

# The Town of Summerville

200 S. Main Street Summerville, South Carolina 29483 843-851-4215

KCollins@summervillesc.gov

March 12, 2021

# **Request for Proposals**

The Town of Summerville (hereinafter referred to as "Town") is requesting design build proposals for the construction of a new fire station located on Miles-Jameson Road in the town limits of Summerville, SC. Proposal packages will be available beginning **Wednesday, May 12, 2021** on the Town website (www.summervillesc.gov) under the Formal Sealed Bids/Proposals/Quotes menu.

This proposal package is provided by the Town and includes basic proposal non-binding specifications, conceptual civil drawings, conceptual building layout and geotechnical report, in an effort to meet the best needs of the Summerville Fire Department.

There will be a mandatory pre-proposal question and answer meeting conducted at **2:00 PM on Tuesday, May 25, 2021** at 200 S. Main St, Summerville S.C. in Council Chambers on the 3<sup>rd</sup> floor of the Annex building. Face coverings and temperature checks will be required. Only one representative from each design build team will be permitted.

Sealed proposals are to be clearly marked "Summerville Fire-Rescue Station 6" and delivered to Town of Summerville 200 S. Main St. Summerville, SC 29483, ATTN: Krista Collins, Procurement Agent by 4:00pm on Tuesday, June 22, 2021 at which time they will be opened and publicly read in the 2<sup>nd</sup> floor training room at Summerville Town Hall Annex, located at 200 S. Main Street, Summerville, SC 29483. All proposals are final. Late proposals will not be accepted, NO EXCEPTIONS.

All questions pertaining to proposals or addendums should be done at time of the pre-proposal meeting or via email to the Procurement Agent, Krista Collins (<a href="kcollins@summervillesc.gov">kcollins@summervillesc.gov</a>) so that they can be addressed through a posted addendum. No information will be dispersed over the telephone. All registered bidders will receive an email notification when project addendums are posted. The cut-off date for questions is Tuesday, June 1, 2021 at 12:00pm. All questions will be answered and posted online via addendum by 5:00 PM on Thursday, June 15, 2021. Any and all addendums issued will be posted to the Town's website (<a href="www.summervillesc.gov">www.summervillesc.gov</a>) and will become an official part of the proposal package. All addendums will need to be signed and included with the submitted proposal package.

The most complete design build proposals that clearly illustrate, and define the scope of work will be considered. Partial or unclear proposals will be deemed unacceptable and will not be reviewed. All proposals that are not complete with the necessary requested information, or the respondent did not attend the mandatory pre-proposal meeting will not be considered for the project. (See the timeline of events located below.)

The Selection Committee will review all proposals and select the top 3 companies based on the criteria listed in the proposal package. The final selection will be based on interviews and which single proposal is deemed to be in the best interest of the Town of Summerville. The Town of Summerville reserves the right to reject any or all proposals, to waive all formalities and award the contract, as it appears in the best interest of the Town of Summerville. The right is also reserved to hold any and all proposals for a period of sixty (60) days from the opening thereof.

# **Schedule of Events**

The following chart outlines the schedule of events, in order of occurrence, for project milestones:

MILESTONE EVENT	DATE
1. Proposal Package Issuance	Wednesday, May 12, 2021
2. Mandatory Pre-Proposal Meeting	Tuesday, May 25, 2021 @ 2:00pm
3. Deadline for Submittal of Questions	Tuesday, June 15, 2021 @ 12:00pm
4. Answers Posted via Addendum Online	Thursday, June 17, 2021 by 5:00pm
5. Proposal Due Date	Tuesday, June 22, 2021 @ 4:00pm
6. Proposal Evaluation Completed	Tuesday, July 6, 22, 2021

The Town reserves the right to change the schedule of events, as it deems necessary. In the event of a major date change, the Town may notify known and registered participants via email.

# Summerville Fire – Rescue Station 6 Miles-Jameson Rd. Summerville SC

Non-Binding Proposed
Project Specifications for
Design-Build Proposal
Assistance only

# Summerville Fire-Rescue - Station 6

# **New Construction**

# Miles-Jameson Rd., Summerville, SC

# **INDEX**

Division 1	General Requirements, Allowances
Division 2	Site Construction
Division 3	Concrete
Division 4	Masonry
Division 5	Metals
Division 6	Woods and Plastics
Division 7	Thermal and Moisture Protection
Division 8	Doors and Windows
Division 9	Finishes
Division 10	Specialties
Division 11	Equipment
Division 12	Furnishings
Division 13	Special Construction (Pre-Engineered Building and Fire
	Suppression System)
Division 14	Conveying Systems
Division 15	Mechanical
Division 16	Electrical

# OTHER ITEMS INCLUDED WITH THIS INFORMATION PACKAGE

- 1. CONCEPTUAL FLOOR PLAN
- 2. CONCEPTUAL SITE PLAN
- 3. PROPOSAL FORM
- 4. SPACE PROGRAM WITH REQUIREMENTS FOR EACH ROOM
- 5. GEOTECHNICAL REPORT

## **Division 1 General Requirements –**

- 1.1 Project Identification: The project name is: Summerville Fire & Rescue-Station 6. New Construction of an Essential Building. The Owner of the property is: The Town of Summerville.
- Project Drawings for Proposal Purposes: Conceptual floor plans and site plans, are provided with these documents to assist the Design-Builder with the preparation of their proposal. All proposals must be based on the design, size, and functional relationships shown on the drawings. (A conceptual elevation is not available. Please refer to the design of Summerville Fire/Rescue stations 2 and 3 located at 110 Luden Drive and 1701 Old Trolley Road for reference.)
- 1.3 Project Specifications for Proposal Purposes: All items contained in these specifications are for assisting the Design-Builder with the preparation of a complete set of specifications for approval by the Owner. These specifications are not to be considered as complete and should not be considered permanent specifications for use in construction of the project. They should be used only as a tool to give the proposing Design-Builder an idea of what the Owner desires within this project. Using the provided specification format as a guide, each Design-Builder shall submit with their proposal additional detailed specifications to describe the materials, products, and equipment included in their proposal.
- 1.4 Project Drawings and Specifications Final: The Design-Builder is responsible for Architectural, Structural, Civil Engineering, Mechanical, Electrical, and Plumbing Drawings, all signed and sealed by a licensed professional. All Specifications, Drawings, Submittals, and Construction will meet all applicable Federal, State and Local Codes and will be approved and inspected by the Town of Summerville Building Official and Fire Marshal, and any other required entities, for an Essential Building. The final specifications shall be a completed set of plans and agreed upon by the Owner and Design-Builder, and shall assist with any clarifications of the drawings. The costs of preparation of drawings and specifications shall be included in proposal.
- 1.5 Project As-Built Drawings: Drawing As-Built will be the responsibility of the Design-Builder and provided to the Owner at the end of the project to include drainage as-built prepared by a licensed surveyor.
- 1.6 Project Close-Out: Design-Builder shall provide to the Owner all resources, instruction manuals, warranties, etc. for their portion of the project responsibility.
- 1.7 Proposal Submission: All proposals shall include as much detail, as needed from the Proposer, to aid the Owner in understanding and deciphering of their submission. Where and when applicable, provide the Owner with the manufacturer, style, size and or other descriptions of materials proposed. When applicable, drawings and specification documents shall be provided to show electrical provisions, mechanical provisions, and plumbing. The Design-Builder shall make the Owner aware of any other items necessary to complete this project prior to calculating costs of the construction, and shall provide this information to the Owner with their proposal submission.
- 1.8 Pre-Bid Meeting with Question and Answer Period: A mandatory pre-bid meeting will be planned for and held by the Owner. A representative of the Design-Build team must be

- present and sign the attendance log. Proposals will only be accepted from Design-Build teams who attend the pre-bid meeting. See the Proposal Package Information for further detail on meeting date and deadline for questions.
- 1.9 Questions and Clarifications During Proposal Process: All questions and requests for clarification or information during the proposal process may be asked during the pre-bid site meeting or submitted to the following person via email only: Krista Collins, Procurement Agent (<a href="mailto:kcollins@summervillesc.gov">kcollins@summervillesc.gov</a>) Responses will come in the form of an addendum. See the Proposal Package Information for further detail.
- 1.10 Commercial Review Board of Summerville: The Design-Builder will be responsible to prepare for, submit, and present the Project Drawings to the Summerville Commercial Review Board for all approval processes, and within this proposal value. If any changes are deemed necessary which includes further review meetings or approvals, this should also be included as part of this proposal. Assume that the proposal project drawings are accepted and approved by the Board for construction pricing purposes.
- 2001.11 Zoning: The property zoning is classified as Public Lands and is approved for construction for the proposed occupancy Fire Station.
- 1.12 Building Codes: Design-builder's proposed building design shall incorporate the requirements of the 2018 ICC codes, with SC Revisions and the 2009 IECC for energy conservation. The fire station shall be designed for a risk category IV-159 mph basic wind speed, seismic zone D. See geotechnical report for further seismic related information.
- 1.13 Construction Permits: The Design-Builder shall submit required site approvals to the Town and any other required entities. The Design-Builder shall submit drawings, obtain and pay for all business license and ensure that all subcontractors do the same prior to starting work on the project. Permits will be required at no cost to the Design-Builder.
- 1.14 Impact Fees: The Town will not assess any impact fees for the project. Summerville CPW will require tap fees for the installation of the domestic water and sewer, fire sprinkler system to be installed in the building. Their cost of the tap and impact fees and the backflow preventer will be the responsibility of the Owner through a project allowance.
- 1.15 Insurance: Design-Builder shall pay for, and maintain for the duration of the project: general liability insurance in the amount of \$2,000,000.00, automotive liability in the amount of \$1,000,000.00, workman's compensation in the amount of \$500,000.00. Professional Liability Insurance in the amount of \$1,000,000.00 per occurrence. Builders Risk Insurance for the duration of Design-Builders work, figured for the contract amount is to be included. Include all insurance costs with proposal.
- 1.16 Performance and Payment Bond: The selected Design-Builder at time of contract acceptance, shall have a performance bond and payment bond, in an amount equal to 100% of the contract price. The Design-Builder shall be licensed and able to be bonded to perform all work under one (1) contract. A split contract will not be accepted, making all work performed under a single bonded contract. All costs for a performance and payment bond

- should be included with the base proposal price. Note the cost of the payment and performance bond separately on the proposal form.
- 1.17 Project Bid Bond: Design-Builder should include a bid bond with proposal submission in the amount of the bid, including performance and payment bond.
- 1.18 Project Contract: Contract between Owner and selected Design-Builder will be AIA A141 Standard Form of Agreement between Owner and Design-Builder.
- 1.19 Design-Builder License: All Design-Builders submitting a proposal for this project shall be properly licensed for this work at the time of the submission. Submit copies and or license numbers for all licensing that would apply to perform this work, with the proposal submission. Provide all numbers, classifications, and expiration dates.
- 1.20 Inspections: All third-party inspections shall be performed by the Town of Summerville, or a third party independent company at the Owners request and paid for by the Design-Builder through an allowance. See third-party allowance information in Division 1 for more detail on Design-Builders responsibility.
- 1.21 Project Clean Up: The Design-Builder shall maintain a clean work site and remove all unwanted debris daily. Prior to the completion of the project, the Design-Builder shall remove all waste materials and debris arising from the performance of the work, and shall present all construction areas in a broom clean condition. Design-Builder will also provide a final cleanup of the building to include vacuuming, cleaning windows, mopping floors prior to turning over the building to the Owner.
- 1.22 Payment: Invoices are to be submitted monthly for work performed and material stored on the construction site in the preceding month. Payment will be reviewed and based on percentage of work values completed and invoiced stored materials will either be approved for payment or denied and returned to the Design-Builder for correction of items deemed questionable within 5 days of original submittal. Payment shall be made to the Design-Builder no more than 30 days after the approved submitted pay voucher is received. There will be a 10% retainage deducted from all payments which will be reduced to 5% at time of Substantial Completion. Substantial completion shall be determined and agreed upon by the Owner and the Design-Builder once the building is approved by the Building Official for occupancy by the Town of Summerville. The remaining 5% will be paid to the Design-Builder upon completion of the project including punch list items, warranty information, as built plans, and close out documents. These items should be included in the contract between Owner and Design-Builder.
- 1.23 Materials Stored on Site: Materials stored on site remain the responsibility of the Design-Builder. Replacement of stored materials due to damage or theft remains the responsibility of the Design-Builder.
- 1.24 Changes (Change Orders): All work shall be completed in a workmanlike manner within standard practices. Any alterations or deviations from the specifications or contract involving extra cost or credits will be executed as mutually agreed upon and be verified by a written change order signed by the Design-Builder and the Owner. No change orders will be

- allowed until discussed with the Owner, a negotiated price is agreed upon, and a signed change order is executed.
- 1.25 Temporary Utilities/Dumpsters: The Design-Builder shall furnish temporary electrical service, water for construction, temporary toilet, and construction dumpster for removal of construction debris, for the duration of the job.
- 1.26 Construction Signage: The Design-Builder shall place signs in two separate areas showing No Trespassing, and Hard Hats Required. Any other pertinent safety signage will also be the responsibility of the Design-Builder. Smoking will not be allowed within the building footprint once the exterior walls are being constructed.
- 1.27 Site Surveillance: If the Design-Builder or Owner selects to have site surveillance, it would be covered at their own perspective cost.
- 1.28 Sub-Contractors, Vendors, and Other Businesses: Design-Builder shall provide a listing of all subcontractors, vendors and other businesses that will be utilized on this project with their proposal. Provide their company name, division of expertise, contact person, address and phone number.
- 1.29 Lump Sum Base Price: The Lump Sum Base Price shown on the submitted proposal form shall be defined as the total lump sum cost to the Owner for design, permitting, materials, labor, equipment, profit, and overhead, including bonds and Owner Allowance to complete the project as presented in the proposal. Include with proposal, a schedule of values that breaks out design, overhead, profit, and work by specification division, as well as the lump sum amount of the Owner's allowance, and the cost for performance and payment bonds.
- allowances: The Owner's Allowance is defined as the lump sum total of all allowances described in these specifications and is included in the proposal's base price. The proposer should use their best estimate to determine their proposed value for each specified allowance, and provide a line item break down of all specified allowances for Owner review. The proposed allowance amounts shall be confirmed and mutually agreed upon by Owner and Design Builder before execution of the Design Build agreement. Allowances shall be used at the discretion and written consent of the Owner. A written directive, signed and agreed upon by the Owner and Design-Builder shall become record of each allowance used during the project. All scheduling and coordination of work associated with the allowances shall be included as part of the Design-Builder's base pricing, unless otherwise agreed upon by the Owner and Design-Builder. All payments to third parties for the allowance work shall be paid for by the Design-Builder using these allowance amounts.

All excess allowance monies not utilized during the project shall not be charged to the Owner. Unused allowance amounts will be deducted from the Lump Sum Base Price at the completion of the project.

## **Division 2 Site Construction**

- 2.1 Communication Pole: Communication pole will be installed by Owner and paid for with an allowance. Refer to Division 16 for electrical provisions provided by the Design-Builder for the power and communication services.
- 2.2 Erosion Control: The Design-Builder's Civil Engineer shall prepare a Stormwater Pollution Prevention Plan (SWPPP) in compliance with SC DHEC and Local MS4 regulations. The Design-Builder shall install and maintain required BMP's during construction in compliance with approved SWPPP. The Design-Builder shall coordinate SWPPP inspections with the Town's third party SWPPP inspector. SWPPP inspections will be paid for by the Owner through an allowance.
- 2.3 Earthwork: Design-Builder will remove trees as required to construct building and complete sitework, clear all debris, import fill material and back fill around the building as required to prevent ponding and develop the project site.
- 2.4 Muck and Fill Pricing: The Design-Builder shall provide a set cubic yard price for mucking and additional offsite fill dirt that may be needed for the project on the proposal form. If muck and fill is needed on the project, it will be the responsibility of the Owner to pay through an allowance. All muck and fill will be discussed and agreed upon with the civil engineer and Owner before Design-Builder proceeds with the work.
- 2.5 Parking and Driveways: Install all parking areas and driveways using pavement material as shown on the provided site plan. Include all traffic markings and signage per SCDOT standard, as well as regular parking ADA parking markings. Refer to Geotechnical Report for recommended pavement sections.
- 2.6 Concrete Curb, Gutter and Sidewalks: Provide and install curb and gutter at all parking areas and at driveways connecting to public streets. Provide sidewalks from parking areas as shown on the provided site plan to building entrances. Sidewalks should receive a light broom finish to avoid slipping. Install to comply with ADA regulations.
- 2.7 Drainage and Detention: Storm drainage and detention will be designed and constructed in accordance SC DHEC, NPDES and MS4 regulations.
- 2.8 Exterior Water Service and Backflow Preventer: This project will require a new domestic service and backflow preventer in accordance with Summerville CPW and SCDHEC requirements. Design-Builder is required to design, provide, and install necessary piping and appurtenances for this service. Design-Builder will pay necessary tap and impact fees through the Owner's allowance.
- 2.9 Exterior Sewer: This project may require the use of an on-site sewer lift station and force main. Design-Builder will pay for potential lift station and any related use or impact fees through the Owner's allowance.
- 2.10 Oil Water Separator: Oil water separator will be required for trench drain from apparatus bay. Refer to Plumbing section for size and more information.

- 2.11 Natural Gas Line: Gas lines will connect to the emergency generator, two tankless water heaters, the heating units in the apparatus bay area, the heating units for the residential section of the building, the kitchen range, and an exterior line with shut off quick connect for a future gas grill. Design-Builder will coordinate service and meter installation with Dominion Energy.
- 2.12 Fencing: Design-Builder shall include allowance for 200 linear feet of galvanized chain link fence (6' tall) to include a personnel swing gate (4' wide) and vehicular double swing gate (12' wide). Exact location and configuration will be coordinated with owner.
- 2.13 Landscaping and Irrigation: Design-Builder shall install final stabilization for all land disturbed by construction. Any additional landscaping and irrigation will be the responsibility of the Owner through an allowance agreed upon prior to contract execution.
- 2.14 Fire Hydrant: Design-Builder shall install a new Fire Hydrant leg under Miles Jamison Road into the front yard of the site. Piping shall be PVC C900. Domestic service shall tee off new hydrant leg. Final location of hydrant to be coordinated with Owner.
- 2.15 Termite Treatment: The building pad and foundation will be cleared of all debris, and termite treated prior to the moisture barrier being applied. A certified letter from the licensed termite company will be furnished to the Owner.
- 2.16 Proof Rolls: Design-Builder shall coordinate all proof rolls that will be conducted on site with the Owner's third party inspectors.
- 2.17 Geotechnical Testing: Refer to Geotechnical Report provided by owner for structural, earthwork, pavement, and other soil recommendations. See third party testing allowance information in Division 1.

#### **Division 3 Concrete -**

- 3.1 Footing and Foundations: Concrete used for footing and foundations will have a 28-day minimum compressive strength of 3,000 psi. Foundations and footings will be designed per the geotechnical report recommendations and in accordance with structural loads as designated by the Design-Builder's Structural Engineer to meet IBC 2018 requirements.
- 3.2 Steel Reinforcing: Design-Builder's Structural Engineer shall design all required steel reinforcing placed in concrete.
- 3.3 Vapor Barrier: After termite treatment, and prior to concrete pour, Install 10 mil thick polyethylene sheet, or better, vapor barrier under all building slabs. Seal all joints and penetrations.
- 3.4 Floor Slab, with Drains and Trench: Provide a concrete slab that meets the requirements of the building. Provide detail of the thickness, structural features, and any other pertinent detail to the Owner with the proposal submission. Provide detail of the apparatus bay trench drain, with a grated top cover provided. Trench drain will connect to an oil water

separator. Apparatus bay slab should be designed to support fire trucks with a maximum Gross Axle Weight Rating (GAWR) of 56,000 lbs. The slab shall be trowel finished, smooth, and slope to a center trench drain in the apparatus bay with a slope not to exceed 1/8" per foot. See Division 9 for application of concrete sealer.

- 3.5 Concrete Entry and Porch: Provide 4" min. thick concrete slab with broom finish for covered exterior areas including entry and porch areas. for front entry with footings and at least 4" slab.
- 3.6 Control Joints: All construction control joints will be saw cut. Design-Builder's structural engineer shall determine locations and depth for the building's slab control joints.
- 3.7 Concrete Testing: See third party testing paid by Design-Builder from Owner's project allowance.

#### Division 4 Masonry -

- 4.1 Concrete Masonry: Concrete masonry, if used as part of foundation or building walls, shall meet ASTM C90 and include horizontal and vertical reinforcing and grouting of cells as determined necessary by the Design-Builder's structural engineer to meet IBC requirements.
- 4.2 Brick Veneer: The finish of exterior walls of the building shall be primarily brick veneer, and installed in compliance with International Building Code requirements for masonry anchors in seismic zone D. Design-Builder should illustrate proposed brick work design on building elevations in their proposal. Brick work will start at the top of the building footings and terminate at the roof height. Design shall include locations of masonry control joints. All brick must be from same manufacturing run to avoid color variations. Use the following color selections for brick veneer. Brick substitution requests must be submitted and approved by the Owner prior to submission of proposal.

Field Brick: Meridian-Full Range Wire Cut, Modular Accent Brick: Carolina Ceramics-Cocoa Velour, Modular

Brick Mortar: Argos-Brown

- 4.3 Moisture Management: Brick veneer system will include a min. 1" wide air cavity with a complete moisture management system that includes weather barrier attached to the wall substrate, through-wall flashing, and weep holes to allow drainage of cavity. Weep holes will be installed every 32" and installed below the finish floor level but above surface grade. Weep holes are to be installed below window sills and at any lentils at wall openings. The weep holes will be full brick height, mortar joint size. Mortar netting will be installed around the entire base, and at all lintels over all openings. Include flashing, and peel and stick, at all sides of each opening. Openings include all windows, doors, and overhead doors, and other affected penetrations.
- 4.4 Mortar Joints: All mortar joints will be uniform in size and all expansion joints will be installed at time of the work and NOT saw cut later. Backer Rod will be installed in all expansion joints and sealed with elastomeric caulking that matches the color of the brick

- work. Design-Builder shall determine locations and final type of control joints on the exterior walls.
- 4.5 Brick Work General: All brick work will be cleaned per manufacturer's recommendations. Excess mortar and debris will be removed prior to Owner taking possession of the building. All broken and discarded brick along with excess mixed mortar and empty mortar bags will be cleared from the project daily and placed in dumpster for proper disposal.

#### **Division 5 Metals -**

- 5.1 Building Structure Options: The Design-Builder may select from three types of building structural systems for their proposal including: Structural Steel, Pre-Engineered Metal Building, or load-bearing light gauge metal framing. The Design-Builders' proposal shall clearly outline the proposed structural system to be used.
- 5.2 Structural Steel: Design and fabricate structural steel components in accordance with applicable AISC standards. Include steel lintels for masonry openings. All steel components exposed to exterior or damp environments shall be hot-dip galvanized. All non-galvanized steel shall be factory primed.
- 5.3 Pre-Engineered Metal Building (PEMB): The Design-Builder may choose to utilize a PEMB structure for building structure and roof. Metal building wall panels will not be allowed for building walls. PEMB should be designed to incorporate brick veneer wall, and collateral loads, and meet the standards set forth by MBMA Metal Building Systems Performance Guide Specification. PEMB shall be designed by a structural engineer licensed in the state of South Carolina. If roof insulation is provided by the PEMB manufacturer it must meet the requirements of the International Energy Conservation Code, 2009 edition.
- 5.4 Exterior Metal Studs: The perimeter building walls are to be framed with 6" metal studs at 16" on center with ½" thick weather-resistive gypsum sheathing screwed to the studs and covered with a fluid-applied weather barrier. The exterior wall will have a stick and seal flashing installed completely from the bottom of slab up the wall 12" around the building perimeter for moisture protection. The specifications for studs, gauge, bracing, strapping for all walls, clips, and anchors will be determined by the Design-Builder's structural engineer. Load-bearing metal stud wall systems must be designed by the stud supplier and approved by the Design-Builder's structural engineer. Refer to Division 7 for insulation requirements.
- Awnings: All single exterior hollow metal passage doors shall have a prefinished aluminum awning, at least 4' wide. Provide a standing seam metal panel, at least 40" wide with a downward projection of 32".
- 5.6 Schedule 40 Steel Clad Pipe Bollard: Although there are no plans for pipe bollards on this project, provide a price for one (1) 6", schedule 40 steel clad pipe bollard, concrete filled, and painted safety yellow on the proposal form. Any bollards that may be installed would be at the time of construction, and would be set in concrete.

#### Division 6 Woods and Plastics -

- 6.1 Wood Roof Trusses: If wood trusses are used for the roof structure, they shall be designed by a structural engineer licensed in the state of South Carolina and shall meet the Structural Building Components Association (SBCA) and the Truss Plate Institute (TPI) standards, as well as ANSI/TPI1 National Design Standard for Metal Plate Connected Wood Truss Construction.
- 6.2 Rough Carpentry: Provide wood blocking as needed for securing items attached to walls, such as cabinets, toilet accessories, plumbing fixtures, and lockers. Provide pressure treated wood blocking where wood is in contact with concrete, damp areas, and in exterior walls and roofs, and at openings in exterior walls. Include blocking for 3 televisions to be located by Owner.
- 6.3 Wood Roof Sheathing: If wood roof trusses are used, provide and install APA rated, 5/8" thick structural plywood sheathing panels.
- 6.4 Cabinetry: Refer to the conceptual floor plan for locations of cabinetry. All counters will be solid surface. (No laminate will be allowed). Cabinets will be custom built and be solid birch plywood with painted or clear lacquer covering. No compressed particle board, or mass manufactured cabinetry shall be used. All cabinetry equipped with heavy duty hinges, hardware, and slides. Final Cabinet design TBD prior to beginning construction. Provide the following types of cabinetry:

Kitchen: 12" deep, 36" high wall cabinets and 24' deep based cabinets. Provide 12" overhand on one side of kitchen island for stool seating.

Vanities: Provide ADA compliant vanity cabinet for installation of under-mount sink.

Chair Rail: Install minimum 5" wide chair rail in Offices, Day Room, and Dining areas at 36" AFF. Chair rail shall be MDF and will be painted.

6.5 Framing Lumber: If used, provide full detail of where and how wood lumber would be used, other than for wood blocking.

#### Division 7 Thermal and Moisture Protection -

- 7.1 Wall Sheathing: Design-Builder shall install 1/2" thick non-paper faced weather resistive gypsum sheathing panels over the entire exterior wall surfaces of the building. Wall sheathing shall be secured to metal studs as recommended by manufacturer, and left smooth and ready for weather barrier installation.
- 7.2 Weather Barrier: Install a vapor permeable fluid applied weather barrier that meets the recommendations of the Air Barrier Association of America. Weather barrier should form a complete envelope around building walls and soffits, and integrate with roofing underlayment and flashing systems. Ensure that weather barrier is compatible with other flashing materials and components.

- 7.3 Insulation Thermal Envelope of Building: Furnish and install unfaced fiberglass batt insulation, continuous rigid foam insulation, or open-cell foam insulation in walls, soffits, and roofs to ensure that the building envelope meets the requirements of the International Energy Conservation Code, 2009 edition. Identify type and R value of all insulated areas of the building with proposal submission.
- 7.4 Interior Wall Insulation: Interior walls that separate conditioned and unconditioned spaces shall extend from floor to underside of roof sheathing, be sealed, and receive appropriate thermal insulation. Identify type and R value of all insulated interior walls in proposal submission.
- 7.5 Sound Insulation: Provide unfaced R-11 fiberglass batt insulation in all walls surrounding restrooms/baths, and sleeping areas. Install additional insulation above ceiling, over top of wall, extending 24 inches over each side of walls receiving sound insulation,
- 7.6 Back Flow Preventer Insulation: Provide for the back-flow preventer insulated blanket to accommodate appropriate size for unit.
- 7.7 Standing Seam Metal Roof: Provide and install complete concealed fastener, standing seam metal roof system incorporating roof penetrations, trim, copings, fascia, gutters and downspouts, and miscellaneous flashings. Panels shall be 26 gauge (min.) 2" high, 16" wide galvalume sheet steel with PDVF finish available in manufacturer's full range of colors for the Owner to select. Install complete roof system according to industry standards and provide 20 year (min.) manufacturer's system warranty.
- 7.8 Cementitious Trim and Soffits: Provide and install factory-primed cementitious soffit panels, fascia, and trim needed at roof edges, overhangs and soffits. Paint all exposed cementitious soffits, fascia, and trim.
- 7.1 Joint Sealants: Provide and install appropriate caulking, and when required backer rod, for control joints, joints of dissimilar materials, window and door frame perimeters, roofing and flashing joints, plumbing fixtures, and casework and counters.

#### Division 8 Doors and Windows -

- 8.1 Exterior Hollow Metal Doors and Frames: Provide and install 16 gauge fully welded hollow metal frames on exterior, and in apparatus bay. Doors shall be 16 gauge flush metal, insulated. Doors and frames shall be galvanized, factory primed, and field painted. Doors that serve as means of egress shall include a 3"x33" glass vision lite.
- 8.2 Interior Hollow Metal Frames with Wood Doors: All interior doors will be 3'-0" x 7'-0" x 1 ¾" with the exception of closet and pantry doors which may be as small as 30" wide. Provide 16 gauge hollow metal knock-down frames with flush solid core wood doors, birch veneer, factory finished in one of the manufacturer's standard colors, selected by the Owner. Include 3"x33" glass vision lite, in 4 interior doors.

- 8.3 Fire-rated Doors: Where required by code, provide labeled fire rated doors and frames in fire rated walls.
- 8.4 Storefront Entrance Doors: Provide and install at front and rear entrances, 3'-0" x 7'-0" prefinished aluminum framed full glass door with 12" (min) wide full height side lites on both sides of opening. Provide all required finish hardware, and coordinate keying with Owner and finish hardware of other doors. Finish to be dark bronze anodized finish. Storefront assembly to be large-missile impact resisted rated per chapter 16 requirements of the IBC.
- 8.5 Exterior Windows: All building windows to be fixed prefinished aluminum storefront with 1" low-E insulated glass. Finish to be dark bronze anodized. Storefront assembly to be largemissile impact resisted rated per chapter 16 requirements of the IBC. Provide and install a minimum of ten approximately 36" wide x 64" high windows for offices, sleeping areas, and living quarters.
- 8.6 Folding Apparatus Bay Doors: Provide and install five 14' x 14' glazed folding doors consisting of two pair of vertically hinged leaves. The folding door system shall be tested to meet the large-missile impact resistance requirements of IBC chapter 16. The folding doors and their components shall be made of galvanized steel, factory primed and factory finished (filed painting not allowed). At least 60% of door shall be glazed lites with 1" min. insulated glazing. Door manufacturer shall provide all door controls, operators, sensors, and weather stripping needed to complete the installation. All doors shall have manual operation capability in case of power failure. Provide one remote control per door. Doors shall not interfere with the heaters, lighting, or vehicle exhaust system inside of apparatus bay.
- 8.7 Finish Hardware: Include and install commercial grade finish hardware for all swinging doors including hinges, closers, latches, locksets, weather stripping, silencers, wall protection, and 10" high kick plates. All doors and hardware installations shall be ADA compliant. Design-Builder shall prepare a complete finish hardware schedule and present to Owner for final approval before ordering.

## Division 9 Finishes -

- 9.1 Non-structural Metal Studs: Interior walls and soffits shall be constructed using 3 5/8" and/or 6" wide, 25 gauge metal framing. Interior wall framing shall be properly braced, or attached to building structure. In damp locations, use galvanized metal framing components.
- 9.2 Gypsum Board-General: Interior walls throughout the building will be 5/8" drywall from the finish floor level to 6" (min.) above suspended ceiling height, and as further detailed below. Finish to GA level 4. All exposed gypsum board walls and ceilings shall be primed and painted.
- 9.3 Fire Rated Assemblies: The design-builder shall determine locations and required assembly ratings for fire-rated walls to meet IBC 2018 requirements. Use 5/8" fire-rated Type X or Type C gypsum board in tested assemblies shown to meet required fire rating. Install fire

- rated assemblies in strict accordance to tested assemblies, seal wall perimeters and penetrations with fire-rated caulk, and label fire-rated walls above ceilings per IBC requirements.
- 9.4 Mold and Moisture Resistant Drywall: All interior surfaces of exterior walls, all interior walls damp locations such as restrooms, showers, and kitchens, and gypsum board ceilings and walls in unconditioned spaces shall be mold and moisture resistant 5/8" drywall.
- 9.5 FRP: Install fiber reinforced panels (FRP) over gypsum board from top of slab to 8'-0" AFF in the following areas: Apparatus Bay, Decon/Laundry, Tool/Equip, and EMS Storage. Use panel joint, perimeter, and corner trims provided by FRP manufacturer. Adhere FRP to wall with manufacturer's recommended adhesive.
- 9.6 Tile Backer Board: In areas to receive ceramic tile, in lieu of gypsum board, install ½" thick cementitious panels on stud walls to receive ceramic tile.
- 9.7 Ceramic Tile Flooring: Provide and install porcelain tile floors meeting TCNA F113 for thinset floors in baths, toilets, shower, and locker areas, as well as gear locker room. Floor tile shall be 12"x 12" porcelain floor tile, with polymer modified grout. Design-Builder to provide a selection of several products, colors, and patterns for final selection by the Owner.
- 9.8 Ceramic Tile Walls: Provide and install 4" x 4" glazed ceramic wall tile, from floor to 6'-0" AFF. Installation shall be thin-set type meeting TCNA W244 with polymer modified grout. Design-Builder to provide a selection of several products, colors, and patterns for final selection by the Owner.
- 9.9 Ceramic Tile Showers: Showers shall be tiles with the same wall and floor tiles specified in this division installed over a bonded waterproof membrane in accordance with TCNA method B421. ADA shower shall have compliant threshold.
- 9.10 Acoustical Ceiling: All interior ceilings, except Apparatus Bay, shall be 9' AFF. Furnish and install 24" X 2" x 5/8" white fissured mold and moisture resistant acoustical ceiling panels in white suspension system, meeting IBC seismic design requirements. Ceiling contractor to install support wires for the light fixtures.
- 9.11 Apparatus Bay Ceiling: Apparatus Bay may be open exposed steel structure/deck, or moisture and mold resistant gypsum board on wood roof trusses. Paint ceiling, and unfinished ceiling mounted components with two coats white dryfall paint.
- 9.12 LVT Floor: All interior rooms not noted to receive other floor treatment in this specification shall have Luxury Vinyl Tile (LVT). LVT shall simulate wood planks and be a min. of 2.5 mm thick with a min. wear layer of 20 mil. Ensure relative humidity of concrete slab meets manufacturer's requirements before installing LVT. Use only adhesives recommended by LVT manufacturer.
- 9.13 Rubber Floors: The weight room floor will be covered with rubber flooring with sufficient thickness to avoid injury to persons and to handle free style lifting weights from being damaged due to being dropped. Design-Builder shall provide manufacturer's full range of colors for selection by Owner.

- 9.14 Concrete Floors: Apparatus Bay and other non-conditioned rooms to receive 2 coats of clear urethane concrete sealer. Surface shall be cleaned and clear of any debris.
- 9.15 Vinyl Base: Provide vinyl base in all floor areas with concrete, LVT, or rubber flooring. Apparatus Bay shall have a 6" vinyl base. All other areas shall have 4" vinyl base. Color to be selected by Owner.
- 9.16 Painting-Exterior Cementitious Materials: Paint factory primed cementitious panels and trim with 2 coats of acrylic latex paint, semi-gloss finish.
- 9.17 Painting-Exterior Metals: All exterior metal products should be factory primed. Where feasible exterior metal items should be factory finished. For field finishing of factory-primed metal, apply 2 coats of acrylic-latex paint for metal surfaces, semi-gloss finish. Owner to select color from manufacturer's full range of colors.
- 9.18 Painting-Interior Walls: All interior gypsum board walls, unless noted otherwise in theses specifications, shall be primed and receive two coats of finish paint. Paint shall be acrylic-latex based, egg-shell finish. Owner to select color from manufacturer's full range of colors.
- 9.19 Painting-Interior Walls Damp Areas: Gypsum boar walls in damp areas, including toilets, baths, showers and locker areas shall receive one coat of primer and two coat of epoxy paint, semi-gloss finish. Owner to select color from manufacturer's full range of colors.
- 9.20 Painting-Interior Metal: Interior factory-primed hollow metal door and window frames shall be painted with two coats of acrylic-latex paint, semi-gloss finish. Owner to select color from manufacturer's full range of colors.
- 9.21 Painting-Interior Wood: Interior wood trim to receive one coat of acryl-latex primer, and two coats of acrylic-latex paint, semi-gloss finish. Owner to select color from manufacturer's full range of colors.

#### **Division 10 Specialties –**

- 10.1 Exterior Signage: Provide and install cast aluminum lettering, anodized finish, color to be selected by Owner from full range of manufacturer's standard colors. The copy for the building sign shall be 12" (min.) high and read: "SUMMERVILLE FIRE & RESCUE STATION 6". The copy for the building address sign shall be 6" (min.) high and include 4 numerals ("####"). Design-Builder shall confirm final street address before ordering sign. Both exterior signs shall be mounted on an exterior building wall facing Miles Jamison Road. Design-Builder's proposal should indicate the size and location of these signs in their proposal.
- 10.2 Interior Wall Signs: Provide 6" x 8" (min.) custom printed acrylic panel signs for all rooms and install on strike side of each room door(s). Signs shall include ADA symbols, when required, and raised braille. Owner shall select color from manufacturer's full range of standard colors.

- 10.3 Other Signage: Provide and install post-mounted metal ADA signage for accessible parking spaces. Provide signage for Fire Department Connection (FDC). If other signs, not specified here, are required by IBC or other relevant building codes, they should be included in the Design-Builder's initial proposal.
- 10.4 Toilet Compartments: In the Men's Bath, Design-Builder may provide individual toilet compartments by physical walls and doors, or by installing toilet partitions. If toilet partitions are proposed, provide and install floor mounted, overhead braced, partitions with stainless steel, heavy duty hardware and full-length wall brackets. Partition panels and doors may be made of solid plastic (HPDE), or phenolic resin panels (no other type of partition will be accepted). Owner shall select final color from manufacturer's full range of standard colors and finishes. Design-Builder should indicate type of compartments used in the submittal.
- 10.5 Wall Protection: Provide and install 3"x 3" x 48" PVC corner guards at all external corners and end wall conditions of interior gypsum board walls to prevent damage.
- 10.6 Toilet Accessories: Furnish and install stainless steel ADA compliant toilet accessories including: grab bars for toilets, 24"x36" mirrors above vanities. At each shower provide: shower curtain rod, 24" towel bar, and 2 robe hooks. At the ADA shower, also provide required grab bars, and folding seat. Provide and install a baby-changing station in the Public Toilet, and an 18" (min.) long broom and mop holder above service sink in Laundry/Decontamination.
- 10.7 Metal Personnel Lockers: Provide and install twenty 12" deep x 18" wide x 72" tall factory finished single tier metal lockers. Each locker interior shall include hat shelf and coat rod, and two coat hooks. Each locker door shall have louvers for ventilation, a number plate, and multi-point latching mechanism capable of receiving a padlock. Install lockers on solid base, 6" (min.) high. See conceptual floor plan for locations and proposed arrangement of lockers.
- 10.8 Gear Lockers: Provide and install eighteen wall-mounted, open gear lockers. Gear lockers shall be constructed of heavy grade steel tubing with 3"X3" wire mesh side, back, and top panels, factory finished. Each locker shall be 18" wide x 20" deep x 74-½" high with one nameplate holder, two shelves, and three hooks per locker.
- 10.9 Fire Extinguishers and Cabinets: Provide and install the quantity and type/size of fire extinguishers for the building per IFC 2018 requirements, including multi-purpose ABC, and Type K (in Kitchen). In conditioned areas, fire extinguishers shall be mounted in a stainless-steel cabinet. In unconditioned areas fire extinguishers may be bracket mounted.
- 10.10 Flagpole: Furnish and install a 40' exposed height aluminum flagpole in the front of the building. The pole will have an external lanyard and capable of flying two flags. The flagpole shall be one piece aluminum, cone shaped and have an aluminum ball on top to match the pole. Provide anchor and embedment details designed and sealed by an engineer licensed in the state of South Carolina that comply with the IBC 2018 wind requirements for this site. Flags will be provided by Owner.

#### Division 11 Equipment -

- 11.1 Equipment: Building equipment as described below to be provided and installed by Design-Builder, unless otherwise noted in these specifications. Design-Builder to provide all necessary electrical provisions for items listed below. Review other pertinent Divisions of these specifications for other building equipment that is included.
  - a) One wall mount eye/face wash, with bowl installed in the apparatus bay, piped with water. No drain needed at this location. Specify model number proposed.
  - b) Ice Machine, Ice Container Bin, and Components installed in the apparatus bay. Manitowoc Model Number IR-0906A Indigo Series Ice Maker. AR-20000 Arctic Pure Primary Water Filter Assembly. Ice Container Bin C-7305, and Adapter K-00023 for mounting.
  - c) One three-compartment sink with deep compartments and hose/sprayer nozzle to be installed. Saturn Equipment Sink MKS3-2424-SD-24 (24"x24" bowls, and two sides of drain board). Faucet assembly T&C Brass B-0133-12CRBCF1.
  - d) Two natural gas tank-less water heaters, with a maximum input rating of 199,000 BTU and a minimum input rating of 15,200 BTU. Specify model. Ensure proper location to best support the building's hot water needs, with install on the exterior of the building.
  - e) Washer and dryer installation, electrical, plumbing, and venting for the washer and dryer furnished by Design-Builder. The washer and dryer will be selected by the Owner and purchased and installed by the Design-Builder through the Owner's allowance.
  - f) Heavy-Duty Extractor: The Owner will select a laundry extractor to be purchased and installed by the Design-Builder through the Owner's allowance. The extractor will be located in the Gear Locker room. The Design-Builder shall incorporate electrical, plumbing and ventilation provisions for this equipment in their proposal.
  - g) Cascade Breathing Air System: The Owner will select a breathing air compressor/fill station and storage tanks to be purchased and installed by the Design-Builder through the Owner's allowance. The cascade system will be located in a closet opening into the Apparatus Bay. The Design-Builder shall incorporate electrical and ventilation provisions for this equipment in their proposal.
  - h) Residential Appliances: The Owner will select the following appliances to be purchased and installed by the Design-Builder though the Owner's allowance: Three 25 cu. ft. refrigerator-freezers, one 1,000 watt microwave, one 6 burner commercial grade natural gas range, one garbage disposer, and one dishwasher. The Design-Builder shall incorporate electrical, plumbing and ventilation provisions for these appliances in their proposal. (NOTE: A commercial range hood with integral fire suppression system will be required, see division 15 of these specifications).
  - i) Bi-fold Door Operators: See divisions 8 of these specifications.
  - j) Vehicle Exhaust System: See division 15 of these specifications.
  - k) Generator: See division 15 of these specifications.

## **Division 12 Furnishings:**

- 12.1 Furniture will be provided and installed by Owner and is not included in the Owner's allowance.
- 12.2 Window Blinds: Design-Builder shall provide and install 2" wide, white color, horizontal louvered polymer blinds on all windows.

## Division 15 Plumbing, Mechanical and Fire Suppression Systems-

- 15.1 Plumbing-General: Scope of work shall include all labor and material to install a complete sanitary waste and vent system and a domestic water supply system. Furnish and install water and sewer from the building to the city's sewer and water systems. All lines should be adequate size and function for this building. Design-Builder is responsible for supplying, installing, setting, and trim out of all fixtures. All plumbing will be in accordance with, and tested as required by, the 2018 International Plumbing Code.
  - Plumbing lines will be securely installed in hangers and brackets every four feet to prevent noise from pressure differentials. All plumbing fixtures, appliances, drains, fixture supports, and appurtenances will be new, without blemishes or defects.
- 15.2 Plumbing Fixtures and Fittings: Plumbing fixtures and fittings shall meet ADA where required. Fixtures shall include: tank type toilets with elongated bowl, wall mounted urinal(s), undermount china lavatories with lever handles at vanities, shower fittings and drains, ADA compliant multi-bowl kitchen sink with at least one 8" min. deep bowl, lever handles, and sprayer, floor mounted mop sink, three ice-maker boxes, one bi-level water cooler, three exterior hose bibs, apparatus bay trench drain, and all other required floor drains and cleanouts. Proposal shall include all necessary fittings, piping, and accessories for each fixture. Design-Builder's proposal submission should include description, and when applicable pictures, of each type of proposed plumbing fixtures to be provided.
- 15.3 Oil & Water Separator: Design-Builder shall provide and install a submerged 1000 gallon oil-water separator tied to the trench drain outlet leaving the apparatus bay.
- 15.4 Natural Gas Piping: See Division 1 for details. Furnish and install gas supply pipin to the apparatus bay heaters, gas range, tank-less water heaters, gas furnaces, the emergency power generator, and an exterior shut off quick connect for a future gas grill. Design-Builder will coordinate with Dominion Energy for the size of the service and meter to be installed based on the demand load.
- 15.5 HVAC Systems: Design Builder shall engineer, provide, and install a complete heating and cooling system for all interior areas, using split systems air conditioners with natural gas furnaces. The apparatus bay, cascade closet, and electrical room are not required to be air-conditioned. The HVAC units will be able to cool the building to 68 degrees Fahrenheit in the summer and warm the building to 74 degrees Fahrenheit in the winter consistently throughout. The selected HVAC units must provide required fresh air intake, and meet IECC requirements for energy conservation.
- Ductwork: HVAC ductwork shall be galvanized metal, shop-fabricated in largest components possible for both supply and return ducts. Ductboard is prohibited. Flex-duct is allowed in

- lengths no longer than 8 feet for connection of registers to main duct. All supply ductwork shall be insulated
- 15.7 Apparatus Bay Heaters: Provide and install three 50,000 BTU thermostatically controlled natural gas heaters hung from the building structure. The installation of the heaters will not interfere with the installation or operations of the Apparatus Bay doors or the vehicle exhaust system.
- 15.8 Apparatus Bay Fans: Provide and install three 96" diameter multi-speed, multi-directional industrial ceiling fans in the apparatus bay with wall controls.
- 15.9 Exhaust Fans: Provide and install commercial grade exhaust fans for all toilets and showers, tied to ductwork and vented to the building exterior. Do not vent through the front of the building or the building roof.
- 15.10 Dryer Vent: Provide and install metal duct dryer vent, with lint trap. Extend dryer vent duct to exterior wall cap. If vent duct exceeds the manufacturer's recommended, or code prescribed equivalent length, include a booster fan in the proposal.
- 15.11 Fire Sprinkler System: Design-Builder to include all costs for a total system design, drawings, permitting, testing, and necessary provisions to install a full working NFPA 13 sprinkler system to support this building. System to be designed and stamped by a fully licensed subcontractor for this line of work. Systems will meet NFPA 13, and 2018 IFC requirements. System design and stamped plans will be submitted to the Town of Summerville Fire Marshal prior for approval prior to installation.
- 15.12 Commercial Range Hood: Provide and install a 6' long commercial range hood with integral fire suppression over the natural gas range. Include all supply and exhaust fans ductwork, and curbs. Vent exhaust through the roof of the building. Do not place roof mounted exhaust fan on front (facing Miles Jamison Road) of building roof.
- 15.13 Vehicle Exhaust System: Provide and install a complete vehicle exhaust system for 3 vehicles. Coordinate equipment electrical and ventilation requirements. System shall include retractable flexible exhaust tubing for each vehicle with ductwork, exhaust fan, louvers, and controls to allow the safe operation of diesel motors in the apparatus bay with the doors closed.

#### Division 16 Electrical -

16.1 Electrical Provisions: Provide and install a complete electrical system for a fully operational IBC Occupancy Category IV-Essential Building. Design-Builder shall determine amperage required to service building and equipment. Indicate selected service size in proposal submittal. Provide for all electrical components starting from Dominion Energy transformer, including the underground service to the building. Coordinate specific circuits that will be powered by the emergency generator with the Owner. Electrical Lighting shall meet 2009 IECC requirements for energy conservation. The scope of electrical work includes, but is not limited to:

- Primary and Secondary Service Cables, Pull Boxes, and Conduits.
- Meter Bases, Disconnects, and Panel Boxes,
- Automatic Transfer Switch for Generator
- Emergency Generator installation
- Separate Lighting and Convenience Power Circuits
- Dedicated power circuits for all HVAC, appliances, and equipment
- Use only metal conduit for above slab branch circuits throughout building.
- 2'X4' lay-in LED light fixtures in all conditioned rooms providing a avg. of 300 lux Also see requirements for living and sleeping areas (below).
- 4' or 8' long High-Bay LED light fixtures in non-conditioned rooms providing min. avg. of 200 lux.
- Three 96" dia. Industrial ceiling fans in the apparatus bay.
- 60" dia. Interior ceiling fan in Day Room, Dining Room, and Fitness.
- Wall Lights mounted above all vanities.
- Lighting in concealed attics containing equipment and/or sprinkler system.
- All Egress and Emergency Lights, including in bathrooms and sleeping areas
- See exterior building lighting description (below) for lighting and general electrical detail
- All electrical requirements for equipment and appliances at proper voltages.
- Provide two duplex ceiling receptacles in day room.
- Provide GFI receptacles in wet areas.
- 110v convenience receptacles
- Provide and install 60 duplex receptacles
- Provide and install 20 quad receptacles
- See Exterior Electrical for additional receptacles (below)
- Include one run of 2" electrical conduit no less than 100' in two different exterior trench locations, for a total of 200' length of underground conduit.
- Data Conduit Drops for Low Voltage Wiring: ¾" conduit with 2"x4" junction box and blank plate. Install no less than 30 drops, extend conduit up to 2' above ceiling, with pull string.
- Building Door Chime/Doorbell for front and rear door
- 16.2 Sleeping Quarters: Provide dimmable LED recessed can lighting for general lighting between bunks, and walking areas, controlled by one dimmer in each area. Also provide a single LED recessed can or wall light controlled by its own dimmer above each bed. Data drops and outlets should be at each bed area for individual use as well. Provide for 2-head emergency lighting in sleeping quarters.
- 16.3 Living Quarters: In the Day Room/Dining/Kitchen area, in addition to the 2'x4' light fixtures, provide additional dimmable LED recessed can lighting controlled separately from the 2'x4' fixtures.
- 16.4 Exterior Electrical for Building: Provide and install the following electrical items on the exterior of the building:

- No less than eight LED wall pack light fixtures capable of at least 4,000 lumen output, mounted to the exterior walls. Control all wall packs by time clock/photocell.
- Exterior rated LED recessed can lighting in entry porch ceiling, or wall mounted decorative fixtures on both side of front entrance door. Control porch fixture(s) by time clock/photocell.
- Exterior rated Emergency Egress wall lights above all other egress doors.
- Exterior rated LED recessed can lighting at screen porch ceiling.
- One 60" diameter exterior rated ceiling fan on screen porch ceiling.
- At least six exterior weatherproof GFI quad outlets.
- 16.5 Site Lighting: Provide and install two ground-mounted flood lights for flag pole, and eight LED pole mounted site lights, 20' mounting height, type 3 distribution, 12,000 lumen (min.) output per fixture. Include concrete foundation, conduit, and branch circuit wiring in proposal. Site lighting shall be controlled by time clock/photocell.
- 16.6 Generator: Design-Builder shall determine the appropriately sized generator to allow all building operations to continue when utility power service is disrupted. Provide and install all electrical provisions for a natural gas generator controlled by an automatic transfer switch. Install concrete pad, anchors and supports, to secure the generator in place.
- 16.7 Doorbell: Provide and install a push button at the front and rear passage doors which will activate chimes/buzzers (doorbell) in the living quarters, the men's bunkroom, and the apparatus bay. The chimes/buzzers (doorbell) should be loud enough to be heard throughout the building.
- 16.8 Occupancy Sensors: Provide occupancy sensors as needed to maintain lighting when rooms are in use and turn off lights when no movement is being detected. Provide night lighting in corridors and non-sleeping areas that are not on occupancy sensors.
- Telephone: The telephone system will be paid for by the Design-Building through the Owner's allowance. The design builder should include two 2" conduits from the telephone company demarcation point to the telephone backer board mounted in the electrical room. Provide and install a 4' x 4' painted plywood telephone backer board.
- 16.10 Computer and Data: The computer system, and associated data wiring will be paid for by the Design-Builder through the Owner's Allowance.
- 16.11 Low Voltage Cabling and Wiring: The cabling and low voltage wiring will be the responsibility of the Owner and paid for by allowance in the contract. The electrician will supply and install conduit and data drops. Provide up to at least twenty-four (24) conduit drops though-out the building at locations designated by the Owner. Provide pull strings, and conduits at least 2' above ceiling height.
- 16.12 Fire Alarm System and Smoke Detection: Design-Builder shall design a complete monitored fire alarm system meeting NFPA-72 and IFC requirements. System shall include control panel, manual and automatic detection and audio/visual alarming devices including required devices for sprinkler system. Include all costs for the design, installation, and testing in

proposal. The system and components' design shall be submitted to the Town of Summerville Fire Marshal for final approval.

END OF THE NON-BINDING PROPOSED SPECIFICATIONS TO AID DESIGN-BUILDERS

PROPOSAL FORM FOLLOWS THIS PAGE - MUST USE FOR PROPOSAL SUBMISSION

# PROPOSAL FORM

Design-Ruilders shall submit pricing with this format

# SUMMERVILLE FIRE RESCUE – STATION 6

besign banders shan sabine priemy with this joinnat	
DESIGN-BUILDER COMPANY NAME:	DATE:
FULL STREET ADDRESS:	
CONTACT INFORMATION:	
TELEPHONE NUMBERS:	
EMAIL ADDRESS:	
ARCHITECTURAL FIRM:	
CIVIL ENGINEERING FIRM:	
STRUCTURAL ENGINEERING FIRM:	
PLUMB/MECH/ELEC ENGINEERING:	·
SIGNATURE OF SUBMITTOR:	
Printed Name of Submitter:	
GENERAL CONTRACTOR'S LICENSE NUMBER:	
ADDENDUM ACKNOWLEDGEMENT:  Proposer acknowledges the receipt of and has incorporated the said  Addenda into this proposal.	ll addenda received and acknowledged
LUMP SUM BASE PRICE:	Including payment & performance bond cost, and including all specified allowances (Owner's)
PAYMENT & PERFORMANCE BOND COST	:
MUCK AND FILL/CY:	Muck:/CY_Fill:/CY
STEEL BOLLARD/EACH	each

#### ALONG WITH THIS COMPLETED PROPOSAL FORM, DESIGN-BUILDER SHALL INCLUDE, BUT NOT LIMITED TO:

- BID BOND
- CERTIFICATE OF INSURANCE
- SCHEDULE OF VALUES BROKEN DOWN BY SPECIFICATION DIVISION FOR BASE PRICE
- SCHEDULE OF VALUES FOR EACH SPEDIFIED ALLOWANCE ITEM INCLUDED IN OWNER'S ALLOWANCE
- ANY ALTERNATIVE OPTIONS AND OR SUBSTITUTIONS-INCLUDING DESCRIPTION AND CHANGE TO COST
- DETAILED SPECIFICATIONS BASED ON THE PROPOSAL SPECICATION FORMAT
- DESIGN-BUILD TEAM QUALIFICATIONS (NO MORE THAN 5 PAGES). IDENTIFY ALL COMPANIES ON TEAM.
- ANY ADDITONAL DETAIL AND/OR INFORMATION TO HELP ASSIST THE OWNER IN FULLY UNDERSTANDING THE PROPOSAL