

**WESTOVER HIGH SCHOOL
CULINARY ARTS LAB
CASEWORK REPLACEMENT**

FAYETTEVILLE, NORTH CAROLINA

April 10, 2017

FOR THE

**CUMBERLAND COUNTY
BOARD OF EDUCATION**

GREG WEST, CHAIR

DONNA VANN, VICE CHAIR
JUDY MUSGRAVE
CARRIE SUTTON
PEGGY HALL
RUDY TATUM

KIM FISHER
ALICIA CHISOLM
SUSAN WILLIAMS
PORCHA McMILLAN

DR. FRANKLIN TILL
SUPERINTENDENT

INVITATION TO BID

Sealed proposals will be received until **2:00 p.m. on May 15, 2017** in the Cumberland County Schools' Plant Operations Center, 810 Gillespie Street, at which time they will be publicly opened and read aloud for the Casework Replacement at the Westover HS Culinary Arts Lab, Room 125.

A **Mandatory Pre-Bid conference** will be held at the site. Contractors interested in bidding shall meet at **Westover High School Main Office on April 26th, 2017 at 2:00 p.m.** The address for the school is **277 Bonanza Drive, Fayetteville, NC 28303**

Single prime bids will be accepted in accordance with G.S. 143-128. Complete Bid Documents will be issued at the Pre-bid Conference or may be obtained prior to the Pre-Bid Conference from Donna Fields, Director of Operations / Project Manager, Cumberland County Schools, (678-2571) when available.

Requirements for bidding this project are as follows:

1. Three references from previously satisfied commercial customers.
2. Furnish NC License Number (G.S. Chapter 87 establishes licensing requirements for general, plumbing, heating, electrical, and refrigeration contractors for construction projects costing \$30,000 or more).
3. Insurance - The Contractor shall provide, as required by law, insurance for his employees. The Cumberland County Schools assumes no liability for injuries or accidents related to the Contractual Agreement. The Contractor shall furnish a certificate to the Owner (Cumberland County Schools) as a Proof of Coverage. The Contractor shall maintain and pay the Insurance Coverage, which shall not be less than the following:
 - A. Workman's Compensation statutory
 - Employees Liability \$500,000
 - B. General Liability (per person/per occurrence):
 1. Bodily Personal Injury \$1,000,000/\$2,000,000
 2. Property Damage \$1,000,000/\$2,000,000
 - C. Automobile Liability (per person/per occurrence)
 1. Bodily Injury \$1,000,000
 2. Property Damage \$1,000,000
 - D. Owner shall be listed as an additional insured.
4. Recruitment of minority business participation in accordance with G.S. 143-128.

The Owner reserves the right to reject any and all proposals.

Dr. Frank Till, Superintendent
Cumberland County Schools
PO Box 2357
Fayetteville, NC 28302

INFORMAL CONTRACT

**FOR
CUMBERLAND COUNTY BOARD OF EDUCATION
PLANT OPERATIONS
810 GILLESPIE STREET
FAYETTEVILLE, NORTH CAROLINA 28306
(910) 678-2565, (910) 678-2642 FAX**

SCOPE OF WORK

Culinary Lab Casework Replacement at Westover High School Room 125

NOTICE TO BIDDERS

Sealed proposals for this work will be received by:

Donna Fields
Director of Operations / Project Manager
Cumberland County Board Of Education2:
810 Gillespie Street
Fayetteville, N.C. 28306
(910) 678-2571, Fax (910) 678-2579, Cell (910) 551-6583

up to **2:00 p. on May 15, 2017** and immediately thereafter publicly opened and read aloud.

A Mandatory Pre-Bid conference will be held. Contractors interested in bidding shall meet around 2:00 p.m. on April 26th, 2017 at Westover High School, 277 Bonanza Drive, Fayetteville, North Carolina 28303.

Contractors are hereby notified that they must have proper license under the State laws governing their respective trades and that North Carolina General Statutes 87 will be observed in receiving and awarding contracts.

The Owner reserves the right to reject any or all bids and waive informalities.

Proposals shall be made only on the form provided herein with all blank spaces for bids properly filled in and all signatures properly executed.

Note on the envelope:

Bid Proposal For:

(Project Name)_____

(Contract Type)_____

(Bid Date)_____

(License Number)_____

INFORMAL CONTRACT FOR CONSTRUCTION

THIS CONTRACT, made the ___ day of _____ in the year of _____ by and between _____ (“Contractor”) and the Cumberland County Board of Education (“Owner”).

WITNESSETH:

That the Contractor and the Owner for the consideration herein named agree as follows:

1. Scope of Work: The Contractor shall furnish and deliver all of the materials, and perform all of the work in the manner and form as provided by the following enumerated plans, specifications and documents, which are attached hereto and made a part hereof as if fully contained herein: Notice to Bidders; General Conditions; Supplementary General Conditions; specifications; this Contract; and drawings, titled:

CULINARY ARTS LAB CASEWORK REPLACEMENT AT WESTOVER HIGH SCHOOL ROOM 125

Dated: _____ and the following addenda:

Addendum No. ___ Dated _____ Addendum No. _____ Dated _____
Addendum No. ___ Dated _____ Addendum No. _____ Dated _____

2. That the Contractor shall commence work to be performed under this Contract on a date to be specified in a written Notice to Proceed issued by the Owner and shall fully complete all work hereunder within **100 (one hundred)** consecutive calendar days from said date. For each day in excess thereof, liquidated damages shall be assessed in the amount of **Two hundred fifty dollars (\$250.00)** per day for each day beyond the substantial completion date. If the Contractor fails to begin the work within ten days after the date specified in the Notice to Proceed, or the progress of the work is not maintained on schedule, or the work is not completed within the time specified, or if the Contractor fails to perform the work with sufficient workmen and equipment or with sufficient materials to ensure the prompt completion of the work, or shall perform the work unsuitably, or not in accordance with the plans and specifications, or in violation of safety requirements or for any cause whatsoever shall not carry out the work in an acceptable manner, then the Owner shall declare this Contract in default and may terminate the performance of the Contract and assume possession of the Project site and of all materials and equipment at the site and may complete the work. In such case, the Contractor shall not be paid until the work is complete.
After Final Completion has been achieved, if any portion of the contract price, as it may be modified thereafter, remains after the cost to the Owner of

completing the work, including all costs and expenses of every nature incurred, such remainder shall belong to the Contractor. Otherwise, the Contractor shall pay and make whole the Owner for such cost. This obligation for payment shall survive the termination of the Contract. Failure of a Contractor to meet the requirements of a Contract and/or insufficient performance may disqualify the Contractor from being awarded future Projects.

3. The Owner hereby agrees to pay to the Contractor for the faithful performance of this Contract, subject to additions and deductions as provided in the Specifications or the accepted Proposal, in lawful money of the United States as follows:

BASE BID: _____
(\$_____)

ALTERNATE: _____
(\$_____)

Based upon an Application for Payment, submitted to the Owner by the Contractor, the Owner shall make payment to the Contractor upon inspection and acceptance by the Owner within 15 days.

IN WITNESS WHEREOF, the Owner and Contractor have executed this Contract on the day and date first above written in two counterparts, each of which shall without proof or accounting for other counterparts, be deemed an original.

CUMBERLAND COUNTY SCHOOLS

OWNER _____ DATE _____
Wilson A. Lacy
Executive Director, Operations

CONTRACTOR _____ DATE _____
Name, Title

ATTEST _____

GENERAL INSTRUCTIONS

It is understood and agreed that by submitting a bid, the Contractor has examined these contract documents, drawings and specifications and has visited the site of the Work, and has satisfied himself relative to the Work to be performed.

MATERIALS, EQUIPMENT AND EMPLOYEES

The Contractor shall, unless otherwise specified, supply and pay for all labor, transportation, materials, tools, apparatus, lights, power, fuel, sanitary facilities and incidentals necessary for the completion of his work, and shall install, maintain and remove all equipment of the construction, and be responsible for the safe, proper and lawful construction, maintenance and use of same, and shall construct in the best and most workmanlike manner, a complete job and everything incidental thereto, as shown on the plans, stated in the specifications, or reasonably implied there from, all in accordance with the contract documents.

All materials shall be new and of quality specified, except where reclaimed material is authorized herein and approved for use. Workmanship shall at all times be of a grade accepted as the best practice of the particular trade involved, and as stipulated in written standards of recognized organizations or institutes of the respective trades except as exceeded or qualified by the specifications. Used products, sub-standard products or leftover materials from a previous job will not be acceptable and shall not be allowed on the job site.

Products are generally specified by ASTM or other referenced standard and or by manufacturer's name and model number or trade name. When specified only by referenced standard, the Contractor may select any product meeting this standard, by any manufacturer. When several products or manufacturers are specified as being equally acceptable, the Contractor has the option of using any product and manufacturer combination listed. However, the contractor shall be aware that the cited examples are used only to denote the quality standard of product desired and that they do not restrict bidders to a specific brand, make, manufacturer or specific name; that they are used only to set forth and convey to bidders the general style, type, character and quality of product desired; and that equivalent products will be acceptable. Substitution of materials, items or equipment of equal or equivalent design shall be submitted to the architect or engineer for approval or disapproval; such approval or disapproval shall be made to the architect or engineer prior to the opening of bids.

If any time during the construction and completion of the work covered by these contract documents, the conduct of any workman of the various crafts be adjudged a nuisance to the Owner or if any workman be considered detrimental to the work, the Contractor shall order such parties removed immediately from the grounds.

The Contractor shall designate a foreman/superintendent who shall direct the work.

PROTECTION OF PERSONS AND PROPERTY

The Contractor shall be responsible for the entire site and the construction of the same and provide all the necessary protections as required by laws or ordinances governing such conditions and as required by the Owner or Designer. The Contractor shall adhere to the rules, regulations and interpretations of the North Carolina Department of Labor relating to Occupational Safety and Health Standards for the Construction Industry, and revisions thereto as adopted by General Statutes of North Carolina 95-126 through 155. The Contractor shall provide all necessary safety measures for the protection of all persons on the job, including the requirements of the A.G.C. Accident Prevention Manual in Construction, as amended, and shall fully comply with all state laws or regulations and North Carolina State Building Code requirements to prevent accident or injury to persons on or about the location of the work. The Contractor shall protect against damage or injury resulting from falling materials and shall maintain all protective devices and signs throughout the progress of the work.

The Contractor shall perform demolition in such a manner as to eliminate hazards to property and personnel. He shall take precautions to minimize interference with the use of adjacent areas, utilities, and other structures and provide free passage to and from the areas or structures. Whenever any equipment is used that may cause a fire or if any flammable material is used, the Contractor shall provide and maintain a fully charged fire extinguisher in the area and instruct all personnel in its proper use.

The Contractor shall be responsible for any damage to the Owner's property, or of that of others on the job, by them, their personnel, or their subcontractors, and shall make good such damages.

At no time shall the Contractor block any fire hydrants or emergency exits with any material, equipment or debris. All equipment locations, storage, etc. shall be approved by the Owner. Outside storage areas shall be roped and/or barricaded and posted as restricted areas. The Contractor shall clearly mark or post signs warning of existing hazards and shall barricade work area if possible to prevent entry by students or other persons.

The Contractor shall wear appropriate clothing, shirts and long pants, while on the job. The Contractor is restricted from wearing clothing that displays offensive language or material. Smoking is prohibited inside the building and will be restricted to a designated site outside the facility.

CONTRACTOR-SUBCONTRACTOR RELATIONSHIPS

The Contractor agrees that the terms of these contract documents shall apply equally to a subcontractor as to the Contractor, and that the subcontractor is bound by those terms as an employee of the Contractor.

INSURANCE

The Contractor shall not commence work until he has obtained all insurance required, and the Owner has approved such insurance, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been obtained.

The Contractor shall provide and maintain during the life of this contract Workman's Compensation

- | | | |
|----|--|-----------------------------------|
| A. | Workman's Compensation | Statutory |
| | Employers Liability | \$500,000 |
| B. | General Liability (per person/per occurrence): | |
| | 1. Bodily and Personal Liability | \$1,000,000/\$2,000,000 |
| | 2. Property Damage | \$1,000,000/\$2,000,000 Aggregate |
| C. | Automobile Liability (per person/per occurrence) | |
| | 1. Bodily Injury | \$1,000,000 |
| | 2. Property Damage: | \$1,000,000 Aggregate |
| D. | Builder's Risk or Installation Floater | Contract Amount |
| E. | Owner shall be listed as an additional insured | |

Certificates of Insurance shall be filed with the Owner. During construction of the work, the Contractor shall provide updated records whenever any of these coverages become outdated.

Each Certificate of Insurance shall bear the provision that the policy cannot be canceled, or coverage reduced or eliminated in less than thirty (30) days after mailing notice to the insured and/or the Owner of such alteration or cancellation.

The certificate holder shall be named Cumberland County Board of Education, Attn: Tim Kinlaw, Associate Superintendent Auxiliary Services, P.O. Box 2357 Fayetteville, NC 28302.

CONSTRUCTION CONFERENCES

The Contractor is required to attend progress conferences as called by the Owner. It shall be the principal purpose of these conferences to effect coordination, cooperation and assistance in every practical way toward the end of maintaining progress of the Project on schedule and toward completing the Project within the specified Contract time.

SHOP DRAWINGS, SUBMITTALS, SAMPLES, DATA

The Contractor shall submit to the Owner all shop drawings, descriptive data, samples, color charts, etc., required for the work. All materials shall be submitted in duplicate. These shall be promptly reviewed by the Owner, noting desired corrections, if any, and one approved copy shall be returned to the Contractor. Once materials have been approved, no substitutions will be permitted except in unusual extenuating circumstances. If a proposed substitution is not approved by the Owner in writing, the Contractor shall supply materials as specified.

PERFORMANCE

The Contractor shall commence work to be performed under the Contract on a date to be specified in a Notice to Proceed issued by the Owner and shall substantially complete all work in accordance with the project Time Table. If the Contractor fails to begin the work within ten days after the date specified in the Notice to Proceed, or progress of the work is not maintained on schedule, or the Contractor fails to perform the work with sufficient workmen and equipment or with sufficient materials to ensure prompt completion of the work, or shall perform the work unsuitably, or not in accordance with plans and specifications, or in violation of safety requirements or for any cause whatsoever shall not carry on the work in an acceptable manner, then the Owner shall declare this Contract in default and Owner may terminate the performance of the Contract and assume possession of the Project site and of all materials and equipment at the site and may complete the work. In such case, the Contractor shall not be paid until the work is complete. After Final Completion has been achieved, if any portion of the contract price, as it may be modified there under, remains after the cost to the Owner of completing the work, including all costs and expenses of every nature incurred, has been deducted by the Owner, such remainder shall belong to the Contractor. Otherwise, the Contractor shall pay and make whole the Owner for such cost. This obligation for payment shall survive the termination of the Contract. Failure of a Contractor to meet the requirements of a Contract and/or insufficient performance may disqualify Contractor from bidding future Projects.

REFERENCES

Contractor shall furnish to the Owner a list of at least three commercial references with names and phone numbers.

PREREQUISITES FOR SUBSTANTIAL COMPLETION

The Owner will not delay Substantial Completion inspection pending receipt of the following items. Conversely, these are items which should be addressed at that time, and must be completed to achieve Final Completion.

- A. Submission of Final Payment Request.
- B. Submission of all Allowances/Change Orders and accounting for all adjustments to the Contract Sum.

CHANGE ORDER

No change shall be made in the Work except upon written approval and change order of the Designer/Owner. Change orders shall be subject to provisions in the current North Carolina Construction Manual.

Changes in the work within the general scope of this Contract, consisting of additions, deletions, revisions, or any combination thereof, may be ordered without invalidating this Contract, by Change Order. Changes in the work shall be performed under applicable provisions of this Contract and the Contractor shall proceed promptly with such changes.

All Change Orders are to be submitted on FORM C/O99-00. (ATTACHED) The Contractor shall not proceed with such work without written authority. THE CONTRACTOR SHALL NOT ACT ON INSTRUCTIONS RECEIVED BY HIM FROM PERSONS OTHER THAN THE PROJECT MANAGER, OR THE ARCHITECT OR ENGINEER REPRESENTING THE OWNER. ANY CLAIMS FOR EXTRA COMPENSATION OR EXTENSION OF TIME ON ACCOUNT OF SUCH INSTRUCTIONS WILL NOT BE HONORED. In preparing figures for Change Orders for consideration, the percentage allowed for overhead and profit combined shall not exceed fifteen (15%) of net cost.

INSPECTION, PERMITS

The Contractor shall obtain the required permits, give all notice and comply with all laws, ordinances, codes, rules and regulations bearing on the conduct of the work under this contract. If the Contractor observes that the drawings and specifications are at variance therewith, he shall promptly notify the Engineer in writing. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, codes, rules and regulations, and without such notice to the Owner, he shall bear all cost arising there from.

All permits must be posted or delivered to the Owner prior to the start of work. A copy of the permit invoice shall be conveyed to the Owner with the application for payment.

It is a condition of this Contract that the work shall be subject to inspection during normal working hours by designated representatives of the Owner, the Architect/Engineer, and those persons required by state law to test special work for official approval. The Contractor shall therefore provide safe access to the work at all times for such inspections.

All work under this Contract shall conform to the North Carolina State Building Code and all other state, local and national codes as are applicable. The cost of all required inspections and permits shall be the responsibility of the Contractor.

TAXES

Federal Excise Taxes do not apply to materials entering into State work (Internal Revenue Code, Section 3442(3)). Federal Transportation Taxes do not apply to materials entering into State work (Internal Revenue Code, Section 3475 (b) as amended). North Carolina Sales Taxes and Use Tax do apply to materials entering into State Work (N.C. Sales and Use Tax Regulation No. 42, Paragraph A), and such costs shall be included in the bid proposal and contract sum.

EQUAL OPPORTUNITY

The non-discrimination clause contained in Section 202 (Federal Executive Order 11246, as amended by Executive Order 11375, relative to Equal Employment Opportunity for all persons without regard to race, color, religion, sex or national origin, and the implementing rules and regulations prescribed by the Secretary of Labor, are incorporated herein.

The Contractor agrees not to discriminate against any employees or applicant for employment because of physical or mental handicap in regard to any position for which the employees or applicant is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices.

MINORITY PARTICIPATION

Contractor shall solicit minority participation in accordance with G.S. 143-128.2. Reporting requirements for solicitation and participation shall follow these guidelines. (MBE Status must be noted in the appropriate section of the Bid Form for the bid to be considered responsive).

CONTRACT PAYMENTS

Payment Request shall be in submitted on an Application and Certificate for Payment AIA G702 Form to Donna Fields, Cumberland County Schools, 810 Gillespie Street, Fayetteville, North Carolina 28306. The Invoice will be processed and paid within fifteen (15) consecutive days after acceptance of the work.

Certificate of Sales Tax Usage must be included with **each** request for payment. This Certificate shall include the date, the type of property and the cost of the property purchased from each vendor, the county in which the vendor made the sale and the amount of local sales and use taxes paid thereon. If the property was purchased out-of-state, the county in which the property was delivered should be listed. Contractors are not to include any tax paid on supplies, tools and equipment which they use to perform their contracts and should include only those building materials, supplies, fixtures and equipment which actually become a part of or annexed to the building or structure.

CLEANING UP

The Contractor shall keep the building and surrounding area reasonably free from rubbish at all times, and shall remove debris from the site from time to time or when directed to do so by the Owner. Before final inspection and acceptance of the building, the Contractor shall clean its portion of the work, including glass, hardware, fixtures, masonry, and tile, clean all floors and completely prepare the building for use by the Owner, with no cleaning required by the Owner.

In the event the Contractor creates additional cleaning work for the Owner, the Contractor shall compensate the Owner for such cleaning. Any expense the Owner incurs to clean the building will be deducted from final payment to the Contractor.

WARRANTY

The contractor shall unconditionally guarantee materials and workmanship against patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve (12) months following the final acceptance of the work and shall replace such defective materials or workmanship without cost to the Owner.

Where items of equipment or material carry a manufacturer's warranty for any period in excess of twelve (12) months, then the manufacturer's warranty shall apply for that particular piece of equipment or material. The contractor shall replace such defective equipment or materials, without cost to the Owner, within the manufacturer's warranty period.

Additionally, the Owner may bring an action of latent defects caused by the negligence of the Contractor, which is hidden or not readily apparent to the Owner at the time of beneficial occupancy or final acceptance, whichever occurred first, in accordance with applicable law.

Guarantee for roof, equipment, materials, and supplies shall be stipulated in the specifications sections governing such roof, equipment, materials, or supplies.

SUPPLEMENTARY GENERAL CONDITIONS

TIME OF COMPLETION

It is the Owner's intent to make a recommendation regarding award of this Contract by **May 17, 2017**. Notice of Intent to Award will be prepared and conveyed to the Contractor immediately. By **May 17, 2017** prepared Contracts will be conveyed to the Contractor along with Notice to Proceed. The Notice to Proceed will set **May 18, 2017** as the Construction Start Date. The Contractor shall commence the performance of this Contract on this date and shall diligently continue its performance to and until final completion of the Project.

The Contractor shall develop a Project Construction Schedule, which shall be approved by and submitted to the Owner.

Substantial Completion shall be achieved by **August 10, 2017**. Final Completion shall be no later than **August 25, 2017**.

The Owner will occupy the existing building and grounds and conduct business on a daily basis while work is in progress. It is essential that the Contractor cooperate closely with the Owner in working to keep disruptions to a minimum. Anticipated disruptions/delays in projected work schedules must be reviewed and cleared in advance with the Owner.

The Contractor may be required to complete a Daily Work Log (Form LOG99-00) ATTACHED, which shall be kept on site for review by the Owner during routine inspections.

USE OF SITE

Working hours of 8:00 am – 5:00 pm Monday – Friday is observed unless prior authorization is approved by the Operations staff. All personnel must sign in at the front office each day they are on-site.

LIQUIDATED DAMAGES

The Contractor shall commence work to be performed under this agreement on **May 18, 2017** and shall substantially complete all work hereunder by **August 10, 2017**. **For each day in excess of this substantial completion date, the Contractor shall pay to the Owner Two hundred fifty dollars (\$250.00) as liquidated damages** reasonably estimated in advance to cover the losses to be incurred by the Owner should the Contractor fail to complete the Work within the time specified.

If the Contractor is delayed at anytime in the progress of his work by any act or negligence of the Owner, his employees or his separate contractor, by changes ordered in the work; by abnormal weather conditions; by any causes beyond the Contractor's control or by any other causes deemed justifiable by Owner, then the contract time may be reasonable extended in a written order from the Owner upon written request from the Contractor within ten days following the cause for delay.

UTILITIES

- a. Use of electric power, fuel oil, water, heating and cooling, and toilet facilities shall be coordinated with the building Owner prior to start of construction.
- b. Any interruption of utilities (electricity, fuel oil, water, heating, cooling, etc.) shall be minimized and undertake through coordination with the Owner with at least 72 hours advance notice.
- c. The contractor is responsible for locating all underground services prior to construction through the use of school property accounting information or through a utility locator service.

SECURITY

The Contractor shall take all necessary precautions to avoid jeopardizing the security of the building to include:

- A. No entry shall be made into the building without the authorization and approval of the administrative staff.
- B. Workers shall be identified at all times with either badges or company logo.
- C. Contractor shall be responsible for securing area within which he is working.

MISCELLANEOUS

If it is determined at the Pre-Bid meeting that this is an unreasonable schedule, an alternate substantial and final completion date will be determined and annotated in an addendum no later than 72 hours prior to the bid opening.

The new casework configurations are to match what is now in place.

SECTION 12 3553
WOOD LABORATORY CASEWORK

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Wood cabinets and cabinet hardware.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary General Conditions, Division 1 Specification Sections, and Addenda, apply to this Section.
- B. Section 06 1000 - Rough Carpentry: Support framing, grounds, and concealed blocking.
- C. Section 07 9000 - Joint Sealers.
- D. Section 11 3100 - Appliances: Appliances to be installed in casework.
- E. Section 12 3600 - Countertops.
- F. Division 22 Sections for plumbing fixtures installed at casework by Plumbing Contractor.
- G. Division 26 Sections for electrical receptacles installed at casework by Electrical Contractor.

1.03 DEFINITIONS

- A. Exposed: Portions of casework visible when drawers and cabinet doors are closed, including end panels, bottoms of cases more than 42 inches above finished floor, tops of cases less than 72 inches above finished floor and all members visible in open cases or behind glass doors.
- B. Semi-Exposed: Portions of casework and surfaces behind solid doors, tops of cases more than 72 inches above finished floor and bottoms of cabinets more than 30 inches but less than 42 inches above finished floor.
- C. Concealed: Sleepers, web frames, dust panels and other surfaces not generally visible after installation and cabinets less than 30 inches above finished floor.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Large Components: Ensure that large components can be moved into final position without damage to other construction.

1.05 SUBMITTALS

- A. See General Conditions for submittal procedures.
- B. Product Data: Component dimensions, configurations, construction details, joint details, attachments; manufacturer's catalog literature on hardware, accessories, and service fittings, if any.
 - 1. Include manufacturer's standard large-scale sections showing materials and construction methods.
- C. Qualification Data: Indicating compliance with Quality Assurance Article.
- D. Shop Drawings: Show location and size, accessories, materials, finishes, and filler panels. Include fully dimensioned plans, elevations, sections, and anchorage details to countertop and walls.
 - 1. Location of each set of cabinets shall be cross-referenced to indications on Architectural Drawings.
 - 2. Include large-scale sections specific to the Project, clearly noting all materials, demonstrating compliance with requirements.
 - 3. Indicate locations of blocking and reinforcements required for installation of casework.
- E. Samples: Submit actual samples of base cabinet for preapproval of casework substitutions. Samples shall be sufficient in size to demonstrate acceptability of materials, joinery, construction, durability, finishes and hardware.

- F. Samples for Selection Purposes: Submit samples consisting of available stains and finishes applied to wood of species and cut being provided for the project.
- G. Samples: Submit actual sample items of proposed pulls, hinges, shelf standards, and locksets, demonstrating hardware design, quality, and finish.
- H. Test Reports: From independent laboratory indicating compliance with referenced chemical-resistance standards for cabinet finish and liner materials.
- I. Maintenance Data: Maintenance data for casework for inclusion in Maintenance Manual specified in Division 1.

1.06 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum five years of documented experience.
- B. Single-Source Responsibility: Obtain wood laboratory casework from a single source and produced by a single manufacturer. Obtain each type of lab fixture and equipment from a single source and produced by a single manufacturer.
- C. Design Concept: The drawings indicate the casework and equipment types required and are based on the specific type and model indicated. Products by other manufacturers may be considered provided deviations in dimensions and profiles are minor and do not change the design concept as judged by the Architect. The burden of proof of equality is on the proposer.
- D. Wood Science Casework: Certified to comply with SEFA-8 standards for impact resistance, hot water resistance, chemical resistance, weight load tests and resistance to table racking.

1.07 FIELD CONDITIONS

- A. Environmental Conditions: Comply with casework manufacturer's recommendations for optimum temperature and humidity conditions during storage and installation. Do not install casework until these conditions have been attained and stabilized.
- B. Space Enclosure Limitations: Do not install science casework and equipment until ambient temperature and humidity conditions are and will be continuously maintained at values near those indicated for final occupancy.
- C. Field Measurements: Verify casework and countertop dimensions by field measurements. Verify casework can be installed in compliance with the original design and referenced standards. Where laboratory casework is indicated to fit to existing construction, verify dimensions of existing construction by field measurements before fabrication and indicate measurements on Shop Drawings. Provide fillers and scribes if necessary.

1.08 WARRANTY

- A. See General Conditions for Closeout Submittals, for additional contractor warranty requirements.
- B. Casework Manufacturer Warranty: Submit a written warranty executed by manufacturer agreeing to repair or replace casework that does not meet requirements or that fails in materials or workmanship within the specified warranty period. Failures include, but are not limited to, defects in materials and workmanship, deterioration of material and surface performance below minimum SEFA-8 standards. Warranty period commences on date of Final Acceptance of the work or Beneficial Occupancy.
 - 1. Warranty Period: 3 years.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Wood Laboratory Casework: A. Manufacturer Qualifications: A firm experienced in manufacturing wood cabinetssimilar tothose indicated for this Project and with a record of successful in-service performance.Subject to compliance with requirements, manufacturers include but are not limited to:
 - 1. CampbellRhea, Heritage Series
 - 2. Leonard Peterson & Co., Century Series
 - 3. Kewaunee Scientific Corp, Signature Series.
 - 4. Substitutions: See General Conditions for Request for Substitution Requirements

2.02 MATERIALS

- A. General: Sizes, dimensions, and thicknesses given are minimum dimensions
- B. Wood-Based Materials:
 - 1. Solid Wood: Air-dried to 6 percent moisture content, then tempered to 7 to 8 percent moisture content prior to fabrication.
- C. Exposed Solid Wood: Grade FAS or better. Clear, dry, sound, plain sawn, selected for compatible grain and color, no defects. Do not use two adjacent exposed faces that are noticeably dissimilar in color, grain, figure, or natural character markings.
 - 1. Species: Maple or Red Oak
- D. Semi-Exposed Solid Wood: Grade FAS or better. Dry, sound, plain sawn hardwood, no appearance defects, any species similar in color and grain to exposed portions.
- E. Exposed Hardwood Plywood: HPVA HP-1 Grade AA, Type I; veneer core; same species as exposed solid wood, clear, compatible grain and color, no defects. Face veneer thickness not less than 1/28 inch. Band exposed edges with solid wood of same species as veneer.
 - 1. Maple or Red Oak Plywood: Rotary cut, whole piece, cross-banded with veneer core.
- F. Semi-Exposed Hardwood Plywood: HPVA HP-1 Grade C, Type I; veneer core; plain sliced, any species similar in color and grain to exposed portions. Face veneer thickness not less than 1/28 inch.
- G. Concealed Solid Wood or Plywood: Any species and without defects affecting strength or utility.
- H. Hardboard: AHA A135.4, Class 1, tempered.
- I. Stainless Steel Sheet: ASTM A 666 Type 304.
- J. Glass: Fully tempered float; ASTM C 1036, Type 1, Quality Q3; ASTM C 1048, tempered using horizontal tempering and complying with ANSI Z97.1; 4 mm thick minimum ; exposed edges ground, and cut or drilled to receive hardware; clear.
- K. Sealant: Clear, sanitary type, as specified in Section 07 9000.

2.03 WOOD LABORATORY CASEWORK

- A. General: Design, material and construction shall comply with SEFA-8 performance and resistance standards. Handicapped accessible units shall comply with current ADAAG standards and ICC/ANSI A117.1.
- B. Construction: Solid wood and wood veneer on plywood core, except as otherwise noted. Each unit self-contained and not dependent on adjacent units or building structure for rigidity; in sizes necessary to avoid field cutting except for scribes and filler panels.
 - 1. Joints: Bored, doweled, dadoed, glued and screwed construction, except drawers may be lock shoulder jointed.
 - 2. Cabinet bottom flush with top of face frame; without gaps or inaccessible spaces or areas where dirt or moisture could accumulate.
- C. Cabinet Style: Reveal overlay, partially recessed into cabinet front.
- D. Solid Wood and Face Veneer Species: Maple or Red oak. Face veneer at all exposed plywood to match face frame.
- E. Base Cabinet Top: Full top frame, tongue and groove or mortise and tenon joints, glued and mechanically attached to cabinet ends.
- F. Cabinet Tops: At cabinets without countertops. Minimum 1-inch-thick plywood, with minimum 1/8 inch hardwood banding or facer on exposed edges.
- G. Cabinet End Panels: 3/4 inch thick plywood with minimum 1/8 hardwood banding or facer on exposed edges.
- H. Back Panels: Exposed back panels, minimum 3/4-inch-thick plywood. Unexposed exterior, exposed interior back panels, minimum 1/4-inch thick plywood. Unexposed back panels, minimum 1/4 inch thick hardwood plywood or 1/4-inch thick hardboard with thermoset finish.

- I. Cabinet Bottoms: Minimum 3/4-inch-thick plywood at base cabinets, 1-inch thick at wall and upper cabinets, with minimum 1/8 hardwood banding or facers on exposed edges. Set flush and joined to cabinet end panels with glued dowels or glue and screws.
- J. Toe Boards: 3/4-inch-thick hardwood or 7-ply minimum veneer core water-resistant plywood. Attached between end panels with glued dowel joinery and metal fasteners and extended from bottom panel to floor.
- K. Shelves: Minimum 3/4-inch-thick plywood, with minimum 1/8 inch solid wood edgebanding on front edge, adjustable on 32 mm centers. All shelves full-depth unless otherwise noted. Shelves over 36 inches wide shall be minimum 1-inch thick. Exposed shelves with face veneer to match cabinet body.
- L. Drawers: Vertical or horizontal grain at drawer fronts at manufacturer's option.
 - 1. Drawer Front: 3/4 inch thick solid hardwood or hardwood plywood, dovetailed and glued to drawer box sides, semi-recessed into cabinet opening. Machine radiused lipped edges overlapping the opening by 1/4 inch on all sides.
 - 2. Sides, and Backs: Minimum 3/8-inch-thick solid wood or 1/2-inch 9-ply plywood with radiused top edges. All corners dovetailed and glued.
 - 3. Bottoms: 1/4-inch-thick hardboard with thermoset finish, set into rabbets in back, sides, and front with continuous bead of glue around perimeter.
- M. Hinged Doors: Solid hardwood frame with 3/4 inch thick particleboard inset with face veneer, vertical grain, semi-recessed into cabinet opening. Machine radiused lipped edges overlapping the opening by 1/4 inch on all sides. Right door of double doors overlaps integral machined astragal of left door.
- N. Open-Frame Tables:
 - 1. Perimeter frame rails minimum 3/4-inch by 4-3/4-inch hardwood or 7-ply minimum veneer core plywood with attached steel corner braces. Cross rails 3/4-inch 7-ply minimum veneer core plywood, doweled and glued into front and back rails at intervals not more than 33 inches on center. Compartment bottoms minimum 1/4 inch plywood and let into dadoed grooves in cross rails and the front and back rails, then glued on all four edges. Leg stretchers of 2 1/8 inch by 1 inch solid wood. Route openings in the one-piece rail when drawers or compartments are required. Exterior rails receive heavy steel corner braces for attachment of legs.
 - 2. Table Legs: 2-1/4 inch square solid hardwood, securely fastened to steel corner brace and table rails. Provide leg shoes of black rubber, closed bottom, inside corners mitered, outside corners wrapped.
- O. Glazing: With gasket and removable stops; minimize rattling and vibration.
- P. Fixture Locations: Cut and drill counter tops, backs, and other components for service outlets and fixtures.
- Q. Access Panels: Provide access panels for maintenance of utility service and mechanical and electrical components.
- R. Scribes and Fillers: Where cabinets do not fit tight to adjacent construction, provide filler panels of matching construction and finish.

2.04 WOOD CASEWORK FINISHES

- A. General: Factory-finish all exposed and semi-exposed surfaces with the same finish. To the greatest extent possible, finish casework at factory. Defer only final touch-up until after installation.
 - 1. Exposed Exterior and Interior : Baked on specified NGR stain, two coats of moisture resistant sealer and two applications of a topcoat of clear catalyzed chemical resistant conversion varnish.
 - 2. Semi-exposed Interior Surfaces: Stain (color coat), one coat of moisture resistant sealer, and two applications of a clear, catalyzed, chemical resistant conversion varnish topcoat. Match exterior color.

3. Other Unexposed Surfaces: Unexposed end panels, unexposed backs, drawer sides and drawer bottoms to receive a baked on coat of moisture resistant sealer, baked on clear catalyzed chemical resistant conversion varnish, but no stain (color coat).
- B. Factory Finishing:
1. Preparation: Wood sanded smooth, free from dust and mill marks.
 2. Stain: Single application of clean, manufacturer-recommended stain of selected color; tinted coating not acceptable.
 3. Coating: Clear, superior-quality, chemical-resistant acyclic urethane; applied in accordance with manufacturer instructions, force-dried, sanded and wiped clean.
 4. Coats: Multiple coats as required to achieve minimum 1.5 mil dry film thickness.
- C. Finish: Formaldehyde free finishes.
1. Provide finish on all surfaces having chemical resistance of Level 0 (no change) or Level 1 (slight change of gloss or slight discoloration) according to SEFA 8.1 and no visible effect when surface is exposed to:
 - a. Hot water at temperature between 190 F and 205 F trickled down the test surface at 45 degree angle for 5 minutes.
 - b. Constant moisture in the form of 2 inch by 3 inch by 1 inch cellulose sponge kept continually saturated with water and in contact with test surface for 100 hours.
 2. Appearance: Clear satin gloss; not cloudy or muddy.
 3. Color: Provide selections made by Owner from full range of standard finishes available.

2.05 WOOD CASEWORK HARDWARE

- A. General: Manufacturer's standard units complying with ANSI A156.9, of type, material, size, and finish as selected from manufacturer's standard choices. Provide matching finish for exposed hinges, pulls, locks, handles and latches.
1. Finish of Exposed Components: No. 4 finish.
- B. Pulls: Manufacturer's standard pulls. Pulls to be mounted horizontally on drawers and vertically on doors. Provide single pull for each door, and for drawers 24 inches or less in width, two pulls for drawers over 24 inches in width.
1. Profile: Extruded flat aluminum, nominal 4 inches by 1/2 inch wide.
- C. Hinges: 5-knuckle heavy-duty institutional style, hospital tipped, stainless steel. Two hinges per door to 36" height, three hinges per door to 60" height, four hinges per door to 80" height.
- D. Latching Handle: ADA compliant handle, operates with 1/4 turn. Three point latching system to provide positive engagement at the top and bottom of the door with rods and strike plates. Aluminum rods 5/16 inch diameter and move in guides attached to the back of the door. The middle of the door is secured by a latch plate, which engages the side of the case, or latches behind the left door on cases with double doors. ~~Provide dummy handle for left door of double-door units, locking handle for the right door.~~
- ~~E. Locking Handle: Latching handle with a lock mechanism incorporated into the handle head. Provide dummy handle for left door of double-door units, locking handle for the right door.~~
- F. Catches: Provide elbow catch at all cabinets with locking double doors. Provide heavy duty roller-type catch at all other doors over 36" in height. Roller catch shall have nylon roller in steel housing, adjustable screw-mounting, steel stop, steel strike plate.
- G. Drawer Slides: Equal to Blum 230M Series. Epoxy-coated steel profiles, full-extension, bottom mounted, built-in positive stop both directions, self-close feature. Captive nylon rollers front and rear. Minimum 100 lbs. load test. Slides shall have manufacturer's lifetime material replacement guarantee.
- H. Sliding Door Tracks: Nylon track with solid bearing followers.
- I. Adjustable Shelf Supports: Polycarbonate clips, laboratory grade. Heavy duty double pin design with anti-tip up restraint, friction fit into cabinet end panels or vertical dividers, readily adjustable on 1-1/4" (32mm) centers.

~~J. Locks: SL-1, laboratory grade, removable core, disc tumbler, cam-style lock with strike, chrome plated. Tumblers and keys shall be brass, plug and cylinder die cast zinc alloy. Provide one lock for each pair of storage cabinet doors and drawers indicated as lockable and one lock for each pair of wall cabinet doors indicated as lockable. Key locks in each room differently, masterkeyed and furnished with 2 keys per lock.~~

K. Coat Rods: Chrome plated steel, 1-1/4" diameter installed in captive mounting hardware.

L. Leg Shoes: Black rubber, closed bottom, inside corners mitered, outside corners wrapped.

M. Countertop Support Brackets: Heavy duty brackets, epoxy-coated 12 gauge steel, with flanges for mechanical fastening to wall and countertop. Load rating 1,200 lbs. Notched at wall to accommodate wiring beneath the countertop. Sized to fit countertops shown in the drawings. Install 30" max. on center.

1. Locations: Required where open span shown on drawings exceeds capacity of table frame.

2.06 COUNTERTOPS

A. Countertops: As specified at Section 12 3600.

2.07 SINKS, STAINLESS STEEL

A. Sinks to be provided and installed by owner. Coordinate cutout requirements, clearances.

2.08 ELECTRICAL SERVICE FIXTURES

A. Electrical components to be provided and installed by owner.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify adequacy of support framing and anchors.
- B. Verify that service connections are correctly located and of proper characteristics.

3.02 COORDINATION

- A. Coordinate requirements for dimensions, cutouts, clearances and utilities with supplier of appliances (owner) to be installed in casework.
- B. Coordinate with owner, who will provide rough-in and make final connections.

3.03 INSTALLATION

- A. Perform installation in accordance with manufacturer's instructions and with SEFA 2.3.
- B. Use anchoring devices to suit conditions and substrate materials encountered.
- C. Set casework items plumb and square, securely anchored to building structure.
 1. Fasten unit of casework to adjacent unit and into structural support members of wall construction with #10 sheet metal or wood screws with washer head or washer.
 2. Fasten countertops securely to sub-tops or cabinet top frame.
- D. Align cabinets to adjoining components, with no variations in flushness of adjoining surfaces, using concealed shims. Where casework abuts other finished work, scribe, and cut for accurate fit. Install filler panels where necessary to close gaps; seal joints between cabinets and countertops and adjacent construction. Provide filler strips, scribe strips, and moldings in finish to match casework face.
- E. Install casework without distortion so that doors and drawers fit openings properly and are aligned. Complete the installation of hardware and accessories as indicated.
- F. Install countertop and edge surfaces in one plane with flush hairline seams. Provide holes and cutouts for service fittings. Countertops shall be installed flush against wall. Carefully dress joints smooth and remove surface scratches. Provide clear sealant at top and around ends of countertops where they meet wall surfaces and where counters have sinks.

- G. Tolerances: Install casework and countertop level and plumb to a tolerance of 1/8 inch in 8 feet.
- H. Coordinate casework cutouts and fillers with appliances provided by other trades or by the owner. Make cutouts from templates provided by other trades.

3.04 ADJUSTING

- A. Adjust operating parts, including doors, drawers, hardware, and fixtures, to function smoothly.
- B. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation.

3.05 CLEANING

- A. Clean casework on exposed and semi-exposed surfaces. Touch up factory-applied finishes to restore damaged or soiled areas. Clean all components.

3.06 PROTECTION

- A. Provide protection of installed products until project completion.
- B. Repair damage that occurs prior to Substantial Completion, including finishes, using methods prescribed by manufacturer; replace units that cannot be repaired to like-new condition.

END OF SECTION

SECTION 12 3600
COUNTERTOPS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Plastic Laminate Countertops for manufactured cabinetwork. *(Included in Base Bid)*
- B. Stainless Steel Countertops for manufactured cabinetwork. *(Included in Alternate Bid)*

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary General Conditions, and Addenda, apply to this Section.
- B. Closeout Submittals.
- C. Rough Carpentry.
- D. Laboratory Casework.
- E. Plumbing fixtures to be installed at countertops.

1.03 SUBMITTALS

- A. See General Conditions - Product Requirements, for submittal procedures.
- B. Shop Drawings: Complete details of materials and installation; combine with shop drawings of cabinets and casework specified in other sections.
- C. Selection Samples: For each finish product specified, color chips representing manufacturer's full range of available colors and patterns.
- D. Maintenance Data: Manufacturer's instructions and recommendations for maintenance and repair of countertop surfaces.

1.04 QUALITY ASSURANCE

- A. Fabricator Qualifications: Company specializing in manufacturing the products specified in this section with minimum five years of documented experience.
- B. Single-Source Responsibility: Obtain each type of countertop from a single source and produced by a single manufacturer.
- C. Installer Qualifications: Fabricator or installer of casework specified in Section 12 3553.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Protect units from moisture damage.
- C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.06 FIELD CONDITIONS

- A. During and after installation of countertops, maintain temperature and humidity conditions in building spaces at same levels planned for occupancy.
- B. Field Measurements: Verify countertop dimensions by field measurements. Verify countertops can be installed in compliance with the original design and referenced standards.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Plastic Laminate: Subject to compliance with requirements, manufacturers include but are not limited to:
 - 1. Formica Corporation.

2. Lamin-Art, Inc.
3. Panolam Industries International, Inc\Nevamar.
4. Panolam Industries International, Inc\Pionite.
5. Wilsonart International, Inc.
6. Substitutions: See General Conditions for Request for Substitution Requirements.

2.02 WOOD BASED COMPONENTS

- A. Moisture Resistant Particleboard for Supporting Substrate: Required at **all** countertop assemblies. ANSI A208.1; panels composed of wood chips, sawdust, or flakes of medium density, made with waterproof resin binders; 1-M-3 Exterior Glue Grade or better, sanded faces. Minimum density of 46 pcf, internal bond of 58 psi, and minimum screw-holding capacity of 200 lbs. on faces and 180 lbs. on edges. 1-1/8 inch thick; join lengths using metal splines.
1. Thickness swell: 5.5% maximum per ASTM D-1037.
 2. Moisture Resistant Category: MR-10.
 3. Available Products: Subject to compliance with requirements, products include:
 - a. Collins Pine FreeForm IND2, Collins Wood.
 - b. Skyblend Panels, Roseburg.
 - c. Vesta MR or Duraflake MZ Panels, Flakeboard.

2.03 PLASTIC LAMINATE COUNTERTOP ASSEMBLIES

- A. Plastic Laminate Countertops: High pressure decorative laminate (HPDL) bonded to moisture-resistant particleboard substrate. 1-1/8" substrate thickness.
- B. Back and End Splashes: Same construction as countertop, 3/4 inch substrate thickness. Height as indicated on drawings, minimum 4 inches high unless otherwise noted.
- C. Laminate Sheet: HPDL, NEMA LD 3, types as recommended for specific applications, through color.
1. Horizontal Surfaces: HGS, 0.048 inch nominal thickness, through color.
 2. Post-Formed Horizontal Surfaces: HGP, 0.039 inch nominal thickness, through color, colors as scheduled, finish as scheduled.
 3. Wear Resistance: In addition to specified grade, comply with NEMA LD 3 High Wear Grade requirements for wear resistance.
 4. Finish: Matte or suede, gloss rating of 5 to 20.
 5. Surface Color and Pattern: To be selected from manufacturer's full line of non-premium colors.
 6. NSF approved for food contact.
- D. High Pressure Backing Sheet: BKL, 0.020 inch nominal thickness, undecorated, laminated to underside of countertops and backs of splashes.
- E. Exposed Edge Treatment: Postformed laminate with radiused front edge, squared horizontal return to cabinet face, integral coved backsplash with radiused top edge. Cove shall be direct bond. **Raised front edge is not acceptable.**
7. coats.

2.04 STAINLESS STEEL COUNTERTOPS -

- A. Stainless Steel Countertops: ASTM A 666 Type 304 stainless steel sheet; 16 gage, 0.06 inch nominal sheet thickness.
1. Finish: 4B satin brushed finish.
 2. Substrate: Moisture-resistant particleboard, 1-1/8 inch thick. Wrap all exposed substrate edges and faces with stainless steel.
 3. Exposed Edge Shape: Straight down with return, 1/8 inch radiused edges.
 4. Back and End Splashes: Same material; welded 1/4 inch radius coved joint to countertop; square top edge with 1 inch wide top surface and minimum 1/2 inch turndown;

2.05 ACCESSORY MATERIALS

- A. Adhesives: Chemical resistant waterproof adhesive as recommended by manufacturer of materials being joined.
- B. Laminating Adhesive: Greenguard standard ethylene vinyl acetate, non-flammable, thermo-fused adhesive. High VOC contact cement will not be accepted.
- C. Edging Adhesive: Ethylene-vinyl acetate. Medium viscosity, hot-melt applied and moisture resistant. Applied to surfaces no less than 350 degrees.
- C. Joint Sealant: Mildew-resistant silicone sealant, color to match solid surfacing.

2.06 FABRICATION

- A. Fabricate tops and splashes in the largest sections practicable, with top surface of joints flush.
 - 1. Join lengths of tops using best method recommended by manufacturer.
 - 2. Fabricate to overhang fronts and ends of cabinets 1 inch except where top butts against cabinet or wall.
 - 3. Prepare all cutouts accurately to size; replace tops having improperly dimensioned or unnecessary cutouts or fixture holes.
- B. Provide back/end splash wherever counter edge abuts vertical surface unless otherwise indicated.
 - 1. Secure to countertop with concealed fasteners and with contact surfaces set in waterproof glue.
- C. Stainless Steel: Fabricate tops up to 144 inches long in one piece including nosings and back and end splashes; accurately fitted mechanical field joints in lengths over that dimension are permitted.
 - 1. Weld joints; grind smooth and polish to match.
- D. Plastic Laminate: Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel arises. Locate counter butt joints minimum 2 feet from sink cut-outs.
 - 1. Apply laminate backing sheet to reverse side of plastic laminate finished surfaces.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
- C. Verify that wall surfaces have been finished and mechanical and electrical services and outlets are installed in proper locations.

3.02 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Countertop fabricator shall make cutouts from templates provided by the equipment supplier for appliances to be installed by the general contractor.
- D. Countertop fabricator shall make cutouts from templates provided by the plumbing contractor for plumbing fixtures to be installed by the plumbing contractor.

3.03 INSTALLATION

- A. Install casework and countertop level and plumb. Shim where required. Countertops shall be installed flush against wall. Where countertop abuts other finished work, scribe, and cut for accurate fit.

- A. Securely attach countertops to cabinets using concealed fasteners. Make flat surfaces level; shim where required.
- B. Attach plastic laminate countertops using screws with minimum penetration into substrate board of 5/8 inch. Spline and glue joints in countertops and provide concealed mechanical clamping of joint.
- C. Attach stainless steel countertops using screws with minimum penetration into substrate board of 5/8 inch.
- D. Provide clear sealant at top and around ends of countertops where they meet wall surfaces, and where counters have sinks.

3.04 TOLERANCES

- A. Variation From Horizontal: 1/8 inch in 8 feet, maximum.
- B. Offset From Wall, Countertops: 1/8 inch maximum; 1/16 inch minimum.
- C. Field Joints: 1/8 inch wide, maximum.

3.05 CLEANING

- A. Clean countertop surfaces thoroughly.

3.06 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

CHANGE ORDER/ALLOWANCE WORK

Number _____

DATE _____

SCHOOL _____

PROJECT _____

CONTRACTOR _____

Note: Work completed under an Allowance shall be submitted on this form for approval. Overhead and profit on all Allowances were to be included in the Contractor's bid and shall not be included on this form.

CONTRACTOR'S WORK	Debit	Credit	TOTAL
Direct Materials			
Sales Tax on Materials 6% of line 1			
Direct Labor			
Insurance, Taxes, Benefits, Etc.			
Rental/Owned Equipment			
Sales Tax on Rental Equipment 6%			
SUBTOTAL (add lines 1-7)			

SUB-CONTRACTOR'S WORK	Debit	Credit	TOTAL
Direct Materials			
Sales Tax on Materials 6% of line 1			
Direct Labor			
Insurance, Taxes, Benefits, Etc.			
Rental/Owned Equipment			
Sales Tax on Rental Equipment 6%			
SUBTOTAL (add lines 1-7)			
Profit and Overhead _____%			
SUBTOTAL (add lines 8 & 9)			

SUMMARY	Debit	Credit	TOTAL
CONTRACTOR'S WORK			
SUB-CONTRACTOR'S WORK			
SUBTOTAL (add lines 1 & 2)			
15% Profit and Overhead (not on allowance)			
Contractor's Bond Premium			
TOTAL AMOUNT OF CHANGE ORDER			

Description of work _____

Signature of Owner _____ Date _____

Signature of Contractor _____ Date _____

SUBSTITUTION OF MATERIALS & PRODUCTS FORM

To: Cumberland County Schools
Attn: Donna Fields
810 Gillespie Street
Fayetteville, North Carolina 28306

Project Name: Culinary Lab Casework Replacement at Westover High School (Rm 125)

The undersigned requests that the following product / materials be considered for substitution in lieu of the specified item in the Project Manual or on the Drawings.

Section _____ Page _____ Paragraph _____ Drawings Page _____ Detail _____

Description of Item _____

Proposed Substitution: _____

The undersigned certifies that the following statements are correct, unless modified on an attachment:

1. The proposed substitution is equal to or better in appearance, function and quality to the specified item, in all respects and is suitable for inclusion in the work.
2. Attached is 1 copy of the manufacturers Product Description, Specification, Data Sheets, Test Data & color charts.
3. We will furnish a physical sample if requested by the Owner.
4. Every variation of this product is to be listed and clearly delineated on the submission.
5. This substitution will require no dimensional changes to the drawings and will have no effect on other trades, the construction schedule or warranty requirements.
6. List similar type projects in which product is used.
7. Verification from the manufacturer that product has been in use a minimum of 2 years at similar projects.

Contractor's Signature

Date

Approved _____ Disapproved _____

Owner's Signature

Date

CONTRACTOR

CONTRACTOR NUMBER AND/OR JOB DESCRIPTION

SALES/USE TAX CERTIFICATE

Sales and/or Use Tax Regulation Number 42 requires that the Cumberland County Schools in the County of Cumberland secure from each contractor certified statement(s) setting forth the cost of the materials and supplies manufactured or purchased by you and consumed in construction. This form is provided for you to list the materials consumed in construction. Please complete this form by inserting the information required below. If heeded, attach additional sheets.

INVOICE NO. OR QUANTITY	DATE PURCHASED OR MANUFACTURED	TYPE OF MATERIAL	INVOICE AMOUNT LESS TAX	STATE SALES/USE TAX AMOUNT	COUNTY SALES/USE TAX AMOUNT	NAME OF COUNTY SALES/USE TAX PAID TO
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<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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TOTALS \$ \$ \$

AFFIDAVIT

This is to certify that sales/use tax was paid as stated above on materials and supplies purchased or manufactured for the Cumberland County Schools in the County of Cumberland, North Carolina, for the above mentioned project during the period .

Report submitted this day of , 20

Contractor:

Authorized Signature: _____

Address and Telephone Number:

BID FORM

**Culinary Lab Casework Replacement at
Westover High School Room 125**

Cumberland County Board Of Education
Fayetteville, NC

The undersigned, as Bidder, hereby declares that the only person or persons interested in this Proposal as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this Proposal or in the contract to be entered into; that this proposal is made without connection with any other person, company or parties making a bid or proposal; and that it is in all respects fair and in good faith without collusion or fraud. The Bidder further declares that he has examined the site of the Work and the Contract Documents relative thereto, and has read all special provisions furnished prior to the opening of bids; that he has satisfied himself relative to the work to be performed.

The Bidder proposes and agrees if this Proposal is accepted to contract with Cumberland County Schools, Fayetteville, North Carolina, in the form of contract specified, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation and labor necessary to complete the **Culinary Lab Casework Replacement at Westover High School Room 125** in accordance with the plans, specifications, and contract documents to the full and entire satisfaction of Cumberland County Schools, Fayetteville, North Carolina with a definite understanding that no money will be allowed for extra work except as set forth in the General Conditions and the Contract Documents, for the sum of:

Project: Culinary Lab Casework Replacement at Westover High School Room 125

TOTAL BASE BID – Plastic Laminate Countertops

_____ Dollars (\$) _____)

TOTAL ALTERNATE BID – Stainless Steel Countertops

_____ Dollars (\$) _____)

Minority Status *:	Form of Minority Certification**:
--------------------	-----------------------------------

*Non-minority, Black, Hispanic, Asian/American, American Indian, White Female, Socially and Economically Disadvantaged, Disabled

**Not Applicable, Local Agency, Self-Identified, State of NC HUB, Federal Agency, State of NC DOT, Out of State Agency, Unknown (Note: In July 2009, businesses will be required to be certified through the State of NC HUB)

BID FORM

Culinary Lab Casework Replacement at Westover High School Room 125

Cumberland County Board Of Education
Fayetteville, NC

The Bidder further proposes and agrees hereby to commence work under this contract and fully complete all work thereunder as specified in the Supplementary General Conditions. Applicable liquidated damages shall be stated in the Supplementary General Conditions.

Respectfully submitted this _____ day of _____, 2014.

(Name of firm or corporation making bid)

Witness: _____ By: _____

Title: _____

(Proprietorship or Partnership)

(Owner/Partner/Corp. President or Vice President only)

Address: _____

License No.: _____

Federal ID No.: _____

(CORPORATE SEAL)

ATTEST:

By: _____

Title: _____

(Corp. Sec. or Ass't Sec. only)

ADDENDA USED IN COMPUTING THIS BID

ADDENDUM NO. 1 _____ ADDENDUM NO. 2 _____