

Division 1 – General Requirements

01 10 00 Summary

01 11 00 Summary of Work

- A. The University shall be responsible for providing the Contractor with rough-in information necessary to accommodate the installation of owner furnished and installed or Contractor installed items.
- B. The Contractor shall coordinate with the University to acquire all owner furnished items.
- C. The Contractor shall provide and pay for the following permits and fees: All permits and fees required by the utility companies, the State of Nebraska, or the City of Omaha. Any assessments shall be paid for by the owner. All fees charged by the City for building permits, sewer line connection and tap fees for water service charged by the Utilities District, shall be paid by the Contractor. Health inspection fees will be paid by the owner, if required.

01 14 00 Work Restrictions

- A. The Contractor is advised that the normal workday for Creighton University is 7:00 A.M. to 4:30 P.M., Monday through Friday. The Contractor may work outside of those hours if desired and approved by the Facilities Management Project Coordinator. The Facilities Management Project Coordinator shall arrange access to the work site.
- B. The Contractor is advised that the Residence Halls have specific work hours and must be adhered to at all times unless prior approval has been granted by the Project Coordinator. Sunday through Saturday no work may commence either inside or outside of the building prior to 9:00 a.m. and work should be completed and area cleaned by 5:00 p.m.
- C. The Contractor shall arrange for keys to access a space through the department of Facilities Management, keys are to be checked in and out daily. No long-term assignment of keys is authorized.
- D. The Contractor shall post at the job site all appropriate material safety data sheets to identify products used by the Contractor as part of the job.
- E. The Contractor shall have a copy of their company's safety manual on the job or in the company vehicle at the job site.
- F. The Contractor shall not block or alter emergency exits under any circumstances.
- G. The Contractor shall furnish, erect, and maintain sufficient safety tape and barricades to render the job site safe.
- H. The Contractor shall maintain at least one fire extinguisher on the job site. Minimum size is a ten-pound ABC extinguisher. If Contractor is working in multi-zones within a project, additional extinguishers will be required.
- I. The Contractor shall ensure that existing fire detection devices, to include fire sprinklers, are operable throughout all phases of construction.
- J. The University will remove or abate any hazardous material noted in the job site, it is the Contractor's responsibility to notify the University's Department of Environmental Health and Safety of any suspected materials. The telephone number is (402) 546-6269.
- K. Contractors whose work requires entry into permit required confined spaces (posted in various locations throughout campus) will be required to obtain permits through coordination with Facilities Management main office in person or at 280-2780.
- L. The Contractor shall be responsible for all safety infractions committed by his or her employees and/or the employees of all sub-contractors.
- M. The Contractor shall provide all mandated Occupational Safety and Health Administration (OSHA) training for their employees and/or the employees of all sub-contractors. This may include but is not limited to: hazardous communication (hazcom), emergency

procedures, lock out/ tag out, electrical, confined space, ladder safety and any others specific to construction standards.

- N. **Arc Flash Requirements:** Current OSHA and NFPA 70E guidelines require that all work performed when there is a risk of arc flash be conducted in a manner that will protect the worker from harm. Therefore all work that will be performed on electrical equipment that can cause arc flash will have a plan for avoiding, mitigating or providing protection from arc flash as required in NFPA 70E.

Each contractor is responsible for determining if the equipment they will be working on will require any further action regarding Arc flash. Creighton can supply information about the system or allow a representative of the contractor to inspect the equipment to assist in making the required calculations. All personnel protective equipment must be supplied by the contractor. At no time will Creighton provide personal protective equipment to contractors.

- O. The Contractor shall advise all employees that the University is a tobacco free campus both inside the buildings and on the grounds, including sidewalks and parking lots owned by the University.
- P. Employees of the Contractor and sub-contractors shall not have personal radios or other entertainment that is offensive to others or is a distraction due to volume.
- Q. The Contractor shall notify Creighton University's Project Coordinator prior to performing any "hot work." Hot work is defined as any work where heat application is required beyond normal room temperature. This will include spark, open flame, heat guns (regardless of source of heat), portable heat generating equipment, and/or any process that will cause or produce smoke.

- R. Confidentiality

Contractor acknowledges that, in the course of providing services, Contractor may have access to (a) Creighton's business information, including, but not limited to, procedures and programs; (b) student information; (c) patient information. Contractor further acknowledges that such information is proprietary to Creighton and confidential, and Contractor agrees to hold such information in strict confidence and not to use, disclose or make available such information to any third party, except as required by law.

01 20 00 Price and Payment Procedures

01290 Payment Procedures

- A. Should the contractor fail to complete the work within the time agreed upon in the construction documents or within such extra time, as may have been allowed by extension, there may be deducted from any monies due or that may become due the contractor, a sum of money, to be determined, for each and every calendar day that the work shall remain uncompleted. This sum shall be considered and treated not as a penalty, but as liquidated damages due to the University from the Contractor by reason of inconvenience to the University, added cost of supervision, maintenance of detours, and other items which have caused an expenditure of University funds resulting from his failure to complete the work within the time specified in the construction documents.
- B. The Contractor is responsible for mailing all invoices to Facilities Management at 723 North 18th Street, Omaha, NE 68178.
- C. Invoices must contain the following information to ensure timely payment:
- Project Name
 - Project Number
 - Project Coordinator's Name
- D. The Contractor shall allow thirty to forty-five (30-45) calendar days from the time an approved invoice is received to the issuance of payment to the Contractor.

- E. Payment to the Contractor for the project shall be lump sum unless otherwise noted in the contract. Process of the Contractor's invoice will begin when the project has achieved substantial completion, conducted a final inspection, and the invoice is filed correctly with the University.
- F. Projects involving progress payments to the Contractor shall be in compliance with the agreed schedule of values submitted by the Contractor prior to processing of any invoice.
- G. Creighton University will not require retainage of the Contractors lump sum bid for work in question of quality or for work that is remaining to be completed unless the Contractor requests such action in writing to the University.

01 30 00 Administrative Requirements

01 33 00 Submittal Procedures

- A. The Contractor shall submit to the University all shop drawings, diagrams, schedules, performance charts, instructions, brochures, or other data prepared by sub-contractors, manufacturers, suppliers, or distributors related to some portion of work.
- B. Electronic sets are required at the same time as the paper sets. Both the hardcopy paper set and the electronic documentation are to be accompanied by a letter of transmittal or e-mail directed to both the Project Coordinator and the CAD representative.
- C. All drawings will be submitted in CAD format. The CAD software employed by the University is AutoCad 2008, and all drawings must be transferred using this release.
- D. All prepared text documents, spread sheets, and databases shall be delivered in Microsoft Office 2003 format.
- E. All submittals must be delivered on CD-ROM, sent by e-mail or FTP. CD-ROM is the preferred method of delivery.
- F. The University requires that all specifications, word processing, spreadsheets, and databases pertinent to the project accompany each electronic submittal. The number of copies is to be determined by the Project Coordinator.

01 40 00 Quality Requirements

01 41 00 Regulatory Requirements

- A. The Contractor shall keep himself informed at all times, regarding all details of the work, including not only installation of the structure, but also the condition of the work in the shops, wherever materials are under construction for any portion of any structure involving in any manner the work being furnished under this contract and shall be responsible for all delays that may result in his failure to install his own work in proper manner and proper time. He shall study and compare all drawings, specifications and other instructions and shall report at once to the Project Coordinator any error, inconsistency or omission which he discovers.
- B. The Contractor shall comply with all applicable local, public and building ordinances, all applicable laws of the City of Omaha and the State of Nebraska and any other laws, ordinances and regulations of any applicable governmental body while in the performance of services related to this agreement. Should more than one code apply, the more stringent shall be followed. Any discrepancies between the specifications outlined in this agreement and any codes shall be brought to the attention of the University's Project Coordinator.
- C. The Contractor shall conform to the City of Omaha "Soil Erosion and Sediment Control Manual" when performing site work.
- D. The Contractor shall be responsible for all federal, state, and local licenses and permits while in the performance of services as related to this agreement.

- E. The Contractor shall be required to provide copies of current state license and all applicable factory-training certificates relevant to the requested services prior to the start of work on the project.
- F. The Contractor shall insure that its employees confirm to these project specifications and the Contractor is reminded that its employees shall be subject to rules and regulations of the University while on University property.
- G. The employees of the Contractor and the sub-contractors shall maintain an acceptable appearance at all times. The employee will wear the companies uniform with proper identification at all times, when applicable. When working in Creighton University Medical Center (St. Joseph Hospital), the identification shall include hospital badges.
- H. The University may request removal of any employee of the Contractor that violates any provision hereof or who is knowingly negligent or discourteous in the performance of their duties.
- I. During the performance of this agreement, the Contractor shall comply with all statutes, regulations, executive orders, and other requirements of the law regarding equal employment opportunity.
- J. The Contractor shall keep on the work at all times, a competent Foreman or Superintendent and any assistants necessary. All employees must be satisfactory to the Project Coordinator. Persons in charge of the work for the Contractor shall not be changed except with the consent of the Project Coordinator. This provision, however, does not abridge the right of the Contractor to discharge persons not satisfactory to him.
- K. The Person in charge of work under the Contract shall represent the Contractor in his absence and all directions given to him shall be binding as if given to the contractor. The Contractor shall give efficient personal supervision to the work and shall give it his best skill and attention. Any employee of the Contractor, who is considered incompetent or careless in his work, shall be removed on demand of the Project Coordinator and replaced by a competent person.

01415 Indoor Air Quality

A. Materials Evaluation and Selection

The University and Contractor will work with manufacturers to select products with the desired emission profile, and develop a strategy to minimize building contamination during installation. Require information about emissions from manufacturers. Manufacturers have both a marketing and liability motivation to test their products. Testing laboratories and emission testing protocols are rapidly developing. In selecting materials, investigate the materials potential to pollute the indoor environment in four key areas:

1. Release of particles, fibers, or chemicals inherent in the material selected.
 2. Potential ability of chemical molecules or particles in the air to adsorb (physically attached) to the material and be released later (e.g. during warm weather or when disturbed).
 3. Potential for microbial growth on material surfaces.
 4. Maintenance or refurbishing requirements requiring chemical treatment that can become pollution sources.
- Wet-applied” materials such as caulks, paint, adhesives, are of particular concern because of the high emission rates experienced while curing.
 - Fast drying materials offer greater flexibility in developing strategies to minimize contamination of other building materials.
 - Materials used in areas, which are likely to become moist, or wet (e.g. kitchens/showers, downstream from cooling coil, area around humidifier) can foster microbial growth if a carbon source is available. Easily cleaned, smooth surfaces are recommended.

- Use of fibrous material, including fiberglass insulation in ducts, requires careful consideration of the potential for soiling. Soiled fiberglass will take on moisture much more rapidly than clean fiberglass creating the potential for microbial growth. Particles provide carbon, and the fiberglass matrix provides self-sheltering surfaces for microbial growth.
 - Fleecy materials covering large areas, such as carpeting, fabric upholstery, textile wall coverings, or ceiling tiles, all can adsorb chemical and particle contaminants during the finishing stage of building construction, and release it later after occupancy. When wet, these surfaces also foster microbial growth.
- B. **Selection and Installation of Materials**
- Identify target products of particular concern, considering potential emission rates, toxicity, and quantity used.
 - Gather information from manufacturers, suppliers and other sources.
 - Require specific testing, if necessary, of emissions over time.
 - The University will select and/or negotiate for materials with low emissions and quick decay rates where possible. The University and Contractor will use this information to determine strategies for the sequence of installation and the ventilation strategies during installation. The University and the Contractor will review options on pre-shipment storage techniques that accelerate emissions of partitions, carpets and similar materials prior to installation. If appropriate we will pursue the use of perforated containers to facilitate off gassing during shipment.
- C. **Monitoring the Construction/Renovation Process**
- The University Project Coordinator will monitor field orders, shop drawings, and change orders impacting IAQ specifications and designs. The Project Coordinator is to monitor IAQ specifications during progress by inspections, and check that products and materials specified are being used.
- Obstacles or construction debris in ventilation airflow paths.
 - Proper installation of insulation, HVAC equipment, ductwork
 - Monitor HVAC system testing and balancing as it occurs.
 - Monitor contaminant isolation and control strategy during construction/finishing.
- D. **Emission Control During Construction/Renovation**
- Protect current and future occupants during construction.
- Accelerate emissions of wet products by using high ventilation.
 - During high emission periods, protect workers and increase ventilation.
 - Delay installation of adsorbent (fleecy) materials such as carpet, furniture, or ceiling tiles until emissions from other construction contaminants (e.g. wet product emissions) have dissipated. Otherwise, these materials will adsorb the contaminants and later release them during occupancy.
 - Protect ducts from construction dust and debris. Keep ducts clean.
 - Delay occupancy until emissions have subsided.
 - Continue high ventilation rates for a significant period after occupancy.
- E. **Isolation of Construction/Renovation Contaminants When Occupants are Present**
- An isolation strategy is usually a necessary condition for effective IAQ control, but it is made more feasible to achieve when pollutant emissions are also controlled through material selection and installation strategies.
- Establish a complete physical enclosure to the construction zone.
 - Seal all return ducts to insure that contaminants do not enter the HVAC system.
 - Using existing and temporary exhaust fans (negative air machines) establish a containment zone under significant negative pressure (e.g., 5 to 10 Pa. or 0.02 to 0.04 w.g.). The supply air to the construction area may also need to be shut down.

- Monitor pressure relationships to insure that the containment zone is under significant negative pressure, and that the construction zone beyond the containment area is under negative pressure relative to all surrounding occupied spaces on the same and on adjacent floors.
 - Insure that exhausted contaminants do not re-enter the building through open windows or the air intake of the HVAC system.
 - Maintain the occupied spaces under positive pressure relative to the outside.
- F. **After Construction**
Check the integrity of the entire building envelope by performing the following:
- Flood test flat roof systems for leaks (do not exceed design live loads).
 - Inspect flashing for signs of leakage.
 - Inspect doors and windows for operation and weather-stripping.
 - Inspect windows and solar equipment (e.g. solar shades) for proper installation and solar angle.
 - Verify that outdoor air is not entering the building through openings near loading dock or other sources of pollution.
- G. **Commissioning of HVAC System (Construction Phase)**
Proper commissioning in the construction phase insures that the building is built correctly and that it works right before occupancy.
- Test and balance system.
 - Test system performance under full and part load conditions.
 - Test outdoor airflow at breathing zone in the occupied spaces under full and part load conditions.
 - Review system operation and documentation.
 - Test pressure relationships consistent with an air pressure map showing areas of planned positive and negative pressure.
 - Assemble all relevant parties to discuss system; answer any questions about system sequences, set points, and operation; and review all documentation prior to submittal.
 - Insure that part of the documentation includes operating and maintenance procedures, and an air pressure map.
 - Submit documentation.
 - Train operational and maintenance personnel on all the operating and maintenance practices required for the particular HVAC system and other systems in the building.
- H. **Initial Occupancy After or During Construction/Renovation**
Protocol for Ventilation System Operation under Initial Occupancy Conditions
Special HVAC strategies should be employed for an extended period after initial occupancy.
- Extend hours of ventilation system operation.
 - Increase outdoor air fraction and operate at reduced temperatures during occupancy.
 - Increase outdoor air fraction during unoccupied periods.
 - Measure key contaminants such as formaldehyde and total volatile organic compounds (TVOC) as a means to judge when the HVAC system can return to normal operation.
 - Run HVAC continuously and increase outdoor air fraction during first hot weather period.
- I. **HVAC Verification under Occupancy Conditions**
Verify system components are all operational and system meets performance requirements under all operating conditions (full and part load) when the building is occupied.
- Verify outdoor air louvers are open and working correctly.
 - Verify that all interior spaces are receiving design quantities of outdoor air.
 - Verify that fans in air handling units operate continuously during occupied periods.

- Verify that all supply registers/diffusers, and return grills are open and unobstructed. Adjust diffusers to insure proper mixing and to avoid drafts on individual occupants.
- Verify the operation of all VAV boxes according to design.
- Verify that local exhaust grilles and hoods are operating correctly.
- Check for backdraft from all combustion appliances under worst case scenarios.
- Check air pressure relationships according to original plans.

01430 Quality Assurance

- A. The Contractor shall provide trained personnel to properly service this University project.
- B. The Contractor may substitute materials specified in the project with alternate materials only when the Facilities Management Project Coordinator approves the substitution in advance.

01450 Quality Control

- A. The Contractor shall install any materials or equipment associated with this project in accordance with the manufactures recommendations.
- B. The Contractor shall request a final inspection at the time of substantial completion. The final inspection will be conducted with the University’s Project Coordinator, Architect, and Engineer if involved with the project; the Contractor; and the Tenant.

01500 Temporary Facilities and Controls

Contingency Planning – All construction projects will identify at the pre-construction meeting an area for all site personnel to go to in case of severe weather or tornado.

Do not use phrases like “or equal”, “equivalent to.” Specify the acceptable manufacturers.

Operation of Equipment During Construction

If the contractor operates the HVAC equipment during construction, it shall be in accordance with University standards:

- All filters shall be in place in the air handling units.
- The temperature control system must be sufficiently operation to assure safe operation.
- Pump strainers shall be in place.
- Lubrication must be maintained in accordance with manufacturer’s instructions.
- Before acceptance by the University install new filters in air handling units and clean all hydronic strainers.

01510 Temporary Utilities

- A. The Contractor may use the utilities provided by the University. It is the Contractor’s responsibility to convey the utility.

01520 Construction Facilities

- A. The Contractor is responsible for securing the Contractor’s tools, equipment, and materials on the job site or otherwise on the campus. Theft or damage reports may be filed by the Contractor at the University’s Department of Public Safety, phone: 280-2104.

01550 Vehicular Access and Parking

- A. The Contractor shall park its vehicles, the vehicles of its employees, and the vehicles of the sub-contractors in approved parking lots only, parking on sidewalks, malls, and lawns

is not acceptable except at the time the Contractor is loading or off-loading supplies or equipment. The Contractor shall coordinate access to restricted parking areas with the Project Coordinator for off-loading purposes.

- B. Parking passes for each vehicle can be obtained through the Department of Public Safety. The use of a parking pass shall be in accordance with the parking and traffic rules of the University.
- C. All service vehicles used on the University shall bear clear markings identifying it as the Contractor's vehicle.
- D. California Mall Gate Access
 - 1. All contractors must check in with Facilities Management and Public Safety for authorization to enter the mall.
 - 2. Typically the mall is only to be used for deliveries and pick up as required.
 - 3. If access is needed for a longer period of time it must be requested in advance per item one above.

01560 Temporary Barriers and Enclosures

- A. The Contractor shall cover all existing ductwork with filter fabric throughout construction. Use of HEPA filters is encouraged.

01600 Product Requirements

01610 Basic Product Requirements

- A. The Contractor shall only install sheetrock stamped "USA Gypsum".
- B. The Contractor shall scribe gypsum board of wall and partitions to irregularities of deck above and seal tightly around any partitions.
- C. All Finished sheetrock surfaces shall be primed with PVA, sanded, and receive 2 finished coats of paint.

01630 Product Substitution Procedures

- A. The Contractor may substitute materials specified in the project with alternate materials only when the Facilities Management Project Coordinator approves the substitution in advance.

01650 Product Delivery requirements

- A. The Contractor shall arrange for all goods and materials to be utilized by the Contractor in the project to be delivered to the project site and received by the Contractor. The University's Department of Central Receiving, phone 280-2397, is to be notified of anticipated arrivals and given instructions about routing the delivery. The University will not receive freight for the Contractor.

01700 Execution Requirements

01710 Examination

- A. The Contractor shall be responsible for accomplishing a utilities location through *Great Plains One Call Service Inc.* 344-3565, and the Contractor shall notify Facilities Management before starting excavation.
- B. The Contractor shall close any wall, floor, or ceiling openings through the structure with fire stop. This shall be at locations of duct, conduit, pipe, or other systems. Fire stop shall be applied to existing and new penetrations.
- C. The Contractor shall furnish and install wood blocking in metal stud partitions for the proper anchorage of all wall-attached items. i.e. toilet accessories, casework, millwork, wall-mounted fixtures, marker boards, tack boards, etc.
- D. The University reserves the right of refusal on all salvage items removed from the project.

01740 Cleaning

- A. The Contractor shall remove all debris and demolished material from the job site to an approved landfill. Use of dumpsters leased by and for Creighton University is not allowed unless otherwise stipulated to the Contractor.
- B. The Contractor shall broom clean the work site at the end of each workday and broom clean the job site at the end of the job.
- C. The Contractor shall wash all interior glass on all fenestration in the project site at the job's completion.
- D. The Contractor shall remove all temporary protection labels not required to remain, clean all finishes free of dust, stains, films and other foreign substances.
- E. The Contractor shall clean transparent and glossy materials to a polished condition, and remove foreign substances.
- F. The Contractor shall vacuum clean all carpeted and similar soft surfaces, and clean, damp mop, and prepare resilient and hard-surface flooring for owner's seal coat as specified.
- G. The Contractor shall clean all surfaces of equipment and remove all excess lubrication.
- H. The Contractor shall clean all plumbing fixtures and food service equipment, and replace disposable filters when units have been operated without filters during construction.
- I. The Contractor shall clean all permanent filters of ventilating equipment and replace disposable filters when units have been operated during construction in addition, clean ducts, blowers, and coils when units have been operated without filters.
- J. The Contractor shall clean all light fixtures and lamps.
- K. The Contractor shall clean grounds; remove stains, spills, and foreign substances from paved areas and sweep clean. When applicable concrete surfaces requiring pressure washing must be coordinated through the Project Coordinator. Rake clean other exterior surfaces.
- L. The Contractor shall allow time for and perform a final clean on the work site prior to final inspection.

01760 Protecting Installed Construction

- A. The Contractor shall preserve and protect the existing structures and contents. Any damage to the structures or its contents or the landscape that occurs from or by action of the Contractor, Contractor's employees and sub-contractors shall be repaired by the Contractor at the Contractor's expense. The method of repair shall be in full agreement with the University for both methods and results.

01770 Closeout Procedures

- A. The Contractor shall arrange for turnover of owners stock at the completion of the project. Contractor is to arrange delivery to a facility specified by the Project Coordinator from Facilities Management. The delivery shall include an itemized inventory of the quantity and specific product information for each item being delivered as well as the building, room number and project number of the actual project listed on the inventory.
- B. For paint and stain products the University will only accept unopened containers. Contractor is to properly dispose of all opened and partial containers at the completion of the project.

01 78 00 Closeout Submittals

- A. The Contractor shall provide training to Facilities Management staff on all new and unique equipment installed as part of this project.
- B. At the time of substantial completion, the Contractor shall request a final inspection of the project with the Project Coordinator from Facilities Management. The items noted as needing completion or repair as part of the inspection shall be completed within ten (10) days of the date of the final inspection.

- C. The Contractor shall provide a one-year warranty on all labor, material, and workmanship included in the project. The Contractor warrants to the University that the materials and equipment furnished under the contract will be of good quality and new unless otherwise required or permitted by the contract documents. Work not conforming to these requirements, including substitutions not properly approved and authorized may be considered defective. The warranty shall commence at the time of substantial completion of the project. The warranty does not cover items damaged as a result from abuse, improper maintenance, improper operation, normal wear and tear, or normal usage by the University.
- D. Neither the final certificate, nor any payment nor any provision in the contract documents shall relieve the Contractor of responsibility for faulty materials or workmanship.
- E. Record Drawings (“as-builts”)
1. CAD files - Before submitting as-built CAD files to the University Planning and Design Department see CAD Standards in the Special Information Section of this Guide for the complete requirements.
 2. Two (2) complete hard copy bond sets of drawings with all disciplines including fire protection.
 3. Contractors redlined construction documents complete with all disciplines.
 4. Updated Specification books.
- F. Operation and Maintenance data is required for all products and equipment (in all MasterFormat divisions) installed on the project. The data shall be for the actual products, equipment, landscaping , etc. that was installed when different from the original specifications. Two (2) complete copies of all data shall be submitted to the Project Manager neatly bound in loose leaf binders properly marked with the project name, building name and year of the project. The sets shall include but are not limited to the following information:
- Summary page of all contractors and/or sub-contractors indicating the materials provided. To include but not limited to cut sheets, as-builts, shop drawings, warranty (one year and/or extended)
 - Finish schedule i.e. paint, flooring, wall covering, etc.
 - Landscaping plans with a list of materials, plants, shrubs and trees
 - Control diagrams and sequence of operation
 - General operating instructions
 - Preventive maintenance requirements
 - Data sheets defining the dimensions, capacities and utility requirements for all equipment
 - A complete parts list for each piece of equipment including assembly drawings and recommended spare parts
 - A complete valve and damper schedule
 - Fan and pump curves for the specific equipment of the project

ADA Requirements

- A. All work by all trades involved with the project shall be in compliance with the requirements of the Americans with Disabilities Act (ADA) Standards for Accessible Design. The contractor shall be aware of the requirements and perform work in accordance with the requirements. The plans and specifications for this project may not include all the design criteria. Omission in design is not constructed as an elimination of the ADA requirements.

Examples of included Requirements:

1. All passageways shall be 36" wide or more except at door frames that shall have a minimum clearance of 33" wide including the door depth when the door is open.
2. Passing spaces if an accessible route is less than 60" wide, passing spaces are required at maximum 200' intervals. Passing space may be either 60"x60" space or a T-Intersection of two walks or corridors.
3. Gratings if located in walking surfaces shall have spaces no wider than 1/2" in one direction. If grating openings are elongated, then the grating shall be placed so that the long dimension is perpendicular to the direction of travel.
4. Objects projecting from walls with their leading edges between 27" and 80" above the finished floor shall protrude no more than 4" into walks or corridors. Protruding objects shall not reduce the required clear width of an accessible route or maneuvering space.
5. Signage shall comply with the following requirements: Character height, finish and contrasting color, braille, height above finish floor.
6. Width of turns shall be 36" clear width minimum for a 90 degree turn if no additional turn is required within 48". Clear width with turns around an obstruction less than 48" wide shall be 42" minimum with a minimum 48" width a turn.
7. Passing spaces if an accessible route is less than 60" wide, passing spaces are required at maximum 200' intervals. Passing space may be either 60"x60" space or a T-Intersection of two walks or corridors.
8. Carpet used shall have the following features:
 - A firm cushion, pad or backing. No pad is preferred.
 - A level loop, textured loop, level cut pile, or level cut/uncut pile texture. Maximum pile thickness of 1/2".
9. Exposed edges fastened to floor surfaces with carpet edge trim.