

SECTION 01600
PRODUCTS, MATERIALS AND SUBSTITUTIONS

PART 1 - GENERAL

1.01 DEFINITIONS

A. The word "Products," as used herein, is defined to include purchased items for incorporation into the Work, regardless of whether specifically purchased for the project or taken from Contractor's stock of previously purchased products. The word "Materials," is defined as products which must be substantially cut, shaped, worked, mixed, finished, refined, or otherwise fabricated, processed, installed, or applied to form units of work.

1.02 QUALITY ASSURANCE

A. Source Limitations: To the greatest extent possible for each unit of work, the Contractor shall provide products and materials of a singular generic kind from a single source.

B. Compatibility of Options: Where more than one choice is available as options for Contractor's selection of a product or material, the Contractor shall select an option which is compatible with other products or materials.

C. The Contractor shall deliver and store the Work in accordance with manufacturer's written recommendations and by methods and means which will prevent damage, deterioration, and loss including theft. Delivery schedules shall be controlled to minimize long-term storage of products at site and overcrowding of construction spaces. In particular, the Contractor shall ensure coordination to ensure minimum holding or storage times for flammable, hazardous, easily damaged, or sensitive materials to deterioration, theft, and other sources of loss.

1.03 DELIVERY, STORAGE, AND HANDLING

A. Products shall be transported by methods to avoid damage and shall be delivered in undamaged condition in manufacturer's unopened containers and packaging.

B. The Contractor shall provide equipment and personnel to handle products, materials, and equipment by methods to prevent soiling and damage.

C. The Contractor shall provide additional protection during handling to prevent marring and otherwise damaging products, packaging, and surrounding surfaces.

D. Products shall be stored in accordance with manufacturer's written instructions and with seals and labels intact and legible. Sensitive products shall be stored in weather-tight climate controlled enclosures and temperature and humidity ranges shall be maintained within tolerances required by manufacturer's recommendations.

E. For exterior storage of fabricated products, products shall be placed on sloped supports above ground. Products subject to deterioration shall be covered with impervious sheet covering and ventilation shall be provided to avoid consideration.

F. Oil lubricated gearing, bearings and other lubricated components shall be shipped with oil soluble protective coating as described in warranty requirements or recommended by manufacturer. Coating shall provide protection for one year after final acceptance.

G. Protect products against moisture, temperature extremes, dust, debris, tampering, vandalism, ultraviolet radiation, or damage from improper handling, storage, or exposure. Protect exposed metals from rust and corrosion even though they will be sandblasted or otherwise cleaned before painting.

H. Clean and protect machined surfaces and shafting from corrosion using proper type and amount of coating as described in warranty requirements to assure protection to one year after final acceptance.

I. Handle products with care and using proper equipment according to manufacturer's recommendations. Lift large heavy items only at points designated by manufacturer. Do not drop, drag, bump or handle products in manner that causes bruises, cracks, scratches or other damage. Use padded slings and hooks for lifting as needed to prevent damage. Improper handling shall be cause to reject mishandled products.

J. Inspect each product item for damage, defects, completeness and correct operation before installing. Notify Owner in writing if delivered or stored product is damaged. Do not repair damaged products without prior written approval. Maintain records for Owner's review of deliveries to show Contractor's order number, purchase order number and equipment number. Include labeling or shipping tag in records.

K. Storage shall be arranged in a manner to provide access for maintenance of stored items and for inspection.

L. The Contractor shall periodically inspect to assure products are undamaged and are maintained under required conditions. The Contractor shall maintain a log of inspections and shall make the log available on request.

M. The Contractor shall comply with manufacturer's product storage requirements and recommendations.

N. The Contractor shall maintain manufacturer-required environmental conditions continually.

1.04 PROPOSED SUBSTITUTES OR "OR-EQUAL" ITEM

A. Whenever materials are indicated in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the naming of the item is intended to establish the type, function, and quality required. If the name is followed by the words "or equal" indicating that a substitution is permitted, materials or equipment of other suppliers may be accepted if sufficient information is submitted by the Contractor to allow the Owner to determine the material proposed is equivalent or equal to that named, subject to the following requirements:

1. The burden of proof as to the type, function, and quality of any such substitute product, material or equipment shall be upon the Contractor.
2. The Owner will be the sole judge as to the type, function, and quality of any such substitute and the Owner's decision shall be final.
3. The Owner may require the Contractor to furnish at the Contractor's expense additional data about the proposed substitute.

4. The Owner may require the Contractor to furnish at the Contractor's expense a special performance guarantee or other surety with respect to any substitute.
5. Acceptance by the Owner of a substitute item proposed by the Contractor shall not relieve the Contractor of the responsibility for full compliance with the Contract Documents and for adequacy of the substitute.
6. The Contractor shall be responsible for resultant changes including design and construction changes and all additional costs resulting from the changes which the accepted substitution requires in the Contractor's Work, the Work of its subcontractors and of other contractors, and shall effect such changes without cost to the Owner.

B. The procedure for review by the Owner will include the following:

1. If the Contractor wishes to provide a substitute item, the Contractor shall make written application to the Owner on the "Substitution Request Form" which is included at the end of this Section.
2. Unless otherwise provided by law or authorized in writing by the Owner, the "Substitution Request Form(s)" shall be submitted within 35 days of the Notice of Award of the Contract.
3. Wherever a proposed substitute item has not been submitted within said 35-day period, or when the submission of a proposed substitute material or equipment has been judged to be unacceptable by the Owner, the Contractor shall provide the material or equipment indicated in the Contract Documents.
4. The Contractor shall certify that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, and be similar and of equal substance to that indicated, and be suited to the same use as that specified.
5. The Owner will evaluate each proposed substitute within a reasonable period of time.
6. As applicable, no shop drawing submittals shall be made for a substitute item nor shall any substitute item be ordered, installed, or utilized without the Owner's prior written acceptance of the Contractor's "Substitution Request Form."
7. The Owner will record the time required by the Owner and the Engineer in evaluating substitutions proposed by the Contractor and in making changes by the Contractor in the Contract Documents occasioned thereby. Whether or not the Owner accepts a proposed substitute, the Contractor shall reimburse the Owner for the charges of the Owner and the Engineer for evaluating each proposed substitute.

C. The Contractor's application using the "Substitution Request Forms" shall contain the following statements and information which shall be considered by the Owner in evaluating the proposed substitution:

1. The evaluation and acceptance of the proposed substitute will not prejudice the Contractor's achievement of substantial completion on time.
2. Whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents to adopt the design to the proposed substitute.
3. Whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty.
4. All variations of the proposed substitute from the items originally specified will be identified.
5. Itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including cost of redesign and claims of other contractors affected by the resulting change.

1.05 PRE-SELECTED MATERIALS AND EQUIPMENT

A. In some instances, materials and equipment have been pre-selected as of make and model to meet project-specific requirements and/or to match existing “standards” established by the Owner. These equipment items have undergone extensive review by the Owner and offer a level of quality, performance, and service acceptable to the Owner. In these instances, the individual technical specifications will specify a particular manufacturer and model which is pre-approved by the governing board and will stipulate that alternative or “or equal” material and equipment will not be acceptable.

B. Where pre-selected, pre-negotiated equipment items are identified in the Contract Documents, pre-negotiated, guaranteed prices are included in the bid form. The price listed in the bid form represents the pre-negotiated price for the supply of the equipment as indicated in the technical specifications and Section 01025 Measurement and Payment. The Contractor is responsible for entering into a purchase order with the named manufacturer in accordance with the specification requirements. Furthermore, the Contractor shall include in his bid all additional costs associated with administering purchase orders, handling and protecting equipment, furnishing appurtenant materials, and installing, starting up, testing, and commissioning equipment. Contractor’s bonds, insurance, and warranty shall cover pre-selected equipment. The items to be pre-negotiated are as follows:

Equipment/Material	Manufacturer	Spec Section

C. Preselected equipment vendors’ letters of commitment establishing the components and services rendered by the individual vendors included in Appendix A. Provide all other components, tie-ins, services, etc. for a complete and fully functional system as defined by the technical specifications and as shown on the drawings.

D. The equipment vendors' scope of supply and terms of conditions for the above listed equipment are included in the attached proposals included in Appendix A. Any differences between the technical specifications and the attached proposals, including but not limited to more stringent or extended warranties, terms of payment, testing, factory inspection, manufacturer site inspections and certifications of installation shall be the sole responsibility of the Contractor and included in the Contractor's bid.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01600

SUBSTITUTION REQUEST FORM

Owner: Valley Center Municipal Water District

Project: **Project Name**

Project No.: _____

Contractor: _____

SUBSTITUTION REQUEST DATA / INFORMATION		
Substitution Request No.:	Date Transmitted:	
Originator:	Date Received:	
Directed To:	Date Reply Transmitted:	
Date Reply Required:	Date Reply Received:	
ITEMS SPECIFIED IN CONTRACT DOCUMENTS		
Section	Paragraph	Specified Item
Drawing No. Reference/Detail No:		
ITEMS PROPOSED TO BE SUBMITTED AS A SUBSTITUTION		
Item description (attached cutsheet if needed):		
Reason for substitution:		
Dimensional changes to Drawings (attached drawings with changes if needed):		
Exceptions to Specifications (attached additional sheet if needed):		
Effects of substitution on other contractors, trades, or suppliers:		
Originator:	Date:	

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OWNER RESPONSE TO SUBSTITUTION REQUEST	
Substitution Request No.:	Owner Response: <input type="checkbox"/> Approved <input type="checkbox"/> Denied
<p>If the Substitution Request is approved by the Owner, the following shall apply:</p> <p>Per the Contract Documents, the Contractor shall pay for the Owner's effort in establishing the quality of the submitted equipment and the suitability for the intended purpose. The estimated time to review this submittal is _____hours, for a total cost of \$_____ dollars. Before any work can be done on this review submittal, a signed copy of this authorization form must be received from the Contractor by the Owner. The starting date for the submittal review shall be the date the Owner receives the signed authorization from the Contractor.</p>	
By:	Date:

CONTRACTOR AUTHORIZATION	
Substitution Request No.:	Contractor Response: <input type="checkbox"/> Accepted <input type="checkbox"/> Declined
Response By:	Date:
<p>Distribution of Executed Document:</p> <p style="text-align: center;">District Engineer Owner's Representative Contractor Engineer</p>	