

DIVISION 01 - GENERAL REQUIREMENTS

NOTE: It is intended that the following General Requirements are covered, where applicable for a specific project, in the Architect/Engineers Specifications and/or Construction Documents.

01 10 00 GENERAL REQUIREMENTS

01 11 00 SUMMARY OF WORK

- 1 The Contract encompasses the furnishing of all labor, materials, services, equipment, bonds and insurance to complete the project as shown on the drawings and specifications.
- 2 Any premium time necessary to complete the Project as scheduled shall be included in the Contractors base bid.
- 3 All pertinent requirements of the Invitation to Bidders, Instructions to Bidders and General Conditions and required GVSU supplements to the same shall form a part of the specifications.
- 4 Right-to-know: Contractor to have on hand MSD sheets on all substances used on project.

01 14 00 WORK RESTRICTIONS

- 1 Grand Valley State University has expectations from contractors, subcontractors and all individuals who work for them. These are, but not necessarily limited to, the following:
 - A The campus is an urban environment and worksite areas are limited. The university expects that worksites be free of debris with a focus on safety. Some members of the university may not recognize the dangers of the work being performed by contractors, thus it is the responsibility of the contractor to ensure safety is a priority for all.
 - B It is the contractor's responsibility to clearly define the area where work will be taking place and provide security of the site.
 - C Vehicle and pedestrian traffic may be high, especially between classes. It's critical that transferring of materials and equipment by contractors does not hamper normal traffic flow.
 - D Parking is limited on the campus grounds and strict regulations are enforced. All vehicles parking on campus are required to have a parking permit. Project managers and Public Safety will work with you to identify areas where you may park. Failure to comply with GVSU's parking rules and regulations will result in penalties that may include revocation of on-campus parking privileges.
 - E While on campus, contract employees are held to the same standard as university employees. Illegal drugs and alcohol are prohibited. Any employee with a criminal conviction for a sex offense is required by law to identify themselves to the campus police. Any negative behaviors, including larceny, assault and sexual harassment are not tolerated. Employees who engage in any criminal activity will be investigated and prosecuted. Notification will be made to the project manager of contract employees that are arrested by the campus police.
- 2 Unless otherwise stated, University buildings will continue to function and remain occupied during the construction process.
- 3 Site access shall be through designated routes or temporary roads as designated by the University's Project representative and as shown on the drawings.
- 4 Dig Requirements: Contractors are to contact Miss Dig for location of public utilities. For locating University utilities the contractor shall follow University dig procedures and submit the required dig request form. See Appendix F of this manual. The procedure outline and submittal form are to be included in the professionals construction specifications.

- 5 Excavations, drilling or boring that is done within 6 feet of any utility marking are to be hand dug until marked utility is located and visually identified so that mechanical excavation can be commenced without damage to marked utility.
- 6 Utility Damage: Any contractor causing damage to underground utilities shall be responsible for all costs required to repair or replace the damaged utility.
- 7 Utility tie-ins: Owner shall be notified at least one week in advance. Also, if utility tie-in requires the utility to be shut down or service to other buildings to be shut down, tie in should be done outside normal business hours, in coordination with the University, and at no additional cost to owner.
- 8 Site access and parking: show construction limits, haul routes, and site access on drawings. Limit access to West Campus Drive during fall, winter and spring; North or South Campus Drive all year. Violators will be ticketed. Contractor to provide for and maintain temporary parking and maneuvering space within contract site limits. This will require installation, maintenance and later removal of at least 6" road gravel or crushed concrete - clay soil here is impassable in wet weather. Improperly parked vehicles will be ticketed by campus police. Unpaid tickets are turned over to Ottawa County.
- 9 Walks and drives: Contractor must keep existing walks and drives swept and free of sand and dirt during construction. Provide means to keep construction dirt off of streets.
- 10 Receiving of Materials: GVSU will not accept drop-shipped items for any contractor at its Central Receiving. Contractor could be charged for costs associated with misdirected deliveries.
- 11 Pedestrian and vehicle access through, around or at the perimeter of the project must be maintained at all times. It is the responsibility of the design firm to determine needs, the method to accomplish the need, and to include the means in the design documents. The complete traffic detour plan must be discussed with the University prior to start of construction documents
- 12 Construction signs: Only one contractor sign will be permitted on the site. It is to be no more than 64 square feet in area. The university shall approve graphic content. Graphic content shall include an illustration of the construction project, title of the project, name of the construction contractor, name of the architect and principal consultants, funding source. No other project, design firm, or subcontractor signs will be permitted. Location of the sign shall be determined by the design architect and is subject to approval by the University. No other signs advertising company names will be permitted.
- 13 Lawn and Site Protection: To extent possible, do not use lawn areas during construction project. When lawns are used, immediate repair is required. Delay of repair until end of project will not be permitted. After use, lawn and ruts are to be filled in with quality topsoil and re-seeded, to match surrounding conditions
- 14 DO NOT USE University equipment ie., cleaning equipment, dumpsters, etc. during course of the project. Contractor is responsible for cost of replacement of damaged University equipment improperly used for construction purposes.

01 20 00 PRICE AND PAYMENT PROCEDURES

01 21 00 ALLOWANCES

01 21 13 CASH ALLOWANCES

- 1 Any allowance must be identified and defined in a separate list. These are not to be buried in specification section. Brick and other materials must be selected. Drawings must show coursing of actual brick selected (e.g. modular, king, jumbo, etc.) to avoid confusion during construction. Finish door hardware must be specified in detail on a schedule included in specification.

01 26 00 CONTRACT MODIFICATION PROCEDURES

01 26 57 CHANGE ORDER REQUESTS

- 1 The Architect shall include at a minimum, in the appropriate section of their specifications, the following requirements for submittal of a Contractor's request for change order or Contract modification:
 - A Provide full information required for evaluation of request. NOTE: Contractors shall not use as sole source cost schedules (such as the MCA-Mechanical Contractors Association) in determining labor and/or material costs for contract modification requests. The subcontractor's costs shall be based on past experience of time and material required to perform the work.
 - B The amount of change in the contract sum, if any.
 - C The amount of change in the contact time, if any,
 - D Cost breakdown, using schedule of values line items, separated into material and labor costs, additions and deletions, and with overhead and profit handled in the same manner as specified for the schedule of values.
 - E The period of time within which the proposed changes in contract sum and time will be valid.
 - F Statement describing the effect the change may have on the work of other prime contractors, if any.
 - G Material quotes from other contractors or suppliers, substantiating requested material costs outlined in 'C' above.

01 29 00 PAYMENT PROCEDURES

01 29 76 PROGRESS PAYMENT PROCEDURES

- 2 The Architect shall include, in the appropriate section of their specifications, the requirements for submittal of the Contractors Application for payment as follows:
 - A With the first application for payment submitted, the contractor will attach a sworn statement listing subcontractors and suppliers for the project and their contracted amounts.
 - B With each subsequent application for payment submitted, the Contractor shall submit an updated Sworn Statement and Partial Unconditional Waivers of Lien for Payments made on prior submittals. Final Unconditional waivers shall be submitted, in the same manner as subcontractors or suppliers complete their work and are paid in full during the course of the project.
 - C At the time final payment is made the Contractor shall submit all remaining Final Unconditional waivers of Lien. (It is recognized that the University is exempt from Liens, however it is the University's desire to stay informed as to status of payment to those providing labor and material on University projects and be able to proactively address any payment issues that may arise. The submittals do not require extraordinary effort beyond what is necessary in private sector work in accordance with the Michigan Lien Act.)
 - D Final payment amount shall be held until all punch list items and close out documents are submitted in accordance with the requirements of the Contract Documents. Amount of final payment withheld shall be negotiated between the Owner and the Contractor, but in no event shall not be less than the amount as defined in the Contractor's Contract for Construction. This amount shall be carried as a separate line item, along with other trade contract costs on the continuation sheet, on each monthly application for payment submitted by the contractor and titled "Final Completion".

01 30 00 ADMINISTRATIVE REQUIREMENTS

01 33 00 SUBMITTAL PROCEDURES

01 33 23 SHOP DRAWINGS, PRODUCT DATA, SAMPLES

- 1 Operating/Installation Instructions: All contractors shall save all papers which are packed with materials and equipment installed on project and turn over to the Construction Manager for inclusion in the operations/warranty close out manual provided GVSU at completion of project. These are vital for maintenance and future replacement of items
- 2 Record Drawings: Architect/engineer will be required to provide Owner with reproducible record drawings at completion of project. Contractor shall maintain accurate, readable record prints at the job site at all times and shall turn these over to architect/engineer at completion of project. Also, provide CD's in applicable AutoCAD 2000 format, (verify with GVSU for current format in use) without external links, or "refs".
- 3 Shop Drawings: GVSU will require the Architect/Engineer to furnish the University one electronic copy of all shop drawings, PDF format, as finally reviewed by architect/engineer for project.
- 4 Drawings shall be either 24" x 36" or 30" x 42", depending upon the requirements of the specific project.

01 40 00 QUALITY REQUIREMENTS

01 41 00 REGULATORY REQUIREMENTS

01 41 19 RULES

- 1 Drawing Submittals for Regulatory Compliance:
 - A Bureau of Fire Safety (Dept. of Labor & Economic Growth)
 - B Department of Labor & Economic Growth (barrier-free, electrical)
 - C GVSU Insurance Carrier (A/E responsible for obtaining current insurance carrier address from
 - D GVSU).
 - E Soil Erosion & Sedimentation Plan - Verify with University
 - F County Health Department (Food Service, Pools and others that may apply)

01 45 00 QUALITY CONTROL

01 45 23 TESTING AND INSPECTION SERVICES

- 1 Testing and Balancing: The Owner will provide for final balancing of HVAC systems. Should this balancing indicate that the HVAC systems do not perform in accordance with the ratings specified in the specifications, the contractor shall make the required modifications at no added cost to Owner, including cost of additional balancing required to verify that design values are met. If systems have been installed in accordance with the drawings and specifications and the equipment performs in accordance with design requirements, the architect/engineer shall perform the redesign required at no added cost to the Owner, and shall be responsible for the cost of construction modifications required such as changes in or additions to ductwork, dampers, piping, valves, circuit setters and other accessories, and the additional balancing required to verify that the systems as designed perform to design requirements. Testing shall include toilet and bath exhausts.
- 2 The Owner reserves the right to conduct independent testing to verify field conditions.

01 50 00 TEMPORARY FACILITIES AND CONTROLS

01 51 00 TEMPORARY UTILITIES

01 51 01 GENERAL

- 1 Hookup fees for water & sewer for permanent service in Allendale will be paid directly by GVSU. Hookup fees for projects at other campus locations are to be included in the Contractor's General Conditions. Please note: Self-supporting units (such as housing, dining, etc) must account for this cost in the project budget.
- 2 The Contractor shall notify the utility company and the University at least 30 days prior to the Contractor's anticipated switch over from temporary service to permanent service
- 3 Underground utilities: At Allendale, most utility lines belong to GVSU and MISS DIG will not locate. Contractor shall provide minimum 7 days-advanced notice. Call GVSU DIG at 331-3000 and GVSU will locate. Call MISS DIG for gas, cable television, and non-GVSU phone lines. Identified utilities shall be located by hand excavation, not mechanical excavation. At Holland, Muskegon and Grand Rapids campuses call MISS DIG for ALL utility locations.

01 51 13 TEMPORARY ELECTRICITY

- 1 Electricity: GVSU will provide at nearest source at Allendale Campus only. Contractor to provide a temporary electrical meter and will be responsible for all electrical power used during construction for any project that is scheduled to last more than thirty (30) days. At other GVSU sites, contact local utility and include responsibility in construction work/bid. Contractor to arrange and pay for connections and wiring to point of use. At satellite campuses, a temporary electric meter shall be installed to allow proper billing of electrical consumption from the start to the end of the construction period. All temporary meters shall be replaced,

with the final building meter, before the University assumes occupancy of the building. To make sure the construction costs are covered under construction and not the University's energy budget. The permanent meter shall not be used for construction purposes.

01 51 23 TEMPORARY HEATING, COOLING AND VENTILATING

- 1 Temporary heat: Responsibility of contractor. New ductwork, boilers and air handling equipment shall be cleaned. Use MERV-8 filters during construction. Prior to occupancy by GVSU, replace MERV-8 filters with MERV-13 filters. Develop and implement Construction Indoor Air Quality Management Plan as described in LEED-NC 2.2 Reference Guide.
- 2 Require contractor to provide for adequate ventilation to remove construction dust and fumes. Consider fume problems when specifying adhesives, paints, etc. Comply with MIOSHA Rules, South Coast Air Quality Management District Rules, and Sheet Metal And Conditioning Contractors National Association guidelines. Develop and implement Construction Indoor Air Quality Management Plan as described in LEED-NC 2.2 Reference Guide.

01 51 26 TEMPORARY LIGHTING

- 1 Temporary site lighting: Responsibility of contractor. Provide security lighting around building site. This is to include walkways and driveways, outside the construction zone but immediately adjacent to the construction zone.

01 51 33 TEMPORARY COMMUNICATIONS

1. Telephone service: Where possible, GVSU will provide construction telephone lines. Contractor will be billed for installation and service costs.
2. Internet access: Where possible, GVSU will provide wired or wireless internet access. Contractor will be billed for installation costs.

3. Contact GVSU's IT representative for installation and connection.

01 51 36 TEMPORARY WATER

- 1 Construction water: Contractor to arrange and pay for connections and piping to point of use at all campus sites.

01 52 00 CONSTRUCTION FACILITIES

01 52 19 SANITARY FACILITIES

- 1 Trash: Prohibit contractor use of GVSU trash containers; site is to be kept clean and all waste materials are to be removed from site and diverted from landfills. Prohibit trash burning and trash burial on site. Require the development and implementation of a Construction Waste Management Plan as described in LEED-NC 2.2 Reference Guide. Require that packaging materials be kept to a minimum; in selecting vendors or distributors, consideration should be given to their ability to avoid single-use or disposable products, provide bulk shipping, to take back excess materials and scrap.
- 2 Toilet facilities: provided by contractor. With few exceptions, use of University facilities is strictly prohibited

01 56 00 TEMPORARY BARRIERS AND ENCLOSURES

01 56 36 TEMPORARY SECURITY ENCLOSURES

- 1 Security: Contractor to provide for security of vehicles, site, excavations, construction in progress, tools, etc. Construction site to be protected, when adjacent to existing operations, with minimum 6-foot high chain link fence. Place signs saying "CONSTRUCTION AREA - NO TRESPASSING" at reasonable intervals around fenced perimeter in clear view of public and at each gated location entering into the construction site. Signs are to be made of durable materials capable of withstanding total construction duration.
- 2 Locks are to be provided on construction-gated entrances. Provide Best pad locks capable of receiving best core. Contractor to install University furnished construction cores for each pad lock. All locks are to be keyed alike. Provide the University with six (6) keys. At end of project remove construction cores and turn over locks to the University.

01 56 39 TEMPORARY TREE AND PLANT PROTECTION

- 1 Regarding construction around existing trees to be retained: Require adherence to Bulletin no. 285 (Appendix D of these Standards)). Require that LEED-NC 2.2 Credit 5.1 (Site Development - Protect or Restore Habitat) be met.

01 57 00 TEMPORARY CONTROL

01 57 13 TEMPORARY EROSION AND SEDIMENT CONTROL

1. Erosion Control and Site Protection: Take care not to allow any discharge of soil, sediment, construction debris into ravines, or public right-of-way. To the maximum extent practicable, prevent erosion or displacement of soils and discharge of soil bearing water runoff to adjacent properties and waterways. Provide and maintain erosion control during the entire project in accordance with applicable regulations. Remove erosion control measures after the permanent ground cover has been established. Provide temporary guards to protect trees from vehicle, foot, and material pile up and construction damage. This

protection will extend out to the drip line of the tree(s) or plant material. Require compliance with the requirements of the Ottawa County Drain Commissioner's office and NPDES permit (if required). Contractor must have a certified storm water operator, who is responsible for all required site inspections and documentation.

01 58 00 PROJECT IDENTIFICATION

01 58 13 TEMPORARY PROJECT SIGNAGE

- 1 Standard project identification signs shall conform to Figure 1 below. Quantities and locations to be confirmed with GVSU project manager and identified on bid documents. Grand Valley logo to conform to GVSU trademark standard. Project title to be Helvetica Medium. CM/Contractor and Consultant to be Helvetica.

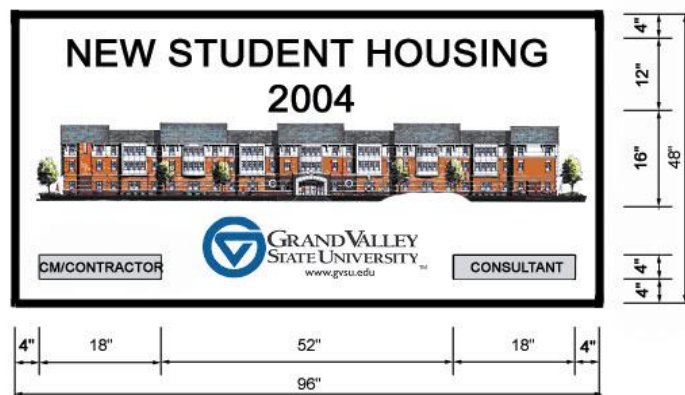


FIGURE 1

01 70 00 EXECUTION AND CLOSEOUT REQUIREMENTS

01 78 00 CLOSEOUT SUBMITTALS

01 78 23 OPERATION AND MAINTENANCE DATA

- 1 All contractors performing work on the Project shall be required to provide as part of their trade division closeout documents a directory of suppliers for all products used by the contractor on the Project. The directory shall indicate the products provided and the supplier's name, telephone number, fax number and address.
- 2 The requirements of this section shall be part of the closeout requirements for the project and required as part of Final Completion, therefore no final payments to the Contractor or Architect/Engineer shall be made until this requirement is fulfilled along with all other project closeout requirements.
- 3 Project close-out documentation such as, but not necessarily limited to, operational and maintenance records, warranties, shop drawings and technical material data, and final record drawings shall be furnished in accordance to the following minimum requirements
 - A One set, hard copy, of final record drawings reflecting all addenda, bulletin, field changes and other modifications made during bidding and construction. In addition to the hard copy, provide one electronic copy (CD) in AutoCAD format (verify current version with University) and one copy in PDF format.

- B All operational and maintenance records, warranties, shop drawings and technical material data, are to be furnished electronically in PDF format on CD-R disk (2 copies). Confirm cataloging requirements with the University.
- C All electronic copies are to have fully legible text, including any illustrations, charts and diagrams.
- D Require that close-out documentation submittals be coordinated with Commissioning Agent.
- 4 All attic stock is to be delivered, to the Owner, at one time along with the Architect/Engineers checklist indicating all items provided.
- 5 Attic stock to be provided for floor and ceiling materials, plumbing equipment, toilet equipment, tile, filters, electrical devices and fuses and hardware. Design A/E to prepare a composite listing for review with GVSU. When shingle roofs are used, provide not less than 2 squares (6 bundles) of shingles for future repairs. Provide stock in accordance with the schedule below.
- 6 The Architect or Engineer shall, as part of the project punch list and closeout, prepare a checklist of all attic stock items required for the specific project in accordance with the schedule of requirements listed below. The checklist shall identify each item furnished and the quantity furnished.

01 78 46 EXTRA (ATTIC STOCK) MATERIALS

01 78 46.13 SCHEDULE OF REQUIRED MINIMUM ATTIC STOCK COMPONENTS

- 1 All attic stock items shall be provided in original boxes or containers. Where original boxes or containers are not available, items shall be furnished in a plain cardboard box with contents and quantity therein clearly labeled on the top and one end of the box. Loose items provided will be rejected for resubmittal in accordance with the above requirements. Exceptions are carpet, walk-off mats and appliances.

DIVISION 07 - THERMAL & MOISTURE PROTECTION

- 1 Roofing Shingles: 2 squares (6 bundles).

DIVISION 08 - OPENINGS

- 1 Hardware: One lockset of each type used; i.e. storeroom function, classroom function, cylinder type, mortise type.
 - A One door closer of each hand.
 - B One additional, for each hand used in project, handicap overhead door operator and actuator.
 - C One overhead stop (if required for project)
 - D One Von Duprin panic hardware repair kit.
 - E One Best cylinder for each mortise function used.
 - F One (1) set of instruction sheets for each item furnished.
 - G One (1) each of any non-standard tool and metric tools used for installation of each item furnished.
- 2 For electronic hardware:
 - A Combination keypad/card swipe stand-alone battery units: 3 of each hand; 6 in total.
 - B Card swipe only stand alone battery units: 3 of each hand; 6 in total.
 - C Two power supplies
 - D Two power transfers
 - E Two SMR 20 on-line readers.
- 3 Hardware attic stock shall be provided ONLY in original packaging.

DIVISION 09 - FINISHES

- 1 Carpet: 240 s.f. of rolled goods; one box if carpet tile; for each color used.

- 2 Floor tile (resilient or hard): One full box of each color used.
- 3 Vinyl wall base: One full box for each color used.
- 4 Carpet base: 50 lineal feet, for each color used.
- 5 Ceramic or Quarry tile base: One complete box of each color used.
- 6 Ceiling tile: Two boxes of each style used in building.
- 7 Wall Covering: One roll of each color used.
- 8 Paint: One full, unopened gallon of each color used. Paint can is to be labeled with color mix number, name of company from which paint was purchased with telephone number and address, project identification, location of paint, i.e. wall paint, and a dollop of paint on paint can lid.

DIVISION 12 - FURNISHINGS

- 1 Walk-Off Mats: One additional complete set for every location required by the drawings and/or specifications.
- 2 Appliances: For student housing projects provide spare appliances, two of each type as required for project.

DIVISION 21 - FIRE SUPPRESSION

- 1 Sprinkler Heads: Two, but not less than any amount as may be required by code, of each type and temperature rating used.

DIVISION 23 - HVAC

- 1 Filters: One complete change out for all HVAC equipment.

DIVISION 26 - ELECTRICAL

- 2 Lamps: six lamps of each style or type used. For fluorescent, provide one box of each type/wattage lamp used. This includes lamps used in other systems or equipment, such as hoods, that may be installed, even if furnished by Owner, as part of the construction contract.
- 3 Light Fixture Lenses: For fixtures that use acrylic diffusing lenses, either lay-in or wrap around, provide 3 extra lenses of each style and size used. Lenses are to be packaged in a cardboard box clearly labeled indicating contents and size thereof.
- 4 Control Device Indicator Lights: 2 of each type and color used. This requirement applies to lamps within indicator lights that have readily changeable, non-soldered connections.
- 5 Exit Signs: One sign with knock outs in place.
- 6 Fuses & Circuit Breakers: Three of each amperage size fuse and/or circuit breaker used.
- 7 All attic stock items shall be provided in original boxes or containers. Where original boxes or containers are not available, items shall be furnished in a plain cardboard box with contents and quantity therein clearly labeled on the top and one end of the box. Loose items provided will be rejected for re submittal in accordance with the above requirements

DIVISION 28- ELECTRONIC SAFETY & SECURITY

- 1 Smoke & Heat Detectors: six of each type used.
- 2 Fire Alarm Audible and Strobe Devices: 2 of each type and style used.

END OF SECTION