

1.01 WORK COVERED BY CONTRACT DOCUMENTS

A. Work under this Contract covers roofing alterations including; selective demolition, pre-finished metal roofing and flashing, pre-finished metal gutters and downspouts, new roofing membrane system. Located at the Owner's site:

Monroe Library  
1070 Village Way  
Monroe, Washington

B. Related Requirements Specified Elsewhere:

- |   |               |
|---|---------------|
| 1. Cutting and Patching                     | Section 01070 |
| 2. Applicable Codes                         | Section 01080 |
| 3. Progress Meetings                        | Section 01220 |
| 4. Construction Schedules                   | Section 01310 |
| 5. Progress Reports                         | Section 01320 |
| 6. Shop Drawings, Product Data and Samples  | Section 01340 |
| 7. Schedules of Values                      | Section 01370 |
| 8. Testing Laboratory Services              | Section 01410 |
| 9. Temporary Facilities                     | Section 01500 |
| 10. Protection of Owner's Work and Property | Section 01546 |
| 11. Field Offices and Sheds                 | Section 01590 |
| 12. Substitutions and Product Options       | Section 01640 |
| 13. Contract Closeout                       | Section 01700 |
| 14. Cleaning                                | Section 01710 |
| 15. Project Record Documents                | Section 01720 |

C. Contractor's Duties:

1. Except as specifically noted, provide and pay for:
  - a. Labor, materials, and equipment.
  - b. Tools, construction equipment, and machinery.
  - c. Water, heat, and utilities required for construction.
  - d. Other facilities and services necessary for proper execution and completion of Work.
2. Pay legally required sales, consumer, and use taxes.
3. Secure and pay for, as necessary for proper execution and completion of Work, and as applicable at time of receipt of bids:
  - a. Permits
  - b. Government fees.
  - c. Licenses.
4. Give required notices.
5. Comply with codes, ordinances, rules, regulations, orders, and other legal requirements of public authorities which bear on performance of Work.
6. Promptly submit written notice to Architect of observed variance of Contract Documents from legal requirements. It is not Contractor's responsibility to make certain that drawings and specifications comply with codes and regulations.
  - a. Modify Contract Documents to adjust for necessary changes.
  - b. Assume responsibility for work known to be contrary to such requirements, without notice.
7. Enforce strict discipline and good order among employees; do not employ on Work:
  - a. Unfit persons.
  - b. Persons not skilled in assigned task.

1.02 CONTRACTS

A. Construction Work under single Lump-Sum Contract.

1.03 OWNER-FURNISHED CONTRACTOR INSTALLED (O.F.C.I.) PRODUCTS

A. Products furnished by Owner shall be as follows:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

B. Copies of manufacturer's literature for the above-listed Owner-furnished products are available in the Owner's office when further information is required. Contact \_\_\_\_\_ at \_\_\_\_\_.

C. Products:

- Delivered and unloaded at site.  
 Picked up at Warehouse/Supplier.

D. Owner's Duties:

1. Schedule delivery date with supplier in accordance with construction Schedule.
2. Obtain current installation drawings and instructions and submit to Contractor.
3. Submit claims for transportation damages.
4. Arrange guarantees, warranties.

E. Contractor's Duties:

1. Designate required delivery date for each product in construction Schedule.
2. Promptly inspect delivered products, report damaged or defective items.
3. Handle at site, including uncrating and storage.
4. Protect from exposure to elements, from damage.
5. Repair or replace items damaged as result of Contractor's operations.
6. Install, connect, finish products.
7. Secure current installation drawings and instructions from Owner and install all above listed items in strict accordance with these instructions.
8. Verify all field dimensions with manufacturer's installation requirements prior to installing permanent surrounding construction.

1.04 CONTRACTOR USE OF PREMISES

A. Confine operations at site to areas permitted by:

1. Law.
2. Ordinances.
3. Permits.
4. Contract Documents.

B. Do not unreasonably encumber site with materials or equipment.

C. Do not load structure with weight that will endanger structure or personnel.

D. Assume full responsibility for protection and safekeeping of products stored on premises.

- E. Move any stored products which interfere with operations of Owner or other Contractor.
- F. Obtain and pay for use of additional storage or work areas needed for operations.
- G. Use of site:
  - Exclusive and complete, for execution of work, except where Owner has existing facilities on site.
  - 1. Maintain access and existing uses.
  - 2. Coordinate all work with the Sno-Isle Libraries Project Representative for the area where construction is proposed, for any other exclusions of use.

**1.05 CONTRACTOR'S SUBMITTAL OF MSDS**

Material Safety Data Sheets (MSDS) shall be submitted on all materials/products that contain or use chemical solutions for treatment or as additives and/or display Hazardous/Warning/Caution information in their products literature or on their labels.

**1.06 FINAL COORDINATION BETWEEN MECHANICAL, ELECTRICAL, HVAC CONTROLS, AND FIRE PROTECTION CONTRACTORS' WORK**

The General Contractor shall be responsible for coordinating and scheduling, 24-hours prior to the Substantial Completion Date, a jobsite test review meeting for checking the sequential operation of the HVAC system, HVAC controls, and fire protection work. The intent of the meeting is to be absolutely positive that all systems are operational and properly interconnected to function per the drawings and specifications.

END OF SECTION

1.01 DESCRIPTION

- A. Related Requirements Specified Elsewhere:
  - 1. Summary of Work ----- Section 01010
  - 2. Painting ----- Section 09900
  - 3. Mechanical ----- Section 15010
  - 4. Electrical ----- Section 16010
- B. Execute cutting (including excavating), fitting, or patching of Work, required to:
  - 1. Make several parts fit properly.
  - 2. Uncover Work to provide for installation of ill-timed Work.
  - 3. Remove and replace defective Work.
  - 4. Remove and replace Work not conforming to requirements of Contract Documents.
  - 5. Remove samples of installed Work as specified for testing.
  - 6. Install specified Work in existing construction.
- C. In addition to contract requirements, upon written instructions of Architect:
  - 1. Uncover Work to provide for Architect, observation of covered Work.
  - 2. Remove samples of installed materials for testing.
  - 3. Remove Work to provide for alteration of existing Work.
- D. Do not endanger any Work by cutting or altering or any part of it.
- E. Do not cut or alter Work of another Contractor without written consent of Architect.

1.02 SUBMITTALS

- A. Prior to cutting which affects structural safety of Project, or Work of another Contractor, submit written notice to Architect requesting consent to proceed with cutting, including:
  - 1. Identification of Project.
  - 2. Description of affected Work.
  - 3. Necessity for cutting.
  - 4. Effect on other Work, on structural integrity of Project.
  - 5. Description of proposed Work. Designate:
    - a. Scope of cutting and patching.
    - b. Contractor and trades to execute work.
    - c. Products proposed to be used.
    - d. Extent of refinishing.
  - 6. Alternatives to cutting and patching.
  - 7. Designation of party responsible for cost of cutting and patching.
- B. Prior to cutting and patching done on instruction of Architect, submit cost estimate.
- C. Should conditions of Work, or schedule, indicate change of materials or methods, submit written recommendation to Architect, including:
  - 1. Conditions indicating change
  - 2. Recommendations for alternative materials or methods.
  - 3. Submittals as required for Substitutions.
- D. Submit written notice to Architect designating time work will be covered, to provide for observation.

1.03 PAYMENT FOR COSTS

- A. Costs caused by ill-timed or defective Work, or Work not conforming to Contract Documents, including costs for additional services of Architect/Engineer: party responsible for ill-timed, rejected, or non-conforming Work.
- B. Work done on instructions of Architect, other than defective or non-conforming Work: Owner.

1.04 MATERIALS

For replacement of Work removed: Comply with specifications for type of Work to be done.

1.05 INSPECTION

- A. Inspect existing conditions of Work, including elements subject to movement or damage during:
  - 1. Cutting and patching.
  - 2. Excavating and backfilling.
- B. After uncovering Work, inspect conditions affecting installation of new products.

1.06 PREPARATION PRIOR TO CUTTING

- A. Provide shoring, bracing, and support as required to maintain structural integrity of Project.
- B. Provide protection for other portions of Project.
- C. Provide protection from elements.

1.07 PERFORMANCE

- A. Execute fitting and adjustment of products to provide finished installation to comply with specified tolerances, finishes.
- B. Execute excavating and backfilling as specified in the Excavating, Filling, and Grading Section of these Specifications.
- C. Restore Work which has been cut or removed; install new products to provide completed Work in accordance with requirements of Contract Documents.
- D. Refinish entire surfaces as necessary to provide as even finish:
  - 1. Continuous Surfaces: To nearest intersection.
  - 2. Assembly: Entire refinishing.

1.08 CUTTING AND PATCHING FOR MECHANICAL AND ELECTRICAL WORK

The General Contractor shall be responsible for the cutting and patching for the mechanical and electrical subcontractors. Coordinate exact locations & sizes of required new openings for the mechanical and electrical work. Provide patching as required around new work so that surfaces match adjacent surfaces.

END OF SECTION

SECTION 01080, APPLICABLE CODES

1.01 GENERAL

Comply with all Federal, State, County, Municipal or City authorities having jurisdiction for environmental, Safety and Health, Land Use, Zoning and building construction except as superseded by Law.

1.02 LAWS, CODES AND ORDINANCES

Comply with the following listed codes as a minimum, except where local ordinances, state codes or laws are more stringent than these requirements:

- 1. International Building Code (IBC) ----- Edition 2009
- 2. International Mechanical Code (IMC) ----- Edition 2009
- 3. International Plumbing Code (IPC) ----- Edition 2009
- 4. National Electrical Code (NEC) ----- Edition 2009
- 5. International Fire Code (IFC) ----- Edition 2009

1.03 STANDARDS

Comply with the following standards as a minimum:

- 1. International Building Code Standards ----- Edition 2009
- 2. \_\_\_\_\_ Edition \_\_\_\_\_
- 3. \_\_\_\_\_ Edition \_\_\_\_\_
- 4. \_\_\_\_\_ Edition \_\_\_\_\_
- 5. \_\_\_\_\_ Edition \_\_\_\_\_
- 6. \_\_\_\_\_ Edition \_\_\_\_\_

END OF SECTION

## SECTION 01310, CONSTRUCTION SCHEDULES

### 1.01 DESCRIPTION

#### A. Related Requirements Specified Elsewhere:

1. Summary of Work ----- Section 01010
2. Progress Meetings ----- Section 01220
3. Shop Drawings, Product Data, Samples ----- Section 01340
4. Schedule of Values ----- Section 01370

B. Provide projected construction schedules for entire work, revise periodically.

### 1.02 FORM OF SCHEDULES

#### A. Prepare in form of horizontal bar chart:

1. Provide separate horizontal bar column for each trade or operation.
2. Order: Table of Contents of Specification.
3. Identify each column:
  - a. By major specification section number.
  - b. By distinct graphic delineation.
4. Horizontal time scale: Identify first work day of each week.
5. Scale and spacing: To allow space for updating.
6. Sheet size: 8 1/2 x 11 1/2 or 24 x 36.

### 1.03 SEQUENCE OF CONSTRUCTION

#### A. Provide complete sequence of construction by activity:

1. Shop drawings, Product Data and Samples:
  - a. Submittal dates.
  - b. Dates reviewed copies will be required.
2. Decision dates for:
  - a. Selection of finishes.
3. Product procurement and delivery dates.
4. Dates for beginning, and completion of, each element of construction, specifically:
  - a. Concrete placement.
  - b. Subcontractor work.
  - c. Equipment installations.
  - d. Equipment tests.

B. Identify work of separate phases, or other logically grouped activities.

C. Show projected percentage of completion for each item of work as of first day of each month.

D. Provide separate sub-schedule, showing submittals, review times, procurement schedules, and delivery dates.

E. Provide sub-schedules to define critical portions of entire schedule.

### 1.04 UPDATING

A. Show all changes occurring since previous submission of updated schedule.

B. Indicate progress of each activity, show completion dates.

## SECTION 01310, CONSTRUCTION SCHEDULES

### C. Include:

1. Major changes in scope.
2. Activities modified since previous updating.
3. Revised projections due to changes.
4. Other identifiable changes.

### D. Provide narrative report, including:

1. Discussion of problem areas, including current and anticipated delay factors, and their impact.
2. Corrective action taken, or proposed, and its effect.
3. Effect of change in schedules of other Prime Contractors.
4. Description of revisions:
  - a. Effect on schedule due to change of scope.
  - b. Revisions in duration of activities.
  - c. Other changes that may affect schedule.

## 1.05 SUBMITTALS

- A. Submit initial schedules within 5 days after date of the Owner-Contractor Agreement.
  1. Architect will review schedules and return review copy within 5 days after receipt.
  2. If required, re-submit within three days after return of review copy.
- B. Submit periodically updated schedules accurately depicting progress to first day of each month.
- C. Submit the number of copies required by Contractor, plus four copies to be retained by Architect.

END OF SECTION



1.01 GENERAL

A. Related Requirements Specified Elsewhere:

1. Summary of Work ----- Section 01010
2. Progress Meetings ----- Section 01220
3. Construction Schedules ----- Section 01310

B. Report on daily progress of the Work throughout the construction period beginning with construction implementation and continuing through the date of Substantial Completion.

1.02 FORM OF PROGRESS REPORT

A. Use "Contractors Daily Work Report".

1.03 CONTENT OF REPORT

A. Fill in all blanks by printing legibly with ballpoint pen, and answer all questions.

B. Work Completed:

1. Estimate the percentage of Work Complete on the job site as of the date of report.
2. Itemize work complete in accordance with specification section numbers in numerical order.
3. List under "Subcontractor" column the principle one who is responsible for section of work itemized, whether supplier, fabricator, installer or some other type of subcontractor.
4. Give the number of men working on the section of work listed for that day.
5. Estimate the percent complete of the total for each section of work listed.

C. "General Comments" in addition to other pertinent information include comments on the following:

1. Comparison between "Construction Schedule" and actual work accomplished.
2. What inspections called for or made.
3. What Change or Field Orders received.
4. Delays in the Work, if any, and the reason for such.
5. What instructions or requests have been made and by whom.
6. Which major products (Materials and equipment) have been delivered.
7. Names of visitors.
8. Photographs made; by whom and of what.
9. Accidents, vandalism, missing materials, etc.

D. The Foreman or Superintendent, whoever is in charge of the work that day, shall be the one who prepared the "Progress Report" printing name in space provided, giving the date and consecutive report number.

1.04 SUBMITTALS AND DISTRIBUTION

A. Fill our reports daily and submit weekly.

B. Submit copies to the following:

1. Architect: Original and one copy.
2. Contractor: One copy.
3. Job site files: One copy.

END OF SECTION



## SECTION 01340, SHOP DRAWING, PRODUCT DATA AND SAMPLES

### 1.01 GENERAL

- A. Submit, to the Architect/Engineer, shop drawings, product data and samples required by specification sections.
- B. Related Requirements Specified Elsewhere:
  - 1. Construction Schedule Section 01310
  - 2. Testing Laboratory Services Section 01410
  - 3. Substitutions and Product Options Section 01640
  - 4. Project Record Documents Section 01720
- C. Prepare and submit, with Construction Schedule, a separate schedule listing dates for submission and dates reviewed shop drawings, product data and samples that will be needed for each product.

### 1.02 SHOP DRAWINGS

- A. Original drawings, prepared by Contractor, subcontractor, supplier or distributor, which illustrate some portion of the Work; showing fabrication, layout, setting or erection details.
- B. Prepared by a qualified detailer.
- C. Identify details by reference to sheet and detail numbers shown on Contract Drawings.
- D. Sheet size: 610 x 914 MM (24" x 36") or 216 x 292 MM (8 1/2" x 11")
- E. Reproductions for Submittals: Opaque blue-line or blackline prints.

### 1.03 PRODUCT DATA

- A. Manufacturer's standard schematic drawings:
  - 1. Modify drawings to delete information which is not applicable to project.
  - 2. Supplement standard information to provide additional information applicable to project.
- B. Manufacturer's catalog sheet, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data.
  - 1. Clearly mark each copy to identify pertinent materials, products or models.
  - 2. Show dimensions and clearances required.
  - 3. Show performance characteristics and capacities.
  - 4. Show wiring diagrams and controls.
- C. Materials list as required in "Part 1.00 - General" of the respective Specification sections.

### 1.04 SAMPLES

- A. Physical examples to illustrate materials, equipment or workmanship, and to establish standards by which completed work is judged.
- B. Office Samples: Of sufficient size and quantity to clearly illustrate:
  - 1. Functional characteristics of product or material, with integrally related parts and attachment devices.
  - 2. Full range of color samples.

## SECTION 01340, SHOP DRAWING, PRODUCT DATA AND SAMPLES

3. After review, samples may be retained by Architect/Engineer.

### 1.05 CONTRACTOR RESPONSIBILITIES

- A. Review Shop Drawings, Product Data and Samples prior to submission.
- B. Verify:
  1. Field measurements.
  2. Field construction criteria.
  3. Catalog numbers and similar data.
- C. Coordinate each submittal with requirements of Work and of Contract Documents.
- D. Contractor's responsibility for errors and omissions in submittals is not relieved by Architect/Engineer's review of submittals.
- E. Contractor's responsibility for deviations in submittals from requirements of Contract Documents is not relieved by Architect/Engineer's review of submittals, unless Architect/Engineer gives written acceptance of specific deviations.
- F. Notify Architect/Engineer, in writing at time of submission, of deviations in submittals from requirements of Contract Documents.
- G. Begin no work which requires submittals until return of submittals with Architect/Engineer's stamp and initials or signature indicating review.
- H. After Architect/Engineer's review, distribute copies.

### 1.06 SUBMISSION REQUIREMENTS

- A. Schedule submissions at least five (5) days before dates reviewed submittals will be needed.
- B. Submit number of copies of Shop Drawings, Product Data and Samples which Contractor requires for distribution plus two (2) copies which will be retained by Architect/Engineer.
- C. Accompany submittals with transmittal letter, in duplicate, containing:
  1. Date
  2. Project title and number
  3. Contractor's name and address
  4. The number of each Shop Drawing, Product Data and Sample submitted
  5. Notifications of deviations from Contract Documents
  6. Other pertinent data
- E. Submittals shall include:
  1. Date and revision dates.
  2. Project title and number.
  3. The names of:
    - a. Architect/Engineer
    - b. Contractor
    - c. Subcontractor
    - d. Supplier

## SECTION 01340, SHOP DRAWING, PRODUCT DATA AND SAMPLES

- e. Manufacturer
- f. Separate detailer when pertinent
- 4. Identification of product or material.
- 5. Relation to adjacent structure or materials.
- 6. Field dimensions, clearly identified as such.
- 7. Specification section number.
- 8. Applicable standards, such as ASTM number or Federal Specification.
- 9. A blank space 127 x 152 MM (5" x 6") for the Architect/Engineer's stamp.
- 10. Identification of deviations from Contract Documents.
- 11. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of field measurements and compliance with Contract Documents.

### 1.07 RESUBMISSION REQUIREMENTS

- A. Shop Drawings:
  - 1. Revise initial drawings as required and resubmit as specified for initial submittal.
  - 2. Indicate on drawings any changes which have been made other than those requested by Architect/Engineer.
  - 3. Product Data and Samples: Submit new data and samples as required for initial submittal.

### 1.08 DISTRIBUTION OF SUBMITTALS AFTER REVIEW

- A. Distribute copies of Shop Drawings and Product Data which carry Architect/Engineer's stamp to:
  - 1. Contractor's file
  - 2. Job-site file
  - 3. Record Documents file
  - 4. Other prime Contractors
  - 5. Subcontractors
  - 6. Supplier
  - 7. Fabricator
- B. Distribute samples as directed.

### 1.09 ARCHITECT/ENGINEER'S DUTIES

- A. Review submittals with reasonable promptness.
- B. Review for:
  - 1. Design concept of project.
  - 2. Information given in Contract Documents.
- C. Review of separate item does not constitute review of an assembly which item functions.
- D. Affix stamp and initials or signature certifying to review of submittal.
- E. Return submittals to Contractor for distribution.

END OF SECTION

1.01 DESCRIPTION

- A. Related Requirements Specified Elsewhere:
  - 1. Progress Meetings Section 01220
  - 2. Construction Schedules Section 01310
  - 3. Contract Closeout Section 01700
- B. Submit to the Architect Schedule of Values, at least ten days prior to submitting first Application for Payment.
- C. Upon request by Architect, support values given with data that will substantiate their correctness.
- D. Submit quantities of designated materials.
- E. Payment for materials stored on-site will be limited to those materials listed in Schedule of Unit Material Values.
- F. Use Schedule of Values only as basis for Contractor's application for payment.

1.02 FORM OF SUBMITTAL

- A. Submit typewritten Schedule of Values on 216 x 292 MM (8 1/2" x 11") white paper.
- B. Use Table of Contents of this Specification for a basis of format in listing costs of work for sections under Divisions 2-16.
- C. Identify each line item with number and title as listed in Table of Contents of this Specification.

1.03 PREPARING SCHEDULE OF VALUES

- A. Itemize separate line item cost for each of the following general cost items:
  - 1. Performance and Payment Bonds
  - 2. Field Supervision and Layout
  - 3. Temporary Facilities and Controls
- B. Itemize separate line item cost for each for each Section of Work.
- C. Break down installed costs into:
  - 1. Delivered cost of product, with taxes paid out.
  - 2. Total installed cost, with overhead and profit.
- D. For each line item which has installed value of more than \$20,000, break down costs to list major products or operations under each item.
- E. Round off figures to nearest ten dollars.
- F. Make sum of total costs of all items listed in schedule equal to total Contract Sum.

## SECTION 01370, SCHEDULE OF VALUES

### 1.04 PREPARING SCHEDULE OF UNIT MATERIAL VALUES

- A. Submit separate schedule of unit prices for materials to be stored on which progress payments will be made.
- B. Make form of submittal parallel to Schedule of Values, with each line item identified same as line item in Schedule of Values.
- C. Include in unit prices only:
  - 1. Cost of material.
  - 2. Delivery and unloading at site.
  - 3. Sales taxes.
- D. Make sure that unit prices multiplied by quantities given equal material cost of that item in Schedule of Values.

### 1.05 REVIEW AND RESUBMITTAL

- A. After review by Architect, revise and resubmit Schedule (and Schedule of Material Values), as required.
- B. Resubmit revised Schedule in same manner.

END OF SECTION

## SECTION 01500, TEMPORARY FACILITIES AND CONTROLS

### 1.01 GENERAL

- A. Related Requirements Specified Elsewhere:
  - 1. Compliance with Safety Regulations: Covered in General Agreement.
  - 2. Equipment: Comply with all pertinent Safety Regulations.
  - 3. Utility Hook-up: Comply with regulations of governing utility.
  - 4. Summary of Work Section 01010
  - 5. Applicable Codes Section 01080
  - 6. Protection of Owners Work and Property Section 01546
  - 7. Field Offices and Sheds Section 01590
  - 8. Mechanical General Provisions Section 01510
  - 9. Electrical General Provisions Section 16010
  
- B. Description of System:
  - 1. Provide temporary electricity including power for:
    - a. Power centers for miscellaneous tools and equipment.
    - b. Construction equipment.
    - c. Temporary field offices and storage sheds.
    - d. Temporary lighting.
    - e. Temporary heating and ventilation.
    - f. Testing and checking equipment.
    - g. Other equipment having special power requirements.
  - 2. Provide temporary lighting as required for:
    - a. Construction needs.
    - b. Safe and adequate working conditions throughout the project.
    - c. Public safety.
    - d. Security.
    - e. Temporary field offices and sheds.
  - 3. Provide temporary heating and ventilating of enclosed areas as required to:
    - a. Facilitate progress of work.
    - b. Protect work and products against dampness and cold.
    - c. Prevent moisture condensation on surfaces.
    - d. Provide suitable ambient temperatures and humidity levels for installations and curing of materials.
    - e. Provide adequate ventilation to meet health regulations for safe working environment.
    - f. Heat and ventilate temporary field offices and storage sheds as may be required.
  - 4. Provide temporary telephone services or other form of communication with the job site.
  - 5. Water service for contractor's use is available at existing building. Verify location and coordinate use with Owner's Project Representative.
  - 6. Provide temporary sanitary facilities including:
    - a. Potable water for construction personnel.
    - b. Safety of construction personnel and the public.
  - 7. Provide construction aids and controls as required for:
    - a. Access to all portions of the Work.
    - b. Safety of construction personnel and the public.
  - 8. Provide temporary fire protection and security.
  
- C. Coordinate with the following Utilities for service:
  - 1. Electrical Power: Applicable Utility District.
  - 2. Telephone: Frontier Communications
  - 3. Water: Applicable Water District.



## SECTION 01500, TEMPORARY FACILITIES AND CONTROLS

- D. Maintain strict supervision of temporary facilities and controls.
  - 1. Enforce conformance with applicable laws, codes, ordinances and standards.
  - 2. Enforce safety standards and practices.
  - 3. Prevent abuses of services.
  - 4. Prevent any damage to installed finishes.
  - 5. Prevent water system from freezing.
  
- E. Costs of facilities and controls:
  - 1. Pay all costs of providing temporary electricity, lighting, heating, ventilating, telephone, water and sanitary service, including maintenance and removal.
  - 2. Pay all costs of providing and removing temporary controls and construction aids including safety, first aid, fire protection and security devices.
  - 3. Pay all local and toll service charges for temporary telephone service related to construction of the project.
  - 4. Pay cost of utilities for electricity, water, telephone or other such utility as may be required to operate and maintain permanent facilities until final acceptance of project.
  
- F. Definitions:
  - 1. Work lighting: That required to provide adequate illumination for work being performed.
  - 2. Safety lighting: That required to provide:
    - a. Adequate illumination for safe movement of authorized persons throughout project.
    - b. Adequate illumination for public safety.
    - c. Special warning lighting for hazardous conditions.
  - 3. Security lighting: That required in protection of project from unauthorized entry.
  - 4. Project Site: Area bounded by temporary enclosure which excludes public.
  - 5. Temporary enclosure: Sufficient preliminary enclosure of an area of structure, or of entire building, to prevent entrance or infiltration of rain-water, wind or other elements, and which will prevent undue heat loss from within enclosed area.
  - 6. Permanent enclosure: Stage of construction at which all moisture and weather-protection elements of construction have been installed in accord with Contract Documents, either for a portion of structure, or for entire building.

### 1.02 QUALITY ASSURANCE

- A. Requirements of regulatory agencies
  - 1. Obtain and pay for permits required by governing authorities.
  - 2. Obtain and pay for temporary easements required across property other than that of the Owner.
  - 3. In addition to "Applicable Codes" Section 01080, comply with the following codes and standards:
    - a. National Electrical Safety Code of National Bureau of Standards Handbook H-30.
    - b. ANSI Standard C1.
    - c. National Fire Protection Association Pamphlet Number 70.
    - d. Standards or regulations of utility companies having jurisdiction of Work.

### 1.03 JOB CONDITIONS

- A. Use of permanent system:
  - 1. Secure Owner's written permission for connection and use of system, indicating conditions of use.
  - 2. Modify and extend system as necessary to meet temporary utilities requirements.
- B. Use of Owner's existing system:

## SECTION 01500, TEMPORARY FACILITIES AND CONTROLS

1. Do not use existing system for temporary utilities.

### 2.00 PRODUCTS

#### 2.01 MATERIALS

- A. General:
  1. Comply with Divisions 15100 and 16100, Mechanical and Electrical Basic Materials and methods, respectively.
  2. Materials may be new or used, but must be adequate for purpose intended, and must not create unsafe, unsanitary nor violate requirements of applicable codes.
  3. At Contractor's option, patented specialty products may be used if in compliance with applicable codes, UL approved, and utility company regulations.
- B. Provide required mechanical facilities, including piping, valves, controls, pumps, pressure regulators, tanks and other appurtenances.
- C. Provide required electrical facilities, including transformers, conductors, poles, conduits, raceways, breakers, fuses, switches, wiring, cable terminals, accessories and supports.

#### 2.02 EQUIPMENT

- A. Provide appropriate electrical enclosures for environment in which used, in compliance with NEMA Standards.
- B. Provide temporary receptacles and fixtures as follows:
  1. Standard products, meeting UL requirements.
  2. Provided with heavy-duty guards.
  3. Appropriate for environment in which used, in accord with NEC and NEMA Standards.
- C. Provide temporary heating cooling and ventilating equipment as follows:
  1. Standard products meeting code requirements and the requirements of Divisions 15, Mechanical.
  2. Portable heaters shall be standard units, meeting code requirements and as follows:
    - a. Safety controls against explosion, overheating and carbon monoxide build-up
    - b. Vent direct-fired units to outside.
    - c. Provide adequate combustion air.
- D. Provide temporary telephone equipment as follows:
  1. Standard products of service company.
  2. Exterior gongs for instruments which are not continuously monitored, except where prohibited by code or ordinance.
- E. Provide temporary sanitary drinking water, toilet facilities as follows:
  1. New or used drinking fountains.
  2. Chemical toilets or as approved in advance by the Architect including toilet tissue on suitable dispenser.
- F. Provide temporary construction aids and control equipment conforming to federal, state, and local health and safety standards.

## SECTION 01500, TEMPORARY FACILITIES AND CONTROLS

### 3.00 EXECUTION

#### 3.01 GENERAL

- A. Comply with applicable sections of Division 15, Mechanical and 16, Electrical.
- B. Install work in neat and orderly manner.
- C. Make structurally, mechanically and electrically sound throughout.
- D. Maintain to give continuous service and to provide safe working conditions.
- E. Modify and extend temporary facilities and controls as work progress requires.

#### 3.02 TEMPORARY ELECTRICITY

- A. General
  - 1. Provide minimum of one power center on each floor, located so that power is available at any desired point with no more than 30.5 m (100 ft.) extension.
  - 2. Provide weatherproof distribution box, with minimum of four 20 amp, 120-volt grounded outlets having circuit breaker protection for each outlet and equipment grounding continuity for entire system.
  - 3. Users shall provide grounded, UL approved extension cords from power center to point of operations.
  - 4. Capacity:
    - a. Adequate electrical service for construction use by all trades during construction period.
    - b. Notify power company if unusually heavy loads, such as welding, and other equipment with special power requirements, will be connected.
      - 1) Provide special circuits for heavy load requirements.
      - 2) Do not overload circuit.
- B. Installation:
  - 1. Service and distribution may be overhead or underground.
  - 2. Locate to avoid interference with traffic, work and storage areas, cranes and material handling equipment and Work under other Contracts.
  - 3. Do not run branch circuits on floor or on ground.
  - 4. Wiring of temporary heating equipment.
    - a. Wire all safety devices specified for final operation of equipment.
    - b. Check operation of safety devices.
- C. Removal:
  - 1. Completely remove temporary materials and equipment upon completion of construction.
  - 2. Repair damage caused by installation, and restore to specified, or original condition.

#### 3.03 TEMPORARY LIGHTING

- A. General
  - 1. Provide lighting levels as follows:
    - a. Work lighting:
      - 1) General: 5 foot candles
      - 2) Construction plant and shops: 10 foot candles
      - 3) For detail and finishing work: 20 foot candles

## SECTION 01500, TEMPORARY FACILITIES AND CONTROLS

- 4) For detailed testing and inspection: 30 foot candles
- 5) For first aid stations and infirmaries: 30 foot candles
- 6) Other areas: ANSI All.I, latest edition, Practice for Industrial Lighting.
- b. Safety lighting
  - 1) General: 1 foot candle
2. Periods of service:
  - a. Work lighting: Continuous from fifteen minutes prior to fifteen minutes past scheduled work hours on scheduled work days.
  - b. Safety lighting:
    - 1) Within project site: At all times authorized personnel are present.
    - 2) Public areas: At all times.
  - c. Security lighting: All hours of darkness.
3. Maintain strict supervision of use of temporary lighting:
  - a. Enforce conformance with applicable standards.
  - b. Enforce safe practices.
  - c. Prevent abuse of services.

### B. Installation

1. Locate to provide full illumination of required areas.
2. Locate to avoid interference with, or hazards to traffic and storage areas, materials handling, work or movement of personnel and Work of other contractors.
3. Install lighting switches at entrance to each area, or successive areas, so that progress to all areas of project may be made through lighted areas.
4. Install exterior security lighting to illuminate entire project site and to control lighting by photo electric cell.

### C. Removal

1. Completely remove temporary materials and equipment, after permanent lighting is in use.
2. Repair damage caused by installation, and restore surfaces to specified, or original condition.

## 3.04 TEMPORARY HEATING, COOLING AND VENTILATING

### A. General:

1. Temperatures Required:
  - a. Generally, 24 hours a day: Minimum 5 degrees Celsius. (40 degrees Fahrenheit).
  - b. 24 hours a day during placing, setting and curing of cementitious materials: As required by specification section for each product.
  - c. 24 hours a day, seven days prior to, and during, placing of interior finishes; woodwork, resilient floors, painting and finishing: As required by specification section for each product.
  - d. 24 hours a day after application of finishes, and until Substantial Completion: Minimum 21 degrees Celsius. (70 degrees Fahrenheit).
  - e. Field Offices: As specified in Section 01590 - Temporary Field Offices.
  - f. Storage areas: As required by Specification Section for each product.
  - g. Beneficial Occupancy: Design Requirements of permanent system.
2. Ventilation Required:
  - a. General: Prevent hazardous accumulations of dusts, fumes, mists, vapors or gases in areas occupied during construction.
    - 1) Provide local exhaust ventilation to prevent harmful dispersal of hazardous substances into atmosphere of occupied areas.
    - 2) Dispose of exhaust materials in manner that will not result in harmful exposure to persons.

## SECTION 01500, TEMPORARY FACILITIES AND CONTROLS

- 3) Ventilate storage spaces containing hazardous or volatile materials.
    - b. Provide adequate ventilation for:
      - 1) Curing installed materials.
      - 2) Dispersal of humidity.
      - 3) Ventilation of temporary sanitary facilities.
    - c. Duration of operations.
      - 1) At all times personnel occupies an area, when subject to hazardous accumulations of harmful elements.
      - 2) Continue operation of ventilation and exhaust system for time after cessation of work process to assure removal of harmful elements.
    - d. For curing installed materials: As required by specification section for respective materials.
    - e. For humidity dispersal: As needed to provide suitable ambient conditions for work.
  - B. Installation:
    1. Locate units to provide equitable distribution of heat and air movement.
    2. Locate to avoid interference with, or hazards to traffic and storage areas, materials handling, work or movement of personnel, finishes or work of other contracts.
  - C. Operation of Permanent Equipment:
    1. Place permanent HVAC system in operation when project is permanently enclosed.
    2. Before operation, ascertain that:
      - a. Inspection has been made by proper authorities.
      - b. Systems, equipment, piping, strainers, filters and associated operating items are sufficiently complete, cleaned, and ready for operation.
      - c. Controls and safety devices are complete and tested, or adequate temporary controls are provided.
    3. Install temporary filters:
      - a. For air-handling units.
      - b. For permanent ducts.
    4. Protect permanent radiation units, such as convectors or finned pipe, with temporary sheet metal enclosures.
    5. Maintain ventilated area in clean condition to avoid undue circulation of dust and air-borne particles.
    6. Provide operation and maintenance of systems.
  - D. Removal:
    1. Completely remove temporary materials and equipment when no longer required, or on completion of construction.
    2. Clean and repair damage caused by temporary installation, and restore equipment to specified or to original condition.
    3. Remove temporary filters and install new filters, or clean permanent filters.
- ### 3.05 TEMPORARY TELEPHONE
- A. General:
    1. Provide directory at each instrument, listing the name and business telephone number of:
      - a. Each primer Contractor and Subcontractor.
      - b. Each Supplier.
      - c. Architect.
      - d. Professional Consultants.
      - e. Testing Laboratories.

## SECTION 01500, TEMPORARY FACILITIES AND CONTROLS

- f. Regulatory agencies, with names of inspectors.
- g. Medical Services:
  - 1) Physicians.
  - 2) Hospitals.
  - 3) Ambulance service companies.
- h. Owner's Project Representative

### B. Installation:

- 1. Service and distribution wiring may be overhead or underground.
- 2. Locate conduit and cable to avoid interference with traffic, work and storage areas, cranes, materials handling equipment and work of other contracts.

### C. Removal:

- 1. Completely remove temporary materials and equipment upon completion of construction.
- 2. Repair damage caused by installation, and restore to specified, or original condition.

## 3.06 TEMPORARY WATER

### A. Installation:

- 1. Locate piping and outlets to:
  - a. Provide service convenient to work stations.
  - b. Avoid interference with traffic, work and storage areas, materials handling equipment and work under other contracts.
- 2. Do not run piping on floor or on ground.
- 3. Provide drip pan under each hose bibb located within building, connect drain to sewer.
- 4. Provide insulation, or other means, to prevent pipes from freezing.
- 5. When necessary to maintain pressure, provide temporary pumps, tanks and compressors.

### B. Removal:

- 1. Completely remove temporary materials and equipment upon completion of construction.
- 2. Clean, and repair damage caused by installation, and restore to specified or original condition.

## 3.07 TEMPORARY SANITARY FACILITIES

### A. General:

- 1. Locate drinking water convenient to work stations.
- 2. Locate toilet facilities secluded from public observation and convenient for use of personnel but not more than 61 m (200 ft.) horizontally from work station.
- 3. Relocate as work progress requires.
- 4. Enclosures for toilet facilities shall be weatherproof, sightproof and sturdy.
- 5. Provide a minimum number of toilets and urinals as follows:
  - a. For less than 20 employees: 1
  - b. For 20 or more employees: 1 toilet and 1 urinal per 40 workers.
- 6. Maintain, clean and service as required to provide sanitary conditions.
- 7. Modify and extend service as work progress requires.

### B. Installation:

- 1. Install sanitary drinking fountain with sterilized piping so as not to allow open, or potential, cross connections between potable water system and nonpotable water system.
- 2. Portable toilets

SECTION 01500, TEMPORARY FACILITIES AND CONTROLS

- a. Erect securely, and anchor to prevent dislocation.
  - b. Service as often as necessary to prevent accumulation of wastes, and creation of unsanitary conditions.
  - c. Coordinate location with Owner's Project Representative.
- C. Removal:
1. Remove portable units when piped units are connected. Completely remove temporary materials and equipment on completion of construction. Clean and repair permanent facilities used for temporary purposes, and surrounding areas; replace damaged fixtures.

END OF SECTION

## SECTION 01546, PROTECTION OF OWNERS WORK AND PROPERTY

### 1.01 DESCRIPTION

- A. Related Requirements Specified Elsewhere:
  - 1. Summary of Work                      Section 01010
  - 2. Cutting and Patching                Section 01070
  - 3. Temporary Facilities & Controls    Section 01500
  - 4. Cleaning                              Section 01710
  - 5. Mechanical Provisions              Section 15010
  - 6. Electrical Provisions                Section 16010
  
- B. Description of System
  - 1. Coordinate with Owner's supervisory at existing facility.
  - 2. Protect existing construction, equipment and facilities from all physical damage, including the infiltration of dust and moisture into existing equipment.
  - 3. Maintain existing facilities fire and security systems.

### 1.02 SUBMITTALS

- A. Methods of Protection: Before any work is begun, submit to the Architect, in accordance with the applicable provisions of Section 01340, a written description and Drawings as required to indicate all means necessary to achieve the protection required.

### 1.03 JOB CONDITIONS

- A. Review, at job site, with Owner's Project Representative and supervisory personnel the requirements for protection, including location of temporary partitions, dust and moisture prevention, shoring and bracing of existing construction and maintenance of existing security and fire protection.

### 1.04 MATERIALS AND EQUIPMENT

- A. All materials and equipment required for a complete and proper protection system, shall be as selected by the Contractor subject to the approval of the Architect.

### 1.05 EXISTING CONDITIONS

- A. Inspection:
  - 1. Prior to all work of this Section, carefully inspect the existing facilities and verify that installation may properly commence.
  - 2. Verify that all protection barriers and equipment may be installed in accordance with all pertinent codes, regulations and original design.
  
- B. Discrepancies:
  - 1. In the event of discrepancy, immediately notify the Architect.
  - 2. Do not proceed with the work in areas of discrepancy until all such discrepancies have been fully resolved.

### 1.06 INSTALLATION

- A. Install all protection in strict accordance with the methods as approved by the Architect.
- B. Install protection systems so as not to generate dust or inflict physical damage to existing facilities



## SECTION 01546, PROTECTION OF OWNERS WORK AND PROPERTY

or equipment.

- C. Relocate temporary protective systems, where necessary, to insure the progress of the Work.

### 1.07 EXISTING FIRE AND SECURITY PROTECTION

- A. Maintain all required fire exits and exit corridors in accordance with applicable codes.
- B. Provide all barriers required to maintain the existing level of security to the facility throughout the construction period.
- C. Existing portable fire extinguishers may be used during construction for fire control, however, the Contractor shall be responsible for recharging them immediately after use.
- D. Install and maintain temporary portable fire extinguishers in all areas added to the existing facility, as construction progresses, at points where shown for permanent extinguishers on the Drawings until the permanent Owner-furnished portable fire extinguishers are installed.
- E. Use of portable fire extinguishers:
  - 1. The Contractor shall familiarize himself and his employees with the requirements for the proper use of portable fire extinguishers in the existing facility and proposed Work.
  - 2. The Contractor shall, in the event of the use of these extinguishers, assume all liability for his employee's actions.

### 1.08 EXISTING CONSTRUCTION OR WORK

- A. Provide all bracing and shoring necessary to maintain the structural integrity of the Owner's existing facility throughout the construction period.
- B. Provide all temporary protective coverings, barricades, or barriers to insure protection of all existing surfaces, equipment and facilities throughout the construction period.

### 1.09 CLEANING

- A. Remove all protective temporary construction and equipment from the site at the end of the construction period, or earlier, where the protection from construction activities is no longer needed.
- B. Repair all surfaces damaged by the installation of the protective system, and restore to the original surface condition in accordance with Section 01070 "Cutting and Patching".

END OF SECTION

## SECTION 01590, FIELD OFFICES AND STORAGE SHEDS

### 1.01 DESCRIPTION

- A. Related Requirements Specified Elsewhere:
  - 1. Summary of Work                      Section 01010
  - 2. Applicable Codes                    Section 01080
  - 3. Temporary Facilities & Controls    Section 01500
  - 4. Cleaning                              Section 01710
  
- B. Description of System:
  - 1. General:
    - a. Furnish, install, maintain field offices, provide specified services, furnishings and equipment for:
      - (1) Architect/Engineer, Owner's Representative.
      - (2) General Contractor.
      - (3) Subcontractors.
    - b. Furnish, install and maintain storage sheds needed for construction.
    - c. Coordinate location on site for field office and sheds with Architect and Owner's Representative.
  - 2. Construction:
    - a. Structurally sound foundation and superstructure.
    - b. Weathertight, with raised floors: compatible with occupancy and storage requirements.
    - c. Temperature transmission resistance: compatible with occupancy and storage requirements.
    - d. At Contractor's option, portable buildings or mobile offices may be used.
  - 3. Storage Sheds:
    - a. Number of sheds: To requirements of various trades.
    - b. Dimensions: To storage requirements of products.
    - c. Ventilation: Meet specified, and code requirements for products stores.
    - d. Heating: Maintain temperatures specified in respective sections for products stored.
  - 4. Fire Extinguishers: One standard dry chemical (ABC) type for each office and each storage shed.
  - 5. Identification:
    - a. Provide a sign on each office structure to identify occupants and function:
    - b. "Emergency First Aid" sign.
  - 6. Remove field offices and storage sheds when no longer required.

### 1.02 QUALITY ASSURANCE

- A. Requirements of Regulatory Agencies:
  - 1. Comply with requirements of regulatory agencies have jurisdiction.
  - 2. Obtain and pay for permits as required by governing authorities.

### 1.03 JOB CONDITIONS

- A. Locate temporary structures to avoid interference with Work.
  
- B. Relocate temporary structures as required by progress of the Work.

### 1.04 MATERIALS, EQUIPMENT, FURNISHINGS

May be new or used, but must be serviceable, adequate for required purpose, and must not create unsafe conditions, or violate applicable codes.

## SECTION 01590, FIELD OFFICES AND STORAGE SHEDS

### 1.05 PREPARATION

Fill and grade sites for temporary structures to provide drainage.

### 1.06 INSTALLATION

- A. Construct temporary field offices and storage sheds with connections for temporary services. Provide steps and landings at entrance doors.
- B. Mount thermometer at convenient location not in direct sunlight.
- C. Mount fire extinguishers in prominent locations with access for use.
- D. Mount sign adjacent to entrance doors of appropriate structures, in conspicuous location.

### 1.07 REMOVAL

- A. Remove temporary field offices, contents and services, at completion of construction operations.
- B. Remove storage shed when they are no longer needed.
- C. Remove foundations, debris; grade to required elevations and clean area.

END OF SECTION

## SECTION 01640, SUBSTITUTIONS AND PRODUCT OPTIONS

### 1.01 PRODUCTS LIST

- A. Within fifteen (15) days after date of Contract, submit to Architect/Engineer five copies of complete list of all products which are proposed.
- B. Tabulate list by each specification section.
- C. For products specified under reference standards, include with listing of each product:
  - 1. Name and address of manufacturer.
  - 2. Trade name.
  - 3. Model or catalog designation.
  - 4. Manufacturer's data:
    - a. Performance and test data.
    - b. Reference standards.

### 1.02 CONTRACTOR'S OPTIONS

- A. For products specified only by reference standards, select any product meeting standards, by any manufacturer.
- B. For products specified by naming several products or manufacturers, select any product and manufacturer named.
- C. For products specified by naming one or more products, but indicating the option of selecting equivalent products by stating "or as approved in advance" after specified products, Contractor must submit request, as required for substitution, for any product not specifically named.
- D. For products specified by naming only one product and manufacturer, there is no option, and no substitution will be allowed.

### 1.03 SUBSTITUTIONS

- A. During Bidding:
  - 1. Architect/Engineer will consider written requests ("Request of Substitution") from prime Bidders for substitutions, received at least five days prior to bid date; requests received after that time will not be considered.
  - 2. Approvals, if any, of proposed substitutions will be by addenda to all Bidders of record.
- B. After Contract is Signed:
  - 1. Within thirty days after date of Contract, Architect/Engineer will consider formal requests from Contractor for substitution of products in place of those specified.
  - 2. No substitutions will be allowed beyond the above thirty day period except under one or more of the following conditions:
    - a. Required for compliance with final interpretation of code requirements or insurance regulations;
    - b. Unavailability of specified products, through no fault of the Contractor;
    - c. Subsequent information discloses inability of specified products to perform properly or to fit in designated space;
    - d. Manufacturer/fabricator refusal to certify or guarantee performance of specified product as required;
    - e. When it is clearly seen, in the judgment of the Architect/Engineer, that a substitution would be substantially to the Owner's best interests, in terms of cost, time, or other

SECTION 01640, SUBSTITUTIONS AND PRODUCT OPTIONS

considerations.

- C. Submit five copies of "Request for Substitution. Include in or with request:
  - 1. Complete data substantiating compliance of proposed substitution with Contract Documents.
  - 2. For products:
    - a. Product identification, including manufacturer's name and address.
    - b. Manufacturer's literature:
      - (1) Product Description
      - (2) Performance and test data
      - (3) Reference standards
    - c. Samples
    - d. Name and address of similar projects on which product was used, and date of installation.
  - 3. For construction methods:
    - a. Detailed description of proposed method.
    - b. Drawings illustrating methods.
  - 4. Itemized comparison of proposed substitution with product or method specified.
  - 5. Data relating to changes in construction schedule.
  - 6. Relation to separate contracts.
  - 7. Accurate cost data on proposed substitution in comparison with product or method specified.
- D. In making request for substitution, Bidder/Contractor shall submit a "Certification of Equal Performance" and represents:
  - 1. He has personally investigated proposed product or method, and determined that it is equal or superior in all respects to that specified.
  - 2. He will provide the same guarantee for substitution as for product or method specified.
  - 3. He will coordinate installation of accepted substitution into Work, making such changes as may be required for Work to be complete in all respects.
  - 4. He waives all claims for additional costs related to substitution which consequently becomes apparent.
  - 5. Cost data is complete and includes all related costs under his Contract, but excludes:
    - a. Costs under separate contracts.
    - b. Architect/Engineer's redesign.
- E. Substitutions will not be considered if:
  - 1. They are indicated or implied on shop drawings or product data submittals without formal request submitted in accord with Paragraph 1.04 above.
  - 2. Acceptance will require substantial revision of Contract Documents.

END OF SECTION

**REQUEST FOR SUBSTITUTION**

Project: \_\_\_\_\_

Address: \_\_\_\_\_

Project No.: \_\_\_\_\_ Dated: \_\_\_\_\_

Architect:  
\_\_\_\_\_

Address: \_\_\_\_\_

In order to give proper consideration to all requests for approval, the following information shall be supplies and all questions answered

1. Nature of request:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Specification section(s) affected:  
\_\_\_\_\_  
\_\_\_\_\_

3. Drawing detail(s) affected:  
\_\_\_\_\_  
\_\_\_\_\_

4. Does the change affect any dimensions shown on the plans in any way? \_\_\_\_\_

5. What effect does the change have on any other trades?  
\_\_\_\_\_  
\_\_\_\_\_

6. Does the change meet all applicable code and ordinance requirements?  
\_\_\_\_\_

7. Is there a cost or maintenance benefit to the Owner? \_\_\_\_\_

a. If cost benefit, how much? \_\_\_\_\_

b. If maintenance benefit, explain how: \_\_\_\_\_

8. Submit with request all necessary samples and substantiating data; include shop drawings, catalog cuts, performance and test data; to prove conformance to the Contract Documents, equal quality and performance to that which is specified. Clearly mark manufacturer's literature to indicate quality in performance.

9. Will the undersigned pay for any engineering or detailing costs caused by the requested change?

Firm: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Date: \_\_\_\_\_

Name of Proposer: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

END OF REQUEST FOR SUBSTITUTION

**CERTIFICATION OF EQUAL PERFORMANCE AND  
ASSUMPTION OF LIABILITY FOR EQUAL PERFORMANCE**

Project: \_\_\_\_\_

Address: \_\_\_\_\_

Frontier Communications Project No.: \_\_\_\_\_

Architect: \_\_\_\_\_

Address: \_\_\_\_\_

The undersigned has thoroughly studied the plans and specifications for the above project and guarantees by this signature that the requested material equipment or system substitution or change in construction procedures or technique will, in addition to conforming to any and all applicable code requirements, perform equal to or better than that material, or combination of materials, presently detailed and specified.

Firm: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Note: Signature must be by person having authority to legally bind his firm to the above terms. Failure to provide legally binding signature will result in retraction of approval.

END OF CERTIFICATION



1.01 DESCRIPTION

- A. Related Requirements Specified Elsewhere:
  - 1. Time of Final Payment: Refer to the General Agreement.
  - 2. Liquidated Damages: Refer to the General Agreement.
  - 3. Closeout Submittals Required of Trades: Refer to the respective sections of Specifications.
  - 4. Applicable Codes Section 01080
  - 5. Shop Drawings, Product Data and Samples Section 01340
  - 6. Project Record Documents Section 01720
  - 7. Mechanical Provisions Section 15010
  - 8. Electrical Provisions Section 16010

1.02 GENERAL INFORMATION

- A. The following documents are required as follows:
  - 1. Contractor's Affidavit of Payment of Debts and Claims (AIA Document G706) shall be submitted by the General Contractor for all projects.
  - 2. Contractor's Affidavit of Release of Liens (AIA Document G706A) shall be submitted by the General Contractor for all projects.
  - 3. Contractor's Affidavit of Release of Liens (AIA Document G706A) shall be submitted by all the Subcontractors and Suppliers for all projects.
  - 4. Consent of Surety Company to Final Payment (AIA Document G707) shall be submitted by the General Contractor.

1.03 SUBSTANTIAL COMPLETION

- A. Contractor
  - 1. Submit written certification (AIA Document G704) to Architect that project, or designated portion of project, is substantially complete.
  - 2. Submit a complete list of items to be completed or corrected.
- B. Architect will make an inspection within seven (7) days after receipt of certification, together with Engineering Consultants and Owner's Representative.
- C. Should Architect consider that work is substantially complete:
  - 1. Contractor shall prepare and submit to Architect a list of items to be completed or corrected, as determined by the inspection.
  - 2. Owner occupancy of project or designated portion of project:
    - Contractor shall:
      - (1) Obtain Certificate of Occupancy.
      - (2) Perform final cleaning.
  - 3. Contractor shall complete work listed for completion or correction within designated time.
- D. Should Architect consider that work is not substantially complete:
  - 1. He shall immediately notify Contractor, in writing, stating reasons.
  - 2. Contractor shall complete work, and send second written notice to Architect, certifying that project, or designated portion of project, is substantially complete.
  - 3. Architect and Engineering Consultants will reinspect work at Contractor's expense and with no expense to the Owner. Architect will submit statement to the Contractor for these services.

1.04 FINAL INSPECTION

- A. Contractor shall submit written certification that:
  - 1. Contract Documents have been reviewed.
  - 2. Project has been inspected for compliance with Contract Documents.
  - 3. Work has been completed in accordance with Contract Documents.
  - 4. Equipment and systems have been tested in presence of Owner's Representatives and are operational.
  - 5. Project is completed and ready for final inspection.
- B. Architect will make final inspection within seven (7) days after receipt of certification, together with Engineering Consultants and Owner's Representative.
- C. Should Architect consider that work is finally complete in accordance with requirements of Contract Documents, he shall request Contractor to make Project Closeout Submittals.
- D. Should Architect consider that work is not finally complete:
  - 1. He shall notify Contractor, in writing, stating reasons.
  - 2. Contractor shall take immediate steps to remedy the stated deficiencies, and send second written notice to Architect, certifying that work is complete.
  - 3. Architect and Engineering Consultants will reinspect work at Contractor's expense and with no expense to the Owner. Architect will submit statement to the Contractor for these services.

1.05 REQUIRED CLOSEOUT SUBMITTALS

- A. All required closeout submittals, including Record Documents, shall be submitted to the Architect at the Substantial Completion Inspection for review and approval.
- B. Project Record Documents as described in Section 01720.
- C. Operation and Maintenance literature of all materials, mechanical and electrical equipment furnished under this Contract (including complete nomenclature of all replaceable parts, their part number and name). Provide three (3) complete manuals in hard cover 3-ring binders with a clear vinyl window on edge for inserting a typewritten label with the project name and work order number. Each manual shall be divided into the following sections by dividers with typewritten labels:
  - 1. Table of Contents.
  - 2. List of Architect and Engineering Consultants:
    - a. Firm Name
    - b. Contact Person
    - c. Firm Address
    - d. Telephone Number
  - 3. General Contractor and Subcontractors List:
    - a. Division of Work Performed
    - b. Firm Name
    - c. Contact Person
    - d. Firm Address
    - e. Telephone Number
  - 4. Guarantees, Warranties and Bonds:
    - a. Letter from General Contractor stating the one year guarantee for their work commencing on the date on "Contractor's Affidavit of Payment of Debts and Claims."

SECTION 01700, CONTRACT CLOSEOUT

Reference Owner/Contractor Standard Agreement, Section 8.4, AIA G706, and Supplementary Conditions, Section 13.2.2.

- b. Letter of guarantees and warranties from the applicable subcontractors and manufacturers.
  - c. Applicable bonds.
  - 5. Color Selections for Building Materials:
    - a. List of Building Materials
    - b. Material Manufacturer
    - c. Color number and color name if applicable
  - 6. General Construction:
    - a. Roofing
    - b. Hardware
    - c. Building materials and special equipment requiring maintenance and replacement parts.
  - 7. Mechanical Items:
    - a. Plumbing
    - b. HVAC System
    - c. Controls
    - d. Special equipment or devices requiring maintenance or replacement parts.
  - 8. Electrical Items:
    - a. Panels
    - b. Light Fixtures
    - c. Special equipment or devices requiring maintenance or replacement parts.
- D. Guarantees, Warranties and Bonds as specified in "Part 1 - General" of the respective specification sections and shall be included in the Operation and Maintenance Manuals.
- E. Deliver evidence of compliance with requirements of governing authorities:
  - 1. Certificates of Inspection for:
    - a. Foundation
    - b. Framing
    - c. Mechanical
    - d. Electrical
  - 2. Certificate of Occupancy from applicable Building Department. Contractor shall mount certificate in small black glassed frame suitable for hanging inside the building; deliver to Owner's Representative.
- F. Deliver Certificate of Insurance for Products and Completed Operations.
- G. Deliver certificates of acceptability, materials and workmanship as specified in "Part 1 - General" of the respective specification sections.

1.06 INSTRUCTIONS

Instruct Owner's personnel in operation of all systems, mechanical, electrical and other equipment.

1.07 EVIDENCE OF PAYMENTS AND RELEASE OF LIENS

- A. Contractor's Affidavit of Payment of Debts and Claims (AIA Document G706).

## SECTION 01700, CONTRACT CLOSEOUT

- B. Contractor's Affidavit of Release of Liens (AIA Document G706A), separate releases of Waiver of liens for subcontractors, suppliers, and other with lien rights against property of Owner, together with list of those parties.
- C. All submittals shall be duly executed before delivery to Architect.

### 1.08 FINAL ADJUSTMENT OF ACCOUNTS

- A. Submit final statement of accounting to Architect.
- B. Statement shall reflect all adjustments:
  - 1. Original contract sum.
  - 2. Additions and deductions resulting from:
    - a. Previously approved Change Orders
    - b. Other adjustments
    - c. Deductions for uncorrected work
    - d. Penalties and bonuses
  - 3. Total contract sum, as adjusted
  - 4. Previous payments
  - 5. Sum remaining due
- C. Architect will prepare final Change Order, reflecting approved adjustments to contract sum not previously made by Change Orders.

### 1.09 FINAL APPLICATION FOR PAYMENT

- A. Consent of Surety Company to Final Payment (AIA Document G707) for all projects.
- B. Contractor shall submit final application in accordance with requirements of the "General Agreement".

### 1.10 FINAL CERTIFICATE FOR PAYMENT

- A. Architect will issue final certificate in accordance with provisions of General Conditions.
- B. Should final completion be materially delayed through no fault of contractor, Architect may issue a Semi-Final Certificate for Payment, in accordance with provisions of General Conditions.

END OF SECTION

1.01 DESCRIPTION

- A. Related Requirements Specified Elsewhere:
  - 1. Cleaning for Specific Products or Work: Refer to the respective Specification sections.
  - 2. Mechanical General Section 15010
  - 3. Electrical General Section 16010
- B. Maintain premises and public properties free from accumulations of waste, debris, and rubbish caused by operations.
- C. At completion of Work, remove waste materials, rubbish, tools, equipment, machinery and surplus materials, and clean all sight-exposed surfaces; leave project clean and ready for occupancy.

1.02 SAFETY REQUIREMENTS

- A. Standards Maintain project in accordance with local City, County, or State applicable Standards and Regulations.
- B. Hazards Control
  - 1. Store volatile wastes in covered metal containers, and remove from premises daily.
  - 2. Prevent accumulation of wastes which create hazardous conditions.
  - 3. Provide adequate ventilation during use of volatile or noxious substances.
- C. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
  - 1. Do not burn or bury rubbish and waste materials on project site.
  - 2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
  - 3. Do not dispose of wastes into streams or waterways.

1.03 MATERIALS

- A. Use only cleaning materials recommended by the manufacturer of surface to be cleaned.
- B. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

1.04 DURING CONSTRUCTION

- A. Execute cleaning to ensure that building, grounds, and public properties are maintained free from accumulations of waste materials and rubbish.
- B. Wet down dry materials and rubbish to lay dust and prevent blowing dust.
- C. At reasonable intervals during progress of Work, clean site and public properties and dispose of waste materials, debris, and rubbish.
- D. Provide on-site containers for collection of waste materials, debris, and rubbish.
- E. Remove waste materials, debris, and rubbish from site and legally dispose of at public or private dumping areas off Owner's property.

## SECTION 01710, CLEANING

- F. Handle materials in a controlled manner with as few handlings as possible; do not drop or throw materials from heights.
- G. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly painted surfaces.

### 1.05 FINAL CLEANING

- A. Employ experienced workman, or professional cleaners, for final cleaning.
- B. In preparation for substantial completion or occupancy, conduct final inspection of sight-exposed interior and exterior surfaces, and of concealed spaces.
- C. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from sight-exposed interior and exterior finished surfaces; polish surfaces so designated to shine finish.
- D. Repair, patch and touch up marred surfaces to specified finish to match adjacent surfaces.
- E. Broom clean paved surfaces; rake clean other surfaces of grounds.
- F. Remove snow and ice from access to building.
- G. Clean air conditioning filters, if units were operated during construction, as outlined in Section 01500 Temporary Facilities and Controls.
- H. Clean ducts, blowers, and coils if air conditioning units were operated without filters during construction.
- I. Maintain cleaning until project, or portion thereof, is occupied by Owner.

END OF SECTION

1.01 DESCRIPTION

- A. Related Requirements Specified Elsewhere:
  - 1. Shop Drawings, Product Data and Samples Section 01340
  - 2. Substitutions and Product Options Section 01640
  - 3. Mechanical General Section 15010
  - 4. Electrical General Section 16010

1.02 MAINTENANCE OF DOCUMENTS

- A. Maintain at job site, one copy of:
  - 1. Contract Drawings
  - 2. Specifications
  - 3. Addenda
  - 4. Reviewed Shop Drawings
  - 5. Change Orders
  - 6. Other Modifications to Contract
  - 7. Field Test Records
- B. Store documents in temporary field office, apart from documents used for construction.
- C. Maintain documents in clean, dry, legible condition.
- D. Do not use record documents for construction purposes.
- E. Make documents available at all times for inspection by Architect/Engineer and Owner.

1.03 MARKING DEVICES

Provide colored pencil pen for marking.

1.04 RECORDING

- A. Label each document "PROJECT RECORD" in two-inch high printed letters.
- B. Keep record documents current.
- C. Do not permanently conceal any work until required information has been recorded.
- D. Contract Drawings:
  - Legibly mark to record actual construction:
    - 1. Depths of various elements of foundation in relation to first floor level.
    - 2. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
    - 3. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
    - 4. Field changes of dimension and detail.
    - 5. Changes made by Change Order.
    - 6. Details not on original contract drawings.

SECTION 01720, PROJECT RECORD DOCUMENTS

E. Specifications and Addenda:

Legibly mark up each Section to record:

1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
2. Changes made by Change Order.
3. Other matters not originally specified.

F. Shop Drawings:

Maintain as record documents all reviewed Shop Drawings, legibly annotated, as required by Part 1 - General, of these Specifications.

1.05 SUBMITTAL

- A. At the Substantial Completion Inspection, deliver Record Documents, including required closeout submittals, to the Architect.
- B. Accompany submittal with transmittal letter, in duplicate, containing:
  1. Date
  2. Project title and number
  3. Contractor's name and address
  4. Title and number of each record document
  5. Certification that each document as submitted is complete and accurate
  6. Signature of Contractor, or his authorized representative.

END OF SECTION