



THIS DRAWING has been prepared by the Architect, or prepared under his direct supervision as an instrument of service and is intended for use only on this project. All Drawings, Specifications, Plans and Details, including the overall layout, form, arrangement, and composition of spaces and elements portrayed, constitute the original, unaltered work of the Architect. Any reproduction, use, or disclosure of the information contained herein without the written consent of the Architect is strictly prohibited.

© 2020 H.C. KLOVER ARCHITECT

THE ARCHITECT DISCLAIMS responsibility for the existing building structure, site conditions, existing construction elements, or any drawings, specifications, plans and details, including the overall layout, form, arrangement, and composition of spaces and elements portrayed, constitute the original, unaltered work of the Architect. Any reproduction, use, or disclosure of the information contained herein without the written consent of the Architect is strictly prohibited.

DIMENSIONS SHOWN are to finish face of a material unless otherwise indicated. LOCATIONS & MEASUREMENTS: 10' 0" DIMENSIONS are shown unless otherwise indicated.

PROJECT TITLE

CFT NV DEVELOPMENTS, LLC
CFT RETAIL BUILDING
E 144TH AVENUE AND GRANT STREET
THORNTON, CO 80023

PROJECT NUMBER
20045.001
DRAWING ISSUANCE
Permit/Bid Set 11.25.20
Construction Set 2.24.21
DRAWING REVISIONS

No. Description: Date:

PROFESSIONAL SEAL



DRAWING TITLE

SPECIFICATIONS

DRAWING NUMBER

SP102

TERMINATION AND REMOVAL: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

Materials and facilities that constitute temporary facilities are the property of Contractor. Owner reserves right to take possession of Project identification signs. Remove temporary paving not intended for or acceptable for integration into permanent paving. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs, and sidewalks at temporary encroachments, as required by authorities having jurisdiction.

At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements in Division 1 Section "Closeout Procedures."

END OF SECTION 01 50 00

PRODUCT REQUIREMENTS SECTION 01 60 00

PART 1 - GENERAL

RELATED DOCUMENTS: The Drawings, and general provisions of the Contract, including the General and Supplementary Conditions, and Division 1 Sections of the Specifications, apply to this Section.

THIS SECTION INCLUDES the following administrative and procedural requirements:

Selection of products for use in Project
product delivery, storage, and handling;
manufacturers' standard warranties on products;
special warranties;
product substitutions; and comparable products.

RELATED SECTIONS INCLUDE the following:
Division 1 Section "Alternates" for products selected under an alternate.
Division 1 Section "References" for applicable industry standards for products specified.
Division 1 Section "Closeout Procedures" for submitting warranties for contract closeout.
Divisions 2 through 16 Sections for specific requirements for warranties on products and installations specified to be warranted.

DEFINITIONS

PRODUCTS: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

NAMED PRODUCTS: Items identified by manufacturer's product name, including make or model number or other designation, shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.

NEW PRODUCTS: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products made from other projects are not considered new products.

COMPARABLE PRODUCT: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service physical properties, appearance, and other characteristics that are substantiated equal or exceed those of specified product.

SUBSTITUTIONS: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

BASIS-OF-DESIGN PRODUCT SPECIFICATION: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.

MANUFACTURER'S WARRANTY: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.

SPECIAL WARRANTY: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.

SUBMITTALS

PRODUCT LIST: Submit a list, in tabular form, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.

COORDINATE PRODUCT LIST with Contractor's Construction Schedule and the Submittals Schedule. FORM: Tabulate information for each product under the following column headings:

Specification Section number and title.
Generic name used in the Contract Documents.
Proprietary name, model number, and similar designations.
Manufacturer's name and address.
Supplier's name and address.
Installer's name and address.
Projected delivery date or time span of delivery period.

Identification of items that require early submittal approval for scheduled delivery date.

INITIAL SUBMITTAL: WITHIN THIRTY (30) DAYS after date of commencement of the Work, submit two (2) copies of initial product list. Include a written explanation for omissions of data and for variations from Contract requirements. At Contractor's option, initial submittal may be limited to product selections and designations that must be established early in Contract period.

COMPLETED LIST: WITHIN SIXTY (60) DAYS after date of commencement of the Work, submit two (2) copies of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.

ARCHITECT OR OWNER'S ACTION: Architect or Owner may respond in writing to Contractor within fifteen (15) days of receipt of completed product list. Response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Lack of response does not constitute a waiver of requirement that products comply with the Contract Documents.

SUBSTITUTION REQUESTS: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

SUBSTITUTION REQUEST FORM: Use CSI Form as included at end of this Section. DOCUMENTATION: Show compliance with requirements for substitutions and the following, as applicable:

Statement indicating why specified material or product cannot be provided.
Coordination information, including a list of changes or modifications needed to other parts of the necessary to accommodate proposed substitution.
Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.

Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.

Product Data, including drawings and descriptions of products and fabrication and installation procedures.

Samples, where applicable or requested.
List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.

Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.

Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.

Cost information, including a proposal of change, if any, in the Contract Sum.
Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.

Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

ARCHITECT OR OWNER'S ACTION: If necessary, Architect or Owner will request additional information or documentation for evaluation within one week of receipt of a request for substitution. Contractor will be notified of acceptance or rejection of proposed substitution within fifteen (15) days of receipt of request, or seven (7) days of receipt of additional information or documentation, whichever is later.

FORM OF ACCEPTANCE: Change Order.

USE PRODUCT SPECIFIED if Architect or Owner cannot make a decision on use of a proposed substitution within time allocated.

BASIS-OF-DESIGN PRODUCT SPECIFICATION SUBMITTAL: Comply with requirements in Division 1 Section "Submittal Procedures." Show compliance with requirements.

QUALITY ASSURANCE

COMPATIBILITY OF OPTIONS: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.

PRODUCT DELIVERY, STORAGE, AND HANDLING

DELIVER, STORE, AND HANDLE PRODUCTS using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.

QUALITY ASSURANCE

STANDARDS: Comply with ANSI A10.6, NECA's "Temporary Electrical Facilities," and NFPA 241. TRADE JURISDICTIONS: Assigned responsibilities for installation and operation of temporary utilities are not intended to interfere with trade regulations and union jurisdictions.

ELECTRIC SERVICE: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

TESTS AND INSPECTIONS: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

COMPLY WITH GOVERNING REGULATIONS and rules or recommendations of utility companies. Comply with specific requirements indicated and with applicable local industry standards including but not limited to the following:

Building codes, including local requirements for permits, testing and inspection
Health and safety regulations, including applicable federal statutes, laws or regulations
Police and Fire department rules and recommendations
Environmental protection regulations governing use of water and energy, and the control of dust, noise and other nuisances.

PROJECT CONDITIONS

TEMPORARY UTILITIES: At earliest feasible time, when acceptable to Owner, change over from use of temporary service to use of permanent service. Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

CONDITIONS OF USE: The following conditions apply to use of temporary services and facilities by all parties engaged in the Work. Keep temporary services and facilities clean and neat. Relocate temporary services and facilities as required by progress of the Work.

PART 2 - PRODUCTS

MATERIALS AND EQUIPMENT - GENERAL: Provide new materials, or undamaged, previously used materials in serviceable condition. Provide materials and equipment suitable for use intended.

FIRE EXTINGUISHERS: Hand carried, portable, UL rated Type ABC extinguishers at locations reasonably effective in extinguishing fires, by personnel at project site. Comply with NFPA No. 10. Post warning and quick-instructions at each extinguisher, and instruct personnel on proper use. Post fire department call number on each telephone at project site.

SANITARY FACILITIES: Provide on-site toilet facilities including temporary toilets, wash facilities and drinking water fixtures for the use of all workmen on the job site. Provide single-occupant units of chemical, aerated recirculation, or combination type; vented fully enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material. Provide separate facilities for male and female personnel when both sexes are working at project site. Provide containerized tap-dispenser, bottled-water drinking-water units, including paper cup supply. Comply with all applicable codes and regulations and health department requirements for the type, number, location, operation and maintenance of fixtures and facilities. Provide toilet tissue, paper towels, paper cups and similar disposable materials for each facility. Provide covered waste containers for used material.

HEATING EQUIPMENT: Unless Owner authorizes use of permanent heating system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control. Provide listed and labeled units, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use for type of fuel being consumed.

ELECTRICAL OUTLETS: Properly configured, NEMA-polarized outlets to prevent insertion of 110- to 120-V plugs into higher-voltage outlets; equipped with ground-fault circuit interrupters, reset button, and pilot light.

POWER DISTRIBUTION SYSTEM CIRCUITS: Where permitted and overhead and exposed for surveillance, wiring circuits, not exceeding 125-V ac, 20-A rating, and lighting circuits may be nonmetallic sheathed cable.

FIELD OFFICE: Maintain an on-site office for the management of the Work. Provide space to review project drawings and for storage of construction documents, shop drawings, and samples. Provide table, chairs and on-site meeting room space for conferences for up to 10 people minimum. Costs of the space and furnishing thereof, including heating, cooling, power and lighting shall be included in the Contract Sum.

PROVIDE TEMPORARY COMMUNICATIONS EQUIPMENT as follows:
Computer with on-site broadband (DSL or cable) internet service and email capability
1 phone line and handset
1 fax line and fax machine

The computer, phone and fax shall be made available to the Architect and Owner for local telephone calls and internet access. Long distance calls shall be paid for by the party making such calls.

TEMPORARY CONSTRUCTION FACILITIES & CONTROLS

BARRIERS: Provide barriers required to prevent public entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.

RAMPS: Provide temporary ramps if access is through existing parking area, to completely protect existing curbs, underground fuel storage tanks, etc.

SCAFFOLDING: Provide scaffolding and construction aids required, including guard rails, lights and platforms necessary for the completion of the Work, and for the protection of the workmen and the public.

DEWATERING: Provide and operate drainage and pumping equipment, construct drainage ditches as required, and maintain excavations and the entire site free of standing water at all times.

SITE ACCESS: Provide temporary access to the site from public through fares. Repair all damage to existing property, roads, curbs and parking areas by job related vehicles or personnel at no cost to the Owner. Provide temporary fencing with lockable gates to match existing to ensure that the facility remains secure at all times.

PROGRESS CLEANING: At all times, keep the project site free from accumulation of waste materials or rubbish caused by construction operations. Provide suitable waste receptacles for trash and construction debris, and arrange for transportation and legal disposal of materials off site.

ENVIRONMENTAL PROTECTION: Provide protection, operate temporary facilities and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable effects might result. Avoid use of tools and equipment which produce harmful noise. Restrict use of noise making tools and equipment to hours that will minimize complaints from persons or firms near the site.

PART 3 - EXECUTION

REVIEW site conditions and factors which affect construction procedures and temporary facilities, including adjacent properties and public facilities which may be affected by execution of the Work.

INSTALLATION - GENERAL: Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

INSPECT and test services before placing temporary utilities in use. Arrange for required inspections and tests by governing authorities, and obtain required certifications and permits for use.

OPERATE temporary services and facilities in a safe and efficient manner. Do not overload temporary services or facilities, and do not permit them to interfere with the progress of the work. Do not hold materials more than 15 days of receipt of completed product list. Response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Lack of response does not constitute a waiver of requirement that products comply with the Contract Documents.

SUPERVISION: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.

MAINTENANCE: Maintain facilities in good operating condition until removal. Protect from damage caused by freezing temperatures and similar elements. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage. Prevent water-filled piping from freezing. Maintain barriers for underground lines. Protect from damage during excavation operations.

POST DANGER SIGNS warning against hazards created by construction operations including but not limited to protruding nails, hoists, wet holes, elevator hatchways, scaffolding, window openings, stairways and falling materials.

PROVIDE RED WARNING LIGHTS for night time hours at such hazards that can be dangerous to foot traffic and vehicular traffic.

TEMPORARY ELECTRICAL POWER: Provide a grounded power distribution system with overload protection, sufficient to accommodate construction operations requiring power, use of power tools, electrical heating, lighting, and start-up testing of permanent electric-powered equipment prior to its permanent connection to electrical system.

TEMPORARY LIGHTING: Provide temporary lighting fixtures to facilitate construction and inspection operations. Use permanent light fixtures only if lamps are replaced before Substantial Completion. Remove temporary lighting fixtures when permanent fixtures are operational. Leave temporary interior lighting fixtures and distribution system in place when spaces are not finished.

POTABLE WATER: Provide portable containers of potable water for construction operations, except when specifically authorized to utilize existing systems by the Owner. If connecting to existing systems, provide branch piping with outlets located so that water is available by the use of hoses.

TEMPORARY HEAT AND VENTILATION shall be provided to maintain adequate environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for the installation and proper curing of materials, to protect materials and finishes from damage due to temperature or humidity, and to prevent hazardous accumulations of dust, fumes, vapors or gases. Once new systems are operational, they may be used for temporary heating and cooling only if: (1) all registers diffusers and filters are cleaned before substantial completion, and (2) warranty periods remain unchanged, starting from the date of Substantial Completion.

WASTE DISPOSAL: Provide dumpsters and collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Do not hold materials more than 7 days during normal weather or 3 days when the temperature is expected to rise above 80 deg F. Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material in a lawful manner.

LOCK UP all site parked mobile equipment or make otherwise inoperable when not in use.

TEMPORARY FACILITY CHANGEOVER: Except for using permanent fire protection as soon as available, do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.

REFERENCES

SECTION 01 42 00

PART 1 - GENERAL

RELATED DOCUMENTS: The Drawings, and general provisions of the Contract, including the General and Supplementary Conditions, and other Division 1 Sections of the Specifications, apply to this Section.

DEFINITIONS

BASIC CONTRACT DEFINITIONS are included in the Conditions of the Contract.

"APPROVED": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.

"DIRECTED": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "approved," "required," and "permitted" have the same meaning as "directed."

"INDICATED": Representations expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."

"REGULATIONS": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.

"FURNISH": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.

"INSTALL": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

"PROVIDE": Furnish and install, complete and ready for the intended use.

"INSTALLER": Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespeople of the corresponding generic name.

"EXPERIENCED": When used with an entity, "experienced" means having successfully completed a minimum of five (5) previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

"PROJECT SITE": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

INDUSTRY STANDARDS

APPLICABILITY OF STANDARDS: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if found or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

PUBLICATION DATES: Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.

CONFLICTING REQUIREMENTS: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding. The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

COPIES OF STANDARDS: Each entity engaged in construction on Project must be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source as required for performance and completion of the Work, and make the standards available on request.

ABBREVIATIONS AND ACRONYMS FOR STANDARDS AND REGULATIONS: Where abbreviations and acronyms are used in Specifications or other Contract Documents they shall mean the recognized name of the standards and regulations in the following list. Names, telephone numbers, and Web-site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents:

ABBREVIATIONS AND ACRONYMS

INDUSTRY ORGANIZATIONS: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale Research's "Encyclopedia of Associations" or in Columbia Books' "National Trade & Professional Associations of the U.S."

INDUSTRY ORGANIZATIONS: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web-site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents:

END OF SECTION 01 42 00

TEMPORARY FACILITIES AND CONTROLS SECTION 01 50 00

PART 1 - GENERAL

RELATED DOCUMENTS: The Drawings, and general provisions of the Contract, including the General and Supplementary Conditions, and other Division 1 Sections of the Specifications, apply to the Work of this Section.

THIS SECTION INCLUDES requirements for temporary facilities and controls, including temporary utilities, support facilities, and security and protection facilities.

PROVIDE SECURITY for field offices, storage and staging area, and the job site.

TEMPORARY UTILITIES include, but are not limited to, the following:

Sewers and drainage.
Water service and distribution.
Sanitary facilities, including toilets, wash facilities, and drinking-water facilities.
Heating, ventilation and cooling facilities.
Electric power and lighting service.
Telephone service.

SUPPORT FACILITIES INCLUDE, but are not limited to, the following:

Temporary roads and paving.
Dewatering facilities and drains.
Temporary signs.
Waste disposal facilities.
Field offices.
Storage and fabrication sheds.
Lifts and hoists.
Temporary stairs.
Construction aids and miscellaneous services and facilities.

SECURITY AND PROTECTION FACILITIES INCLUDE, but are not limited to, the following:

Environmental protection.
Stormwater control, in compliance with the Owner's Stormwater Management Plan.
Tree and plant protection.
Security enclosure and lockup.
Barricades, warning signs, and lights.
Temporary enclosures.
Fire protection.

RELATED SECTIONS INCLUDE the following:
Division 1 Section "Summary of Work."
Division 1 Section "Submittal Procedures" for procedures for submitting copies of implementation and testing schedule and utility reports.
Division 1 Section "Execution Requirements" for progress cleaning requirements.

PERMANENT ENCLOSURE: As determined by Architect, permanent or temporary roofing is complete, insulated, and weathertight; exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures.

USE CHARGES FOR TEMPORARY FACILITIES shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, the following:

Owner's construction forces.
Occupants of Project.
Architect.
Testing agencies.
Personnel of authorities having jurisdiction.

SEWER SERVICE: Pay sewer service use charges for sewer usage, by all parties engaged in construction.

WATER SERVICE: Pay water service use charges, whether metered or otherwise, for water used by all entities engaged in construction activities at Project site.

ELECTRIC POWER SERVICE: Pay electric power service use charges, whether metered or otherwise, for electricity used by all entities engaged in construction activities at Project site.

PAY ALL COSTS of installation, maintenance, fuel, operation and removal of temporary utilities. Obtain and pay for temporary easements required to bring temporary utilities to the project site, if required, if permanent easements cannot be utilized for that purpose.

CONTRACTOR'S CONSTRUCTION SCHEDULE: Comply with requirements in Division 1 Section "Construction Progress Documentation."

QUALIFICATION DATA: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

PRODUCT CERTIFICATES: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements.

WELDING CERTIFICATES: Prepare written certification that welding procedures and personnel comply with requirements. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.

INSTALLER CERTIFICATES: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements and, where required, is authorized for this specific Project.

MANUFACTURER CERTIFICATES: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements. Include evidence of manufacturing experience where required.

MATERIAL CERTIFICATES: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements.

MATERIAL TEST REPORTS: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements.

PRECONSTRUCTION TEST REPORTS: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements.

COMPATIBILITY TEST REPORTS: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.

FIELD TEST REPORTS: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements.

PRODUCT TEST REPORTS: Prepare written reports indicating current product produced by manufacturer complies with requirements. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

RESEARCH/EVALUATION REPORTS: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:

Name of evaluation organization.
Date of evaluation.
Time period when report is in effect.
Product and manufacturer's names.
Description of product.
Test procedures and results.
Limitations of use.

MAINTENANCE DATA: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements in Division 1 Section "Closeout Procedures."

DESIGN DATA: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

MANUFACTURER'S INSTRUCTIONS: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:

Preparation of substrates.
Required substrate tolerances.
Sequence of installation or erection.
Required installation tolerances.
Required adjustments.
Recommendations for cleaning and protection.

MANUFACTURER'S FIELD REPORTS: Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:

Name, address, and telephone number of factory-authorized service representative making report.
Statement on condition of substrates and their acceptability for installation of product.
Statement that products at Project site comply with requirements.
Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
Results of operational and other tests and a statement of whether observed performance complies with requirements.

Statement whether conditions, products, and installation will affect warranty.
Other required items indicated in individual Specification Sections.

INSURANCE CERTIFICATES AND BONDS: Prepare written information indicating current status of