Creed will provide professional engineering services for development of the park and assist Pender County with obtaining approval under the NC Certified Site Program, as administered by the NC Department of Commerce. Primary tasks include:

- Roadway Design
- Stormwater Management
- Water & Sewer Infrastructure
- Lighting Plan
- Topographic Survey & Subdivision Plat
- Amenities (sidewalk trail)

243 North Front Street

Wilmington, NC 28401

910.343.1048

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[www.mckimcreed.com](http://www.mckimcreed.com)

## SCOPE OF SERVICES

We will complete the following specific tasks of for this project:

### Task 1. Topographic Survey

Project area consists of approximately 200 acre and we will survey into the right of way of Hwy 421 to the edge of pavement of the eastbound lane.

- All survey work will be performed to the Standards of Practice for Land Surveying in North Carolina.
- Horizontal survey control will be referenced to NC Grid NAD 83
- Vertical Survey control will be referenced to NAVD88
- Locate adequate number of property corners to show relationship to project site boundary
- Set two temporary bench marks on site
- Locate buildings, roads, parking, paved areas, concrete areas and pads, sidewalks, bollards, curbing, signs, and fences
- Locate curb inlets, catch basins, yard inlets, junction boxes, drainage pipes, culverts along with material, size and invert elevations.
- Locate utilities such as utility poles, area lights, transformer pads, pedestals, fire hydrants, water meters, water valves, cleanouts, sanitary sewer manholes – underground utilities will be located where above ground features are visible and record information is available
- Show breaks in grade, high points, low points, ponds, ditches, and waterways
- Locate public right ways adjacent to property
- Contours will be drawn at 1 foot intervals
- Map will be drawn at an appropriate scale for 30 x 42 sheet
- Provide 1 original mylar drawing and 2 paper copies signed and sealed by a Professional Land Surveyor

### Task 2. Two (2) Lot Subdivision Plat

Prepare a subdivision plat for two lots suitable for recording in Pender County Register of deeds. Subdivision layout will be provided from preliminary design, provided by client. We understand the two lots will include the water treatment plant lot and the wastewater treatment plant lot.

- All survey work will be performed to the Standards of Practice for Land Surveying in North Carolina and prepared in accordance with G.S. 47-30 as amended for recording.
- Horizontal survey control will be referenced to NC Grid NAD 83
- Set all new property corners
- Mark and flag new property lines with survey flagging

- Locate Streets or Roads on or adjacent to property for access purposes
- Show easements, water courses, utilities, etc., as they cross the property
- Show name, PIN, record information of adjoining properties
- Locate gaps, overlaps, and encroachments
- Place area, north arrow, and bar scale on map
- Map will be drawn at an appropriate scale for recording purposes
- Provide 1 original mylar drawing and 2 paper copies signed and sealed by a Professional Land Surveyor

### **Task 3. Roadway Design**

The roadway network to serve the commerce park lots will be dedicated to NCDOT as a public system. We will design the roadway to meet the horizontal and vertical NCDOT design criteria. The roadways will be designed as a shoulder section, without curb and cutter. The pavement section will reflect the geotechnical recommendations. The right-of-way width will be in accordance with NCDOT standards. Additional utility easements will be reserved outside the public right-of-ways to enable future water and sewer utility construction.

NCDOT will also require a turn-lane at the park entrance. In the absence of the TIA recommendations, we have assumed a right turn only lane. We have included effort for a right turn lane plan, details and stripping.

### **Task 4. Water and Sewer Design**

The design of both water and sewer systems will be to state regulations including line sizes, hydrant spacing, and SSMH spacing. We have assumed 8" diameter watermain line sizes will provide the fire flow requirements.

We have also assumed that 8" to 10" diameter gravity sewer will accommodate the future commerce park occupants. We will confirm this during the design process by estimating commerce park sewer flows and evaluating sewer main depths.

Design of both water and sewer systems will be "zero flow" pending completion of the respective water treatment plant and wastewater treatment plant.

Service laterals are not proposed for either of the water or sewer systems to allow flexibility in lot configurations.

### **Task 5. Stormwater Design**

Stormwater collection will be accomplished primarily by roadside ditches. Wet detention ponds will be sized to accommodate impervious surfaces for the commerce park as well as the water treatment plant and wastewater treatment

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plant lots. The built upon limits for those two lots will be estimated based on current and proposed design plans.

We will assume built-upon limits for the balance of the park lots to enable a Master Stormwater Permit. We will make conservative assumptions. The built-upon limits can be shifted from lot to lot based on final occupant needs. This would simply require a stormwater permit modification.

#### **Task 6. Lighting Plan**

A conceptual street lighting plan will be proposed through Progress Energy. Light fixtures will be selected by Pender County. Pole and transformer placement will be at proposed lot corners to help reduce future lot conflicts.

It is doubtful that a complete power supply plan can be prepared by Progress Energy since the end user requirements are unknown. We will coordinate this effort if it is an option.

#### **Task 7. Site Amenities**

A combination sidewalk / trail will be designed to link passive and active recreation areas. Recreation components will be designated but not designed. Designated features could include benches, picnic tables, multipurpose field, sand volleyball court, etc.

Street trees will be designated outside the public right-of-way. Plantings will be outside proposed utility easements also and placed to minimize future lot conflicts.

A sign easement area will be delineated at the park entrance. Pender Commerce park signage will be provided by Pender County.

#### **Task 8. As-Needed Subcontractor Services**

##### **A. Geotechnical Investigations (S&ME)**

We propose to perform 8 to 10 hand auger borings at the site. The borings will be advanced in the planned roadway areas. The boring locations will be identified in the field by our personnel by estimating right angles and approximating distances from existing site features. With these considerations, our locations should be considered approximate. The encountered soil will be visually classified in general accordance with Unified Soil Classification System guidelines. Dynamic Cone Penetrometer testing (ASTM Special Technical Publication #399) will be

performed along with the hand auger borings to estimate the consistency of the near surface soils to depths of 5 to 6 feet.

We also plan to obtain one bulk sample of representative near surface soil from the pavement areas for standard Proctor and California Bearing Ratio testing. We will also perform grain-size and moisture content tests on the bag sample to confirm our visual soil classification.

A Geotechnical Exploration Report will be prepared based on the results of the fieldwork. The report will include the following information:

1. Description of the exploration sampling methods as well as logs of each of the hand auger borings.
2. General description of the site and subsurface soils.
3. Groundwater depths encountered in completed borings.
4. General information regarding site preparation, including compaction recommendations and preparation of subgrade.
5. Considerations for reuse of on-site soil as structural fill.
6. Pavement design recommendations.

**B. Traffic Impact Analysis Report Scope of Services (Ramey Kemp & Assoc.)**

We have not had any discussions of this project with the NCDOT or Pender County to estimate the scope of work that will be required for the TIA report. A scoping meeting may be necessary to discuss the project and finalize the scope of work. The scope of work outlined in this proposal is based on our best estimate of what will be required by the NCDOT and Pender County and could change following the scoping meeting.

1. Coordinate with client to obtain all relevant project information.
2. Coordination with NCDOT and Pender County to discuss the project and obtain any relevant information.
3. The following intersections are assumed to be included in the traffic study:

- a. US 421 and SR 1109/Site Driveway
  - b. US 421 and I-140 off-ramp
  - c. US 421 and I-140 on-ramp
4. Conduct a.m. peak period (7:00 - 9:00) and p.m. peak period (4:30 - 6:30) turning movement counts at intersections a. - c. above. These counts will be taken on a typical weekday.
  5. Through field reconnaissance, verify existing roadway features of study intersections. Record the number of traffic lanes in each direction, number of turn lanes, width of lanes, approximate vertical alignment of street, and horizontal sight distance.
  6. Determine background traffic volumes for the study area. Background traffic volumes will be determined by projecting existing traffic volumes to the scheduled development build out year using a compounded annual growth rate agreed to by the NCDOT.  
  
Future conditions will consider traffic from any approved developments in or surrounding the study area that will affect traffic patterns at study intersections. This scope assumes the information for these developments will be provided by Pender County and NCDOT. The scope assumes we will not be required to prepare trip generation, distribution, and assignment for these developments.
  7. Utilizing methodologies and procedures presented in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 8th Edition, calculate the amount of daily, a.m. and p.m. peak hour trips generated by full build out of the proposed development.
  8. Determine primary trip distribution percentages based on residential population areas, employment centers, existing traffic patterns, and engineering judgment.
  9. Utilizing trip distribution percentages, assign site-generated traffic to the study intersections.
  10. Analyze study intersections under the following scenarios:
    - a. Existing (2009) conditions
    - b. Background (Build-Out Year) without site with and without improvements
    - c. Combined (Build-Out Year) conditions with full build out site traffic with and without improvements

All scenarios will be analyzed during the a.m. peak hour and p.m. peak hour. Determine the individual approach and overall level of service at each intersection. The analysis will be completed utilizing procedures and methodologies described in the Highway Capacity Manual and incorporated into the Synchro 7.0 software program.

11. Document the study findings, with graphical aides and an appendix of supporting data, in a Draft TIA report to the client. With client approval, submit final TIA reports to the client for distribution.
12. Since it is difficult to anticipate the extent of comments by the County and NCDOT in their review, this scope does not assume meetings, lengthy discussions, or negotiations to address major issues. The amount of effort required addressing County and / or NCDOT comments can vary greatly from project to project. Because it is difficult to predict the amount of effort required, this proposal and fee does not consider this task.
13. This proposal assumes one meeting. The meeting may be necessary to discuss the project scope, negotiate roadway improvements, or attend a public hearing.

**C. Traffic Signal Design Scope of Services (Ramey Kemp & Assoc.)**

The following scope of work is included in anticipation that a traffic signal will be warranted at the intersection of US 421 and the Site Driveway. The NCDOT will make the final decision as to whether the traffic signal is required. If a traffic signal is not necessary at the intersection, the following scope of work will not be completed.

As we understand the project, the scope will include traffic signal and electrical detail designs for the following intersection(s):

- US 421 & SR 1109/Site Driveway – New Signal

The following is a detailed scope of services for the necessary work.

1. Prepare a letter to the North Carolina Department of Transportation (NCDOT) requesting a traffic signal agreement between the developer and NCDOT for the installation of revised traffic signals and associated traffic signal equipment to be administrated by NCDOT. The letter will describe in general terms the scope of the traffic signal improvements and party responsibilities that are anticipated at the intersection.

2. Electronic file(s) of the base drawings and existing survey of the intersection will be provided to Ramey Kemp & Assoc. (RKA) in a MicroStation or AutoCAD file format for use in preparing the traffic signal design plans. Please understand the base drawing will need to show the intersection layout for all approaches and include curb & gutters, shoulder sections, overhead and underground utilities, existing signal pole locations, controller cabinet locations, grade lines/cross sections, proposed widening improvements, right-of-ways and lane line/designations.
3. An on-site field review of the intersection with the survey in hand will be made to locate possible conflicts and obtain notes of existing field conditions.
4. Traffic signal design plans will be prepared in accordance with the latest NCDOT standards and specifications and designed from approved roadway design plans. RKA is not responsible for signal plan revisions resulting from roadway design plan changes. **Changes to signal plans resulting from roadway plan revisions will be considered Extra Services to be invoiced separately on an hourly basis.**
5. RKA will coordinate with the NCDOT to determine special requirements of the traffic signal if necessary.
6. Drawings will include intersection layout, loop detector chart and layout, signal head identification and location, phasing diagram, signal head sequence chart, timing information, electrical details and stop bar location detail. For metal pole/mast arm installations, designs will include additional mast arm loading and signal head layout sheets as required by NCDOT for loadings and mast arm mounting height calculation purposes. For 'Flashing Yellow Arrow' operations, additional electrical detail sheets will be required for programming purposes as required by NCDOT.
7. RKA will submit copies of the plans to the NCDOT for review and comment.
8. Based on review comments, we will make the necessary corrections to the plans and prepare final plans for distribution. RKA will complete two (2) revisions based on review comments received.
9. RKA will prepare traffic signal quantities and cost estimates if necessary.

10. It is understood that neither construction inspection nor administration is included as part of this project. Contractor bid quote request and reviews are also not included in this fee estimate since that work is considered construction administration. In the event of field conflicts due to inaccurate surveys or base plan designs, it may be necessary to conduct additional site visits with the signal contractor to work out these details. Any of these additional services or site meetings requested by the client will be deemed 'extra services' and if required will be invoiced on an hourly fee basis.
11. This proposal scope does not include the preparation of "as-built" drawings of the intersection after completion of the project. It is normal practice for the selected signal contractor to 'red-line' any minor changes to the signal plans and forward to the NCDOT Division Traffic Engineer as a Plan of Record.

#### **Task 9. Permitting**

The following permit packages will be submitted in conjunction with this proposal:

- Erosion Control Permit for Commerce Park lots
- Master Stormwater Permit for Commerce Park and Plant lots
- NCDOT Driveway Permit for Commerce Park

The following permit packages will be prepared but not submitted due to lack of facility connections:

- DEH Water Distribution Permit for Commerce Park lots
- DWQ Gravity Sewer Extension for Commerce Park lots

The following permit package is not anticipated at this time, but is shown for information:

- NCDOT Signalized Intersection Permit

#### **INFORMATION PROVIDED BY CLIENT**

Engineer shall rely on the completeness and accuracy of all information and technical data provided by the Client and Client's other consultants. The Client shall provide all necessary information required by Engineer to complete its work, including any updates to previously provided information and any other information reasonably requested by Engineer.

Items provided by Client include:

- Wetlands Delineation Data and Mapping
- Threatened & Endangered Species Surveys

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- Permitting Data
- Boundary and Wetland Delineation Survey in hard copy (sealed) and in electronic format (AutoCAD 2008)
- Conceptual Master Plan
- Preliminary Site Plan
- Phase I / II Environmental Assessments
- Architectural Renderings
- Title Work
- Notice of Scheduled Meetings
- Access to the Site

#### **ADDITIONAL SERVICES**

Any services not reflected in the Scope of Services section of this Agreement, including but not limited to the following, are not included in this Agreement. Engineer may elect to provide or coordinate these services, if requested, but they will be considered additional services. These additional services can be performed as mutually agreed upon by the Client and Engineer and documented by a written addendum to this Agreement. They are as follows:

- Tree surveys
- Survey of off-site utilities, bridges or roadways
- Subsurface utility locating services and subsurface utility engineering(SUE) services
- Due diligence / Site analysis report
- Wetland determination, delineation, mapping, permitting or mitigation design
- Threatened & Endangered Species Surveys
- Environmental Assessments or Environmental Impact Statements
- Geotechnical Investigations and Reports, including pavement design
- Archeological or Historical Survey
- Detailed flood plain studies
- LOMR or LOMR-F (Letter of Map Revision)
- Traffic control plans, Sequencing Plans, Temporary Signage Plans
- Building Architectural design and / or permitting services
- Air quality permit / Transportation Facility Permit
- Noise permit
- CAMA permit
- Landscape architectural design and plans
- Irrigation design and details
- Signage design and details

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- Site amenities, including but not limited, to boat ramps, docks, pools, clubhouse, entrance wall features, recreational facilities, unless specifically included herein
- Design of fountains or other water features
- Cost associated with bonds for NCDOT or other entities
- Phasing plans, including but not limited to a "early site" or "rough grading package"
- Electrical design and details, including gates and electronic fencing
- Wire utilities design, including electric, telephone and cable services
- Fire flow testing and analysis, including fire pump and system design
- Existing utility capacity and conditions evaluation
- Pump station design(water booster and sanitary sewer)
- Off-site channelization or drainage improvements
- Off-site infrastructure improvements(water, sewer and storm drainage)
- Offsite roadway improvements
- Structural engineering services, including retaining wall design
- Submittals and / or permit applications beyond those already included in the Scope of Services
- Revisions to our plans as a result of changes by Client after approval of Client / City / State agencies, including modification to building(s) footprint or shifting of location(s) on the site.
- Plan revisions due to value engineering after plan approval and permits
- Attendance at meetings and / or public hearings beyond those described in the Scope of Services, including Planning or City Council / Board of Commissioners
- Earthwork quantities: Engineer will endeavor to grade the project to minimize earthwork costs, but in no way does this guarantee a balanced site.
- Lender certifications and / or exhibits for loan closings
- Bidding & Contract Negotiation
- Construction Administration or Construction Observation Services
- Construction staking services
- Special inspections
- Record drawings based on contractor's markups or as-built surveys
- Payment of any review, application or permit fees
- Representation for court appearances for litigation, or preparation for the same

**COMPENSATION AND BILLING**

<b>Task / Activity / Phase</b>	<b>Compensation Method</b>	<b>Fee Amount</b>
Task 1. Topographic Survey	FIXED FEE	\$ 52,000
Task 2. Two (2) Lot Subdivision Plat	FIXED FEE	\$ 6,500
Task 3. Roadway Design	FIXED FEE	\$ 25,850
Task 4. Water and Sewer Design	FIXED FEE	\$ 13,000
Task 5. Stormwater Design	FIXED FEE	\$ 15,000
Task 6. Lighting Plan	FIXED FEE	\$ 4,000
Task 7. Site Amenities	FIXED FEE	\$ 4,000
<b>MCE Design &amp; Survey Services Subtotal</b>		<b>\$ 120,350</b>
Task 8. As-Needed Subcontractor Services		
A. <u>Geotechnical Investigations</u>	FIXED FEE	\$ 5,000
B. <u>Traffic Impact Analysis Report Scope of Services</u>	FIXED FEE	\$ 11,300
C. <u>Traffic Signal Design Scope of Services</u>	FIXED FEE	\$ 10,350
Task 9. Permitting	FIXED FEE	\$ 12,000
<b>Total</b>		<b>\$ 159,000</b>

**COMPENSATION & BILLING METHODS**

**FIXED FEE**

This work will be billed on a fixed price basis for the scope of work described. We will invoice for our fixed fee services at the end of billing cycle on a percent complete basis.

Note that Task 8 is subcontractor services that may be required to complete the project; however, these services will not commence without specific written authorization by Pender County.

**OTHER COSTS**

All permitting, application and similar project fees will be paid directly by the Client. If, due to time constraints for a submittal, McKim and Creed is required to pay for any submittal fee, it will be marked up 15% and billed directly to Client as an additional reimbursable expense entitled "Permit".

**PAYMENT**

The Client is specifically requested to review the "Billing and Payment" Section of the attached McKim & Creed General Conditions. McKim & Creed's ability to continue providing services on your project is dependent on the timely payment of our invoices. McKim & Creed reserves the right, and the Client acknowledges

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this right by entering into this Agreement, to stop work and withhold the submittal of our documents to all parties including, but not limited to, regulatory agencies should the Client's invoices become past due.

#### **SCHEDULE OF SERVICES**

We will perform the work described in the above Scope of Services as expeditiously as practical to meet a mutually agreed schedule with the Client upon receipt of your written authorization to proceed.

Based on our current workload, we are available to commence work on this project within five business days following receipt of your written authorization to proceed. We will complete all design and survey work such that the project will be ready for submittal to the appropriate permit agencies in ninety (90) calendar days after receipt of Authorization to proceed. We will provide complete design plans and specifications suitable for public bid within one hundred fifty (150) Calendar days after receipt of Authorization to proceed.

#### **ATTACHMENTS**

The following attachments are incorporated into and made part of this proposal and Agreement by reference:

1. McKim & Creed General Conditions (01 / 2009-1) – 5 pages

#### **ACCEPTANCE**

If acceptable, sign and return one (1) copy of this document and all attachments for our files. Our receipt of the executed copy of this proposal will serve as our Notice to Proceed. This proposal is valid for thirty (30) days from the date of the proposal. If the proposal is not accepted within thirty (30) days, we reserve the right to revise or withdraw the proposal entirely at our discretion.

We look forward to working with you on the Pender Commerce Park project and appreciate this opportunity to serve Pender County engineering needs. If you have any questions or need additional information, please feel free to call us.

Sincerely,

McKIM & CREED, P.A.

Tony Boahn, PE  
Vice-President



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I hereby authorize McKim & Creed, PA to proceed with the work described above.

**PENDER COUNTY**

By: \_\_\_\_\_ Date: \_\_\_\_\_  
(Print or Type Name)

\_\_\_\_\_  
(Signature)

Title: \_\_\_\_\_

Attest: \_\_\_\_\_ Date: \_\_\_\_\_  
(Print or Type Name)

\_\_\_\_\_  
(Signature)

Title: \_\_\_\_\_

**McKim & Creed, P.A.**  
**Engineering Division**  
**General Conditions**  
**(01/2009-1)**

**Billing and Payment.** Invoices will be submitted by McKim & Creed, P.A. (the "Engineer") to the Client monthly for services performed and expenses incurred pursuant to this Agreement. Payment of each such invoice will be due upon receipt and considered past due if not paid within thirty-(30) days of the date of the invoice. Any retainers shall be credited on the final invoice.

a) **Interest.** A service charge will be added to delinquent accounts at 18 percent per annum (1.5 percent per month).

b) **Suspension of Services.** If the Client fails to make any payment due the Engineer for services and expenses within thirty (30) days of the invoice date on the project(s) covered by this agreement or any other project(s) being performed by Engineer for Client, the Engineer may suspend services under this Agreement until it has been paid in full for all past due amounts owed by Client for services and expenses. The Engineer shall have no liability whatsoever to the Client for any costs or damages occurring as a result of such suspension caused by any such breach of this Agreement by Client.

c) **Collection Costs.** In the event legal action is necessary to enforce the payment provisions of this Agreement, the Engineer shall be entitled to collect from the Client any judgment or settlement sums due, reasonable attorneys' fees, court costs and expenses incurred by the Engineer in connection therewith and, in addition, the reasonable value of the Engineer's time and expenses spent in connection with such collection action, computed at the Engineer's prevailing fee schedule and expense policies.

d) **Termination of Services.** The failure of the Client to make payment to the Engineer in accordance with the payment terms set forth herein shall constitute a material breach of this Agreement and shall entitle the Engineer, at its option, to terminate the Agreement. Any material breach of this Agreement by the Client shall, at the Engineer's option and in its sole discretion, constitute a breach of and default under any and/or all other agreements between the Client and Engineer.

**Confidentiality.** The Engineer agrees to keep confidential and not to disclose to any person or entity, other than the Engineer's employees, sub-consultants and the general contractor and subcontractors, if appropriate, any data and information not previously known to and generated by the Engineer or furnished to the Engineer and marked CONFIDENTIAL by the Client. These provisions shall not apply to information in whatever form that comes into the public domain, nor shall it restrict the Engineer from giving notices required by law or complying with an order to provide information or data when such order is issued by a court, administrative agency or other authority with proper jurisdiction, or if it is reasonably necessary for the Engineer to defend itself from any suit or claim.

The Client agrees that the technical methods, techniques and pricing information contained in any proposal submitted by the Engineer pertaining to this project or in this Agreement or any addendum thereto, are to be considered confidential and proprietary, and shall not be released or otherwise made available to any third party without the express written consent of the Engineer.

**Consequential Damages.** Notwithstanding any other provision of the Agreement, neither party shall be liable to the other for any

consequential damages incurred due to the fault of the other party, regardless of the nature of the fault or whether it was committed by the Client or the Engineer, their employees, agents, sub-consultants or subcontractors. Consequential damages include, but are not limited to, loss of use and lost profit.

**Non-Contingency.** The Client acknowledges and agrees that the payment for services rendered and expenses incurred by the Engineer pursuant to this Agreement is not subject to any contingency unless the same is expressly set forth in this Agreement. Payments to the Engineer shall not be withheld, postponed or made contingent on the financing, construction, completion or success of the project or upon receipt by the Client of offsetting reimbursement or credit from other parties causing Additional Services or expenses. No withholdings, deductions or offsets shall be made from the Engineer's compensation for any reason.

**Opinions of Cost.**

(a) Since the Engineer has no control over the cost of labor, materials, equipment or services furnished by others, or over methods of determining prices, or over competitive bidding or market conditions, any and all opinions as to costs rendered hereunder, including but not limited to opinions as to the costs of construction and materials, are estimates only and shall be made on the basis of its experience and qualifications and represent its best judgment as an experienced and qualified professional engineer, familiar with the construction industry; but the Engineer cannot and does not guarantee that proposals, bids or actual costs will not vary from opinions of probable cost prepared by it and the Engineer shall have no liability whatsoever if the actual cost differs from the Engineers estimate. If at any time the Client wishes greater assurance as to the amount of any cost, Client shall employ an independent cost estimator to make such determination. Engineering services required to bring costs within any limitation established by the Client will be paid for as additional services hereunder by the Client.

**Termination.** The obligation to provide further services under this Agreement may be terminated by either party upon seven (7) days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. In the event of any termination, the Engineer shall provide a final statement of charges due and will be paid for all services rendered to the date of termination, all expenses subject to reimbursement hereunder, and other reasonable expenses incurred by the Engineer as a result of such termination. In the event the Engineer's compensation under this Agreement is a fixed fee, upon such termination the amount payable to the Engineer for services rendered will be determined using a proportional amount of the total fee based on a ratio of the amount of the work done, as reasonably determined by the Engineer, to the total amount of work which was to have been performed, less prior partial payments, if any, which have been made.

**Reuse of Documents.** All documents, including but not limited to drawings and specifications, prepared by the Engineer pursuant to this Agreement are related exclusively to the services described herein. They are not intended or represented to be suitable for reuse by the Client or others on extensions of this project or on any other

McKim & Creed, P.A.  
Engineering Division  
General Conditions  
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project. Any reuse without written verification or adaptation by the Engineer for specific purposes intended will be at the Client's sole risk and without liability or legal exposure to the Engineer; and the Client releases and shall indemnify and hold the Engineer harmless from all claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting there from. Any such verification or adaptation will entitle the Engineer to further compensation at rates to be agreed upon by the Client and the Engineer.

**Liability.** The Engineer is protected by Workmen's Compensation Insurance (and/or employer's liability insurance), professional liability insurance, and by public liability insurance for bodily injury and property damage and will furnish certificates of insurance upon request. The Engineer agrees to compensate the Client for loss, damage, injury or liability arising directly and exclusively from the negligent acts or omissions of the Engineer, its employees, agent, subcontractors and their employees and agents but only to the extent that the same is actually covered and paid under the foregoing policies of insurance. If the Client requires increased insurance coverage, the Engineer will, if specifically directed by the Client, take out additional insurance, if obtainable, at the Client's expense.

**Limitation of Liability.** In performing its professional services hereunder, the Engineer will use that degree of care and skill ordinarily exercised, under similar circumstances, by reputable members of its profession practicing in the same or similar locality. No other warranty, express or implied, is made or intended by the Engineer's undertaking herein or its performance of services hereunder. THE CLIENT UNDERSTANDS AND AGREES THAT THE ENGINEER HAS NOT MADE AND IS NOT MAKING ANY PROMISE, WARRANTY OR REPRESENTATION EXCEPT THE WARRANTIES EXPRESSLY MADE HEREIN, AND THE ENGINEER EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER IMPLIED WARRANTIES. ~~It is agreed that, in accordance with and subject to the provisions of the foregoing paragraph (Liability) and this paragraph, any claim for damages, cost of defense, or expenses which the Client or any third party may assert against the Engineer on account of any and all design defects, errors, omissions, and professional negligence shall be limited to \$50,000 or the amount of Engineer's fee for this project, whichever is greater.~~ Under no circumstances shall the Engineer be liable for extra costs or other consequences due to changed conditions or for costs related to the failure of the contractor or material men to install work in accordance with the plans and specifications. ~~The limitation of liability to \$50,000 or the amount of Engineer's fee for this project is a specifically bargained for provision of this agreement, reflected in Engineer's fee.~~ The Engineer shall not be liable for errors in judgment or for any loss or damage, which occurs for any reason beyond the control of the Engineer. No action may be instituted hereunder more than one year after the cause of action accrued or should have been discovered by reasonable diligence. The provisions of this paragraph and the previous paragraph (Liability) shall survive the termination of this Agreement.

**Limitation of Liability for Construction Staking.** It is agreed that, in accordance with and subject to the provisions of the foregoing paragraphs (Liability), (Limitation of Liability) and this paragraph,

any claim for damages, cost of defense, or expenses which the Client or any third party may assert against the Engineer on account of or related to construction staking shall be limited to \$ \_\_\_\_\_, which amount shall be less than \$50,000, or the amount of the Engineer's fee for this project, whichever is greater. The limitation of liability for construction staking is a specifically bargained-for provision of this agreement, reflected in Engineer's fee.

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Client initials

~~**Expenses of Litigation.** In the event litigation in any way related to the services performed hereunder is initiated against the Engineer by the Client, its contractors, or subcontractors, and such litigation concludes with the entry of a final judgment favorable to the Engineer, the Client shall reimburse the Engineer for all of its reasonable attorneys' fees and other expenses related to said litigation. Such expenses shall include, but shall not be limited to, the cost, determined at the Engineer's normal hourly billing rates, of the time devoted to the defense of such litigation by the Engineer's employees.~~

**Controlling Law.** This Agreement is to be governed by the law of the State of North Carolina. The parties agree that any suit or action related to this Agreement shall be instituted and prosecuted in the courts of the County of New Hanover, State of North Carolina, and each party waives any right or defense relating to such jurisdiction or venue.

**Binding Effect.** This Agreement shall bind, and the benefits thereof shall inure to the respective parties hereto, their legal representatives, executors, administrators, successors and permitted assigns.

**Merger; Amendment.** This Agreement constitutes the entire agreement between the Engineer and the Client with respect to its subject matter, and all negotiations and oral understandings between the parties are merged herein. This Agreement can be supplemented and/or amended only by a written document executed by both the Engineer and the Client.

**Ownership of Instruments of Service.** All reports, plans, specifications, field data, notes and other documents, including all documents on electronic media, prepared by the Engineer as instruments of service shall remain the property of the Engineer. The Engineer shall retain all common law, statutory and other reserved rights, including the copyright thereto.

**Photographs.** Photographs of any completed project embodying the services of the Engineer provided hereunder may be made by the Engineer and shall be considered as its property, and may be used by it for publication.

**Assignment.** Neither party to this Agreement shall transfer, sublet or assign any rights under or interest in this Agreement, including but not limited to fees that are due or fees that may be due, without the prior written consent of the other party.

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**Archiving of Project Documentation.** Engineer shall maintain copies of printed project documentation for a period of three years from substantial completion of Engineer's services. Engineer shall maintain copies of all electronic media related to the project for a period of one year from substantial completion of Engineer's services. Requests for reproduction of project documentation after these periods have expired will be considered additional services and will be invoiced at the Engineer's prevailing hourly rates at the time of the request, plus expenses.

**Betterment.** If, due to the Engineer's error, any required item or component of the project is omitted from the Engineer's construction documents, the Engineer shall not be responsible for paying the cost to add such item or component to the extent that such item or component would have been otherwise necessary to the project or otherwise adds value or betterment to the project. In no event will the Engineer be responsible for any cost or expense that provides betterment, upgrade or enhancement of the project.

**Electronic Files.** Because data stored on electronic media can deteriorate undetected or be modified without the Engineer's knowledge, the Client agrees that it will accept responsibility for the completeness, correctness, or readability of any electronic media delivered to the Client after an acceptance period of 30 days after delivery of the electronic files, and that upon the expiration of this acceptance period, Client will release, indemnify and save harmless the Engineer from any and all claims, losses, costs, damages, awards or judgments arising from use of the electronic media files or output generated from them. The Engineer agrees that it is responsible only for the printed and sealed drawings and documents, and if there is a conflict between these printed documents and the electronic media, the sealed documents will govern. Engineer makes no warranties, express or implied, under this agreement or otherwise, in connection with the Engineer's delivery of electronic files.

**Certifications, Guarantees and Warranties.** The Engineer shall not be required to sign any documents, no matter by whom they may be requested, that would result in the Engineer's having to certify, guarantee or warrant the existence of conditions, which the Engineer cannot ascertain. The Client also agrees that it has no right to make the resolution of any dispute with the Engineer or the payment of any amounts due to the Engineer in any way contingent upon the Engineer's signing any such certification.

**Corporate Protection.** It is intended by the parties to this Agreement that the Engineer's services in connection with the project shall not subject the Engineer's individual employees, officers or directors to any personal legal exposure for the risks associated with this project. Therefore, and notwithstanding anything to the contrary contained herein, the Client agrees that as the Client's sole and exclusive remedy, any claim, demand or suit shall be directed and/or asserted only against the Engineer, a North Carolina corporation, and not against any of the Engineer's employees, shareholders, officers or directors.

**Extension of Protection.** The Client agrees to extend any and all liability limitations and indemnification's provided by the Client to the Engineer to those individuals and entities the Engineer retains for performance of the services under this Agreement, including but not limited to the Engineer's officers and employees and their heirs and assigns, as well as

the Engineer's sub-consultants and their officers, employees, heirs and assigns.

**Job-Site Safety.** Neither the professional activities of the Engineer, nor the presence of the Engineer or its employees and sub-consultants at a construction site, shall relieve the General Contractor and any other entity of their obligations, duties and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending or coordinating all portions of the Work of construction in accordance with the contract documents and any health or safety precautions required by any regulatory agencies. The Engineer and its personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions. The Client agrees that the General Contractor is solely responsible for job-site safety, and warrants that this intent shall be made evident in the Client's agreement with the General Contractor. The Client also agrees that the Client, the Engineer and the Engineer's consultants shall be indemnified and shall be made additional insured under the General Contractor's general liability insurance policy.

**Scope of Services.** Services not set forth as Basic Services or Additional Services and listed in this Agreement are excluded from the scope of the Engineer's services and the Engineer assumes no responsibility to perform such services.

**Severability and Survival.** Any provision of this Agreement later held to be unenforceable for any reason shall be deemed void, and all remaining provisions shall continue in full force and effect. All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating responsibility or liability between the Client and the Engineer shall survive the completion of the services hereunder and the termination of this Agreement.

**Shop Drawing Review.** If included in the scope of services to be provided, the Engineer shall review and approve Contractor submittals, such as shop drawings, product data, samples and other data, as required by the Engineer, but only for the limited purpose of checking for conformance with the design concept and the information expressed in the contract documents. This review shall not include review of the accuracy or completeness of details, such as quantities, dimensions, weights or gauges, fabrication processes, construction means or methods, coordination of the work with other trades or construction safety precautions, all of which are the sole responsibility of the Contractor. The Engineer's review shall be conducted with reasonable promptness while allowing sufficient time in the Engineer's judgment to permit adequate review. Review of a specific item shall not indicate that the Engineer has reviewed the entire assembly of which the item is a component. The Engineer shall not be responsible for any deviations from the contract documents not brought to the attention of the Engineer in writing by the Contractor and approved by the Engineer. The Engineer shall not be required to review partial submissions or those for which submissions of correlated items have not been received.

**Specification of Materials.** The Client understands and agrees that products or building materials, which are permissible under current building codes or ordinances, may, at some future date, be banned or limited in use in the construction industry because of presently unknown hazardous characteristics. The Client agrees that if the Client directs the

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Engineer to specify any product or material, after the Engineer has informed the Client that such product or material may not be suitable or may embody characteristics that are suspected of causing or may cause the product or material to be considered a hazardous substance in the future, the Client waives all claims as a result thereof against the Engineer. The Client further agrees that if any product or material specified for this project by the Engineer shall, at any future date be suspected or discovered to be a health or safety hazard, the Client hereby releases the Engineer from any and all liabilities and waives all claims against the Engineer relating thereto.

**Standard of Care.** Services provided by the Engineer under this Agreement will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances in the same geographic area.

**Suspension of Services.** If the project is suspended for more than thirty-(30) calendar days in the aggregate, the Engineer shall be compensated for services performed and charges incurred prior to such suspension and, upon resumption of services, the Engineer shall be entitled to an equitable adjustment in fees to accommodate the resulting demobilization and re-mobilization costs. In addition, there shall be an equitable adjustment in the project schedule based on the delay caused by the suspension. If the project is suspended for more than ninety-(90) calendar days in the aggregate, the Engineer may, at its option, terminate this Agreement upon giving notice in writing to the Client.

**Unauthorized Changes to Documents.** In the event the Client consents to, allows, authorizes or approves of changes to any plans, specifications, construction documents or electronic media, and these changes are not approved in writing by the Engineer, the Client recognizes that such changes and the results thereof are not the responsibility of the Engineer. Therefore, the Client releases the Engineer from any liability arising from the construction, use or result of such changes. In addition, the Client agrees, to the fullest extent permitted by law, to indemnify and hold the Engineer harmless from any damage, liability or cost (including reasonable attorneys' fees and costs of defense) arising from such changes.

**Compensation for Additional Services.** The undertaking of the Engineer to perform professional services under this Agreement extends only to those services specifically described herein. If upon the request of the Client, the Engineer agrees to perform additional services hereunder, the Client and the Engineer shall negotiate and agree upon an additional fee to be paid to the Engineer for completion of the agreed upon Additional Services. The Engineer will be under no obligation to begin or complete requested Additional Services until the additional fee has been negotiated and agreed upon in writing by the Client and the Engineer.

**Hourly Billing Rates.** All services to be billed on an hourly basis under this agreement will be billed using the Engineer's prevailing billing rate schedule at the time services are provided. If a specific rate schedule is to be used for this Agreement, it shall expire no later than one year from the date of this Agreement and will be replaced with the prevailing rate schedule in effect at that time.

**Priority over Form Agreements.** The parties agree that the provisions of this Agreement shall control and govern over any Work Orders, Purchase Orders or other documents, which the Client may issue to Engineer in regard to the project(s) which is (are) the subject of this Agreement. The Client may issue such documents to Engineer for its convenience for accounting or other purposes, but any such Orders will not alter the terms of this Agreement, regardless of any contrary language appearing therein.

**Indemnity.** The Client shall and hereby agrees to indemnify and hold harmless the Engineer from and against all losses, costs, damages, expenses and liability of whatever nature, including but not limited to reasonable attorney's fees, litigation and court costs, expert witness fees and expenses, amounts paid in settlement, amounts paid to discharge judgments, penalties, punitive damages, and interest, directly or indirectly resulting from, arising out of or related to one or more Claims, as hereinafter defined. The word "Claims" as used herein shall mean all claims (whether valid or not), lawsuits, causes of action, liens, investigations, administrative proceedings, and other legal actions and proceedings of whatsoever nature that directly or indirectly result from, arise out of or relate to this Agreement, the project which is the subject of this Agreement, and/or any other matter or transaction contemplated hereunder, including without limitation, any failure by the Client to adhere to or comply with any drawing, design, plans, specifications, recommendation or advice given or furnished by the Engineer to the Client; provided however, that the foregoing shall not apply to any claim resulting primarily from the negligence of the Engineer.

**Paragraph Headings.** The paragraph headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement.

**Third Parties.** Nothing in this Agreement shall be construed as giving any person, firm, corporation or other entity other than the parties to this Agreement and their respective successors and permitted assigns, any right, remedy or claim under or in respect of this Agreement or any of its provisions.

**Default.** The Client shall be in default under this Agreement if (i) it fails to pay in full any invoice from the Engineer on the due date or fails to make any other payment due to the Engineer under this Agreement, (ii) it fails to observe or perform any other term, condition or covenant under this Agreement, (iii) it breaches any warranty or representation made under this Agreement, (iv) it dissolves, terminates or liquidates its business, or its business fails or its legal existence is terminated or suspended, (v) any voluntary or involuntary bankruptcy, reorganization, insolvency, receivership, or other similar proceeding is commenced by or against the Client, or (vi) it becomes insolvent, makes an assignment for the benefit of creditors, or conveys substantially all of its assets.

**Design without Construction Phase Services.** If the services to be provided by Engineer hereunder do not include construction observation and/or construction administration services, or if such services are included in Engineers contracted services and Client later decides to perform these services itself or decides to retain other consultants or individuals to perform these services, Engineer assumes no responsibility for interpretations of the Engineer's services or for any

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construction observation, construction administration and/or supervision performed by Client or other parties and Client waives any and all claims against Engineer for any losses, claims, costs or damages of any kind whatsoever that may be in any way connected thereto.

In addition Client agrees, to the fullest extent permitted by law, to indemnify and hold Engineer harmless from any loss, claim, damage or cost, including reasonable attorneys' fees and costs of defense, arising or resulting from the performance of construction observation, construction administration and/or supervision by Client, its employees, agents or consultants, and including any and all claims arising from the modification or adjustment of, or any clarifications or interpretations of, the Engineer's Work by others.

Unless, in the Engineer's sole opinion, appropriate levels of construction observation and construction administration services are contracted for and performed by Engineer, Engineer will not be responsible to provide any engineering or other certifications related to the construction or installation of any improvements.

**Reliance on Data Provided by Others.** Engineer shall be entitled to reasonably rely on the accuracy of information provided to it by Client or any of Client's other consultants or sub-consultants. Engineer shall not be responsible to review extensively the information provided to insure the accuracy thereof. Client agrees to not hold Engineer responsible for errors or omissions in Engineer's work that are directly attributable to errors or incorrect data provided to Engineer by Client or Client's other consultants. Client further acknowledges that any redesign or corrective efforts required by Engineer resulting from incorrect information provided by Client or Client's other consultants will be paid for by the Client as additional services.

**Engineer Retaining Consultants.** In the event that Engineer is required by Client to retain other Consultants to perform necessary services related to the project, the Client agrees to defend, indemnify and hold the Engineer harmless from and against all claims, losses, liabilities and damages arising out of the performance of services by such Consultants. In the event that Client suffers any financial loss or expense resulting from or alleged to result from the performance or the failed performance of any Consultant retained by Engineer, the Client agrees to pursue recovery of and assert any claims based upon its losses, expenses and/or damages solely and directly against those Consultants. The Client agrees to waive any claims, losses, liabilities or damages against Engineer arising out of the performance of such Consultants. In consideration of such indemnity and waiver, the Engineer agrees to assign its rights and/or claims against those Consultants pursuant to the Consultants' agreements with the Engineer to the Owner.

**Credit and Financial Obligations.** Prior to commencement of the work, Engineer may require that Client provide reasonable credit information and other documentation to confirm that the Client has made financial arrangements to fulfill the Client's payment obligations under this Agreement. Engineer may also require such information at any time during the performance of Engineer's services should the Client fail to make payments per this Agreement, a change in the scope materially changes the contract sum, or Engineer identifies in writing a reasonable concern regarding the Client's ability to make payment when payment is due. The Client may be required to

furnish this information prior to further commencement or continuation of services by Engineer and Engineer shall not be responsible for the cost of any delay occurring as a result of such a request.

**Markup on Expenses.** Unless specified otherwise in our proposal, all sub consultant costs and other project related costs incurred by Engineer will be billed with a 15% markup. Company vehicle mileage and internal reproduction costs will be billed at the Engineer's prevailing rate for those items. Personal vehicle mileage costs incurred on the project by employees of Engineer will be billed at the prevailing IRS mileage rate in effect at the time of travel.