

**RESOLUTION 13-55**

**A RESOLUTION AUTHORIZING FUNDING FOR PRELIMINARY DESIGN DEVELOPMENT, PREPARATION OF BUILDING AND CONSTRUCTION PLANS AND DOCUMENTS, AND BIDDING PHASE SERVICES FOR A NEW FIRE HALL**

**WHEREAS**, the Spring Hill Board of Mayor and Aldermen is committed to the safety of the citizens of the City of Spring Hill, TN; and

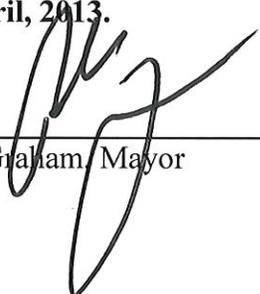
**WHEREAS**, the City of Spring Hill Board of Mayor and Aldermen wishes to address the urgent need for a new fire hall on Port Royal Road; and

**WHEREAS**, the Board of Mayor and Aldermen has instructed staff to proceed in getting this crucial project started; and

**WHEREAS**, the City Engineer has submitted a proposal for preliminary design development, preparation of building and construction plans and documents, and bidding phase services for the new fire hall; and

**NOW, THEREFORE BE IT RESOLVED**, by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee that an expenditure of approximately \$62,000.00 is hereby authorized for preliminary design development, preparation of building and construction plans and documents, and bidding phase services of a new fire hall at Port Royal Road to be done by Dempsey Dilling and Associates.

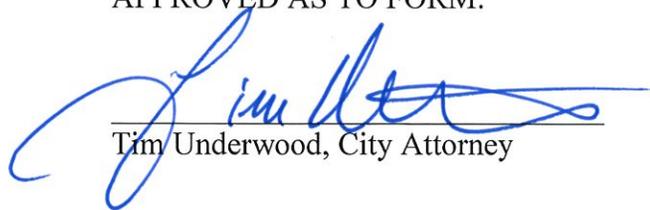
**Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee, this 20th day of April, 2013.**

  
\_\_\_\_\_  
Rick Graham, Mayor

ATTEST:

  
\_\_\_\_\_  
April Goad, City Recorder

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Tim Underwood, City Attorney



**DEMPSEY, DILLING & ASSOCIATES, P.C.**

**ENGINEERING CONSULTANTS**

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SMYRNA, TENNESSEE 37167  
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WWW.DEMPSEYDILLING.COM

May 16, 2013

Mr. Jim Swindle  
Spring Hill Fire Chief  
Post Office Box 789  
Spring Hill, TN 37174

**Re: PROPOSAL FOR ENGINEERING AND ARCHITECTURAL SERVICES  
CITY OF SPRING HILL PORT ROYAL ROAD FIRE STATION PLANS REVISION**

Mr. Swindle:

Thank you for allowing Dempsey, Dilling & Associates, P.C. (DDA), the opportunity to submit this proposal for engineering and architectural design services pertaining to the proposed new fire station for the City of Spring Hill to be located on Port Royal Road in Spring Hill, TN.

It is our understanding the new single story facility for the above referenced project will consist of approximately 7,000 sq. ft. The layout of the facility will be based on the previously design provided by our firm in 2006. The revisions will be in accordance to update in accordance with current building codes and the revisions as discussed with you on May 15, 2013 which consisted of the following items:

- Incorporate a fire sprinkler system, risers to be located on the inside corner of the Apparatus Bay area
- EMS Area: will be revised to become a decontamination room, storage room (with double doors), gear storage (with double doors, floor drain in the northeast interior corner and 220 volt washer and dryer hookups located on the northerly wall near the drain), cascade (air tank fill room with outside exhaust), mop sink area and restroom (no shower and non ADA); upstairs area to contain walls and a door to allow an enclosed and conditioned area with suspended tile ceiling and standard fluorescent lighting. Both downstairs and upstairs floors will be unfinished concrete. Exterior stairs to the upper level shall be adjusted along the lower wall (located between storage areas and truck bay area) to allow adequate entrance height to the door entering the Decontamination Room from the Apparatus bay area
- Communications Room: no window to bay area; walls to be of concrete block filled with concrete and contain reinforcement bars. Reinforced concrete ceiling and storm proof window and door
- No exterior awning over doors; standard light fixtures with standard energy saving bulbs lighting in down direction only (no dual up and down lighting fixtures)
- Day Room: no corner window, double window on each wall near corner; fire suppression system in the kitchen
- Interior stained concrete (not carpet and tile) floors throughout living area except for locker rooms which will have tile floors; interior lighting will be standard energy efficient fluorescent fixtures rather than canister lighting; canister lighting only around kitchen area on a separate switch from Day Room lighting
- Apparatus Bay doors to incorporate adequate motors to properly raise and lower doors without continued difficulty

- Exterior doors to incorporate controlled entrance mechanisms and security equipment to meet Homeland Security requirements, if any
- Review solid birch interior doors versus metal doors for most economical cost; review types of exterior windows to determine most cost effectiveness while also allowing energy efficiencies
- Apparatus Bay Area concrete floor to incorporate and epoxy finish, coating as recommended by the Fire Department based on past experience with flooring durability
- Sheet C2.0: provide a monument sign at the north side of the Apparatus Room exit drive; move the handicap parking spaces to the northwest corner of the building
- Sheet A9.1: detail 4-stairs to be painted diamond plated steel instead of poured concrete within metal frame;
- Sheet M1.1: Plymovent Air Exhaust Removal System note (and bid documents) shall be revised as to allow an alternate bid of a MagneGrip Air Exhaust Removal System
- Sheet P1.1: Provide two more P-11 wall hydrants, one at the outside west wall between the bay doors and one on the interior wall of the Gear Storage Room at the most southerly bay area

The remaining layout from the existing plans for the facility will not be changed unless items are required to be changed to bring the design in compliance with the International Building Code 2012 editions. Specifically, the facility will consist of an apparatus room with 3 drive-thru bays and living quarters. The facility will also contain a storage room, decontamination room, cascade room, restroom, and gear storage room where the previously located EMS quarters was located. Living quarters will consist of a combined day room and kitchen area, 2 offices, laundry, a separate men's and women's restroom with shower, sleeping quarters for 7 people, and other associated spaces. The living quarters will consist of a combined day room and kitchen area, restroom with shower, sleeping quarters for 2 people, and other associated spaces. The facility is to be located adjacent to a developed residential area along Port Royal Road in the City of Spring Hill; therefore, the exterior of the facility is to be compatible within the residential developed areas. Furthermore, the construction of the facility is to be concrete slab on grade, metal or wood load bearing stud walls, metal or wood pre-engineered roof trusses, brick veneer, asphalt shingle roof, and other finish materials as required. Mechanical systems are to be natural gas if utility is available. The project will be publicly bid.

The scope of this proposal for redesign is described as follows to provide the City of Spring Hill and DDA with a mutual understanding of the scope of services for this project.

#### **1. DESIGN SERVICES:**

**A. Conceptual Design Development**– this has been completed.

**B. Preliminary Design Development** –We will develop proposed revised plans to include a site plan, landscaping plan, and floor plan and proposed building elevations for preliminary submission and approval for the Planning Commission. Further information regarding services to be provided in the redesign is listed as follows:

- Development of preliminary site plan (utilities, grading/drainage, and landscaping)
- Preparation of preliminary floor plans and building elevations (minor changes only as listed above to the previously completed plan)
- Coordination of floor and site plans
- Preliminary reflected ceiling plan, finish plan and furniture plan

- Evaluation and selection of building structural system(s)
- Evaluation and selection of owner furnished equipment, furnishings, etc
- Evaluation of mechanical, plumbing, and electrical systems

**C. Preparation of Building and Construction Plans and Documents** - We will develop the construction drawings and specifications required for the actual construction of the proposed building and related site improvements. These drawings and specifications will be suitable for use in making applications for the building permits required for construction and will include the following information.

**Civil Engineering Design**

Topographic and boundary survey  
Site layout plan  
Site utilities  
Site grading and drainage plan  
Parking layout  
EPSC plan  
Landscape design (minimum per zoning ordinance)  
Details and specifications  
Assist Owner in applying for approval from municipal entities  
Preparation of drainage calculations  
Pre-application meetings  
Storm water permits preparation of Notice of Intent (NOI)  
Preparation of Storm water Pollution Prevention Plan (SWPPP)  
Submission of NOI and SWPPP to Tennessee Department of Environmental and Conservation for NPDES permit as required.

**Architectural Design**

Dimensioned and detailed floor plans for building improvements  
Enlarged plans and details  
Reflected ceiling plans and details  
Roof plan and details  
Exterior elevations  
Wall sections and details  
Door and window schedules, types and hardware requirements  
Cabinet elevations, sections, and details  
Finish plan, schedule, and details  
Special furnishing, equipment, and specialty item coordination

**Structural Design**

Foundation plan and details for a shallow foundation system for entire building  
Wall framing details  
Roof trusses to be designed by truss manufacturer  
Standard structural specifications  
Quality assurance plan for special inspections required by Chapter 17 of the International Building Code

**Mechanical (HVAC) Design**

HVAC system  
Unit types, sizes, and selections  
Duct layout and sizes  
Heating/air conditioning zones selections  
Compliance with applicable energy conservation requirements

**Plumbing Design**

Coordination with local water and sewer companies  
Plumbing fixture selection  
Potable water supply (cold and hot) and sewer line layout and sizing  
Plumbing riser diagrams as necessary  
Oil waste system (if required)

**Electrical Design**

Exterior lighting design and Photometric Plan  
Appliance and equipment coordination  
Coordination with local power company  
Interior lighting design and layout  
Building power systems (i.e. outlets, equipment power supplies, etc.)  
Electrical power distribution system  
Coordination of low voltage (computer, telephone, cable television, security, etc.)  
infrastructure (rough-in conduit only)

**Life and Safety Design**

Building sprinkler design intent layout  
Fire alarm system design and layout (if required)  
Fire extinguisher locations  
Safety fixtures as required

**Plans for Building Code submission and review for applicable building permits**

Submit completed building plans to Codes Department

**Specifications/Bid Document Manual**

Development of specifications and bid documents

**2. BIDDING PHASE SERVICES - A breakdown of services in this phase includes:**

Answer general contractor questions about project  
Written addendums as required  
Bid Qualification and Recommendation

**3. CONSTRUCTION ADMINISTRATION/REPRESENTATION DURING CONSTRUCTION -**

This phase of work includes the general oversight of the general contractor and associated sub-contractors and coordination with manufacturer and manufacturer vendors. Breakdown of services in this phase include:

- Daily inspector onsite periodically to represent owner
- 1 Monthly site visit by Architect for observation of construction
- Site visits by engineers; 4 by structural engineer and 4 by MPE representative
- Change orders review and recommendation

- Monthly Payment Application Review
- Review of shop drawings to ensure supplied items by contractors meet or exceed plans and specifications and specifications other than those listed above in scope of services
- Shop Drawing review of items designed by others for coordination purposes only
- Project Closeout

**SERVICES NOT INCLUDED IN THIS PROPOSAL:**

If the following services are required, they would be in addition to our base fees listed below.

**Geotechnical Services** –soil exploration test borings for sub-surface conditions with written report for foundation and paving specification and design requirements

**Additional Topographical Survey** (beyond current survey which may be required due to soils stockpiles and disturbance of site since original survey was performed) and Site Layout

**Wetland, Flood and other Environmental Studies**

**Hazardous Materials** – subsoil materials, asbestos, lead paint, etc. testing and abatement

**Traffic Studies** – evaluation of road structures around the facility for adequate traffic volumes related to traffic increase by the new facility.

**Off-Site Utility Improvements** – all utilities are expected to be available and have adequate capacity at the property line. Offsite utility and roadway improvements are not included.

**Low Voltage Systems** – phone, computer, television, security, access control, audio and video systems, including coordination with service providers. SOA has connections with a local company that can provide all the systems listed above and can provide coordination of these systems.

**Interior Design** – interior finish color selections (to be performed by owner)

**Record drawings** – revision of construction documents as provided by on-site markups by general contractor for items changed during construction.

**Fees:**

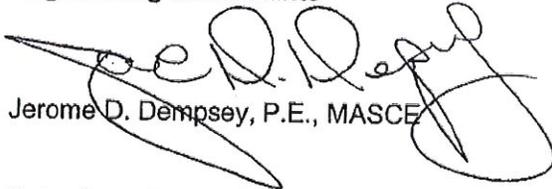
Conceptual Design Development (completed from previous design)	\$0
Preliminary Design Development	\$12,000
Preparation of Building and Construction Plans/Documents	\$42,000
Bidding Phase Services	\$8,000
Construction Administration	\$60,000
<b>Total Fees</b>	<b>\$122,000</b>

Additional site visits (not included in contract proposal description by Civil Engineer, Architect, Structural, Mechanical, Plumbing and/or Electrical Engineers will be considered additional services.

Expenses: Expenses including mileage @ most current standard IRS reimbursement rate/mile, submittal fees, printing, and mailing costs are not included in the proposal as described and will be invoiced separately. Reimbursable expenses will be billed at cost times 1.15. Permit and review fees from any applicable governmental authorities are not included with the above fees and will be reimbursed by the Owner.

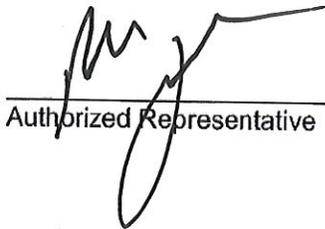
If this proposal is acceptable we can perform this work within our existing contract with the City of Spring Hill. If this proposal is acceptable, please have the proper representative sign a copy and return to our office. Thank you for requesting our proposal on this project, we look forward to working with you.

Sincerely,  
**Dempsey, Dilling & Associates, P.C.**  
**Engineering Consultants**



Jerome D. Dempsey, P.E., MASCE

Note: Acceptance of this proposal also conveys the Terms and Conditions of Dempsey, Dilling & Associates, P.C. current contract with the City of Spring Hill.

Accepted By:  \_\_\_\_\_ Date: 5-20-2013

Authorized Representative