# IFB NO. 19-R071301CB WATER, SEWER, AND BACKFLOW PARTS (658-28, 658-60, 659-33, 890-03) MAY 9, 2019

Manatee County BCC
Procurement Division
1112 Manatee Avenue West Ste 803
Bradenton, FL 34205
purchasing@mymanatee.org



## ADVERTISEMENT INVITATION FOR BID NO. 19-R071301CB WATER, SEWER, AND BACKFLOW PARTS

Manatee County, a political subdivision of the State of Florida (hereinafter referred to as County), will receive sealed bids from individuals, corporations, partnerships, and other legal entities authorized to do business in the State of Florida, to provide Water, Sewer, and Backflow Parts, as specified in this Invitation for Bid to include Water and Sewer Materials and Accessories including No Lead Brass Water, Sewer, and Backflow Products.

#### DATE, TIME AND PLACE DUE:

The Due Date and Time for submission of Bids in response to this IFB **is June 12, 2019 at 3:00 P.M. ET.** Bids must be delivered to the following location: Manatee County Administration Building, 1112 Manatee Ave. W., Suite 803, Bradenton, FL 34205 prior to the Due Date and Time. Bids will be opened immediately following the Due Date and Time at the Manatee County Administration Building, Suite 803 and the Bidder's name and total bid amount will be read aloud. Interested parties may attend the opening.

#### SOLICITATION INFORMATION CONFERENCE:

A non-mandatory Information Conference will be held at 2:30PM on May 21, 2019 at the Manatee County Administration Building, 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205. Attendance to information conferences is not required but is strongly encouraged.

#### **DEADLINE FOR QUESTIONS AND CLARIFICATION REQUESTS:**

The deadline to submit all questions, inquiries, or requests concerning interpretation, clarification or additional information pertaining to this Invitation for Bid to the Manatee County Procurement Division is May 28, 2019. Questions and inquiries should be submitted via email to the Designated Procurement Contact shown below.

Important: A prohibition of lobbying is in place. Review Section A.15 carefully to avoid violation and possible sanctions.

DESIGNATED PROCUREMENT CONTACT: Charles Bentley, Senior Buyer
(941) 749-3036, Fax (941) 749-3034

Email: charles.bentley@mymanatee.org

Manatee County Financial Management Department

Procurement Division

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## SECTION A INSTRUCTIONS TO BIDDERS IFB No. 19-R071301CB

To receive consideration, entities who submit a response to this Invitation for Bid (Bidders) must meet the minimum qualification requirements and comply with the following instructions. Bid responses (Bids) will be accepted from single business entities, joint ventures, partnerships or corporations.

#### A.01 BID DUE DATE

The Due Date and Time for submission of Bids in response to this Invitation for Bid (IFB) is June 11, 2019 at 3:00 P.M. ET. Bids must be delivered to the following location: Manatee County Administration Building, 1112 Manatee Ave. W., Suite 803, Bradenton, FL 34205 and time stamped by a Procurement representative prior to the Due Date and Time.

Bids received after the Due Date and Time will not be considered. It will be the sole responsibility of the Bidder to deliver its bid to the Manatee County Procurement Division for receipt on or before the Due Date and Time. If a bid is sent by U.S. Mail, courier or other delivery services, the Bidder will be responsible for its timely delivery to the Procurement Division. Bids delayed in delivery will not be considered, will not be opened at the public opening, and arrangements will be made for their return at the Bidder's request and expense.

#### A.02 PUBLIC OPENING OF BIDS

Sealed Bids will be publicly opened at Manatee County Administration Procurement Division, 1112 Manatee Avenue West, 8<sup>th</sup> Floor, Suite 803, Bradenton, Florida 34205, in the presence of County officials immediately upon expiration of the Due Date and Time. Bidders or their representatives may attend the Bid opening.

Manatee County will make public at the opening the names of the business entities which submitted a Bid, the city and state in which they reside, and the total bid price. No review or analysis of the Bids will be conducted at the bid opening.

#### A.03 SUBMISSION OF BIDS

The contents of the Bid sealed package must include:

- One (1) bound original clearly identifying Bidder and marked "ORIGINAL".
- Two (2) bound copies clearly identifying Bidder and marked "COPY" with all required information and identical to the original.
- One (1) electronic format copy clearly identifying Bidder.

Electronic format copy should be submitted on a Universal Serial Bus (USB) portable flash memory drive or compact disc (CD) in MicroSoft Office® or Adobe Acrobat® portable document format (PDF) in one continuous file. Do not password protect or otherwise encrypt electronic Bid copies. Electronic copies must be searchable and contain an identical Bid to the original.

Submit the Bid package in a sealed container with the following information clearly marked on the outside of the package: IFB No. 19-R071301CB, Water, Sewer, and Backflow Parts, Bidder's name, and Bidder's address. Bids must be delivered to the Manatee County Procurement Division prior to the Due Date and Time at the following address:

Manatee County
Procurement Division
1112 Manatee Avenue West, Suite 803
Bradenton, FL 34205

#### A.04 BID FORMS

Bids must include the forms provided in this IFB. If needed, additional pages may be attached to a form. Bidders must fully complete and execute all Bid Forms. Bid Forms must be executed by an authorized official of the company who has the legal authority to bind the company.

#### A.05 ENVIRONMENTAL SUSTAINABILITY

Bidder shall acknowledge in its Bid if Bidder has an environmental sustainability initiative. In addition, Bidder shall submit with its Bid a brief summary of its environmental sustainability initiative. This information will be used as a determining factor in the award decision when all other factors, including local preference, are otherwise equal.

#### A.06 STANDARDS FOR MATHEMATICAL ERRORS

- 1. Bid pricing forms without imbedded mathematical formulas: In the event of multiplication/extension error(s), the unit price shall prevail. In the event of addition error(s) the extension totals will prevail. In the event the dollar amount for contract contingency is omitted, it will be added to the total price of the Bid.
- 2. Bid pricing forms with imbedded mathematical formulas: Interactive bid pricing forms that contain mathematical formulas may be provided to automate lengthy and complex bid forms. In the event bid pricing forms with imbedded formulas are used and a multiplication/extension error(s) is discovered in the formula, the unit price entered by the Bidder shall prevail.
- 3. Bidder shall assume the responsibility and accuracy of the information input in the bid pricing form and therefore shall verify that the calculations are correct before submitting its Bid.
- 4. Regardless of the type of bid pricing form used, all Bids shall be reviewed mathematically by the County using these standards.

#### A.07 DISTRIBUTION OF SOLICITATION DOCUMENTS

All documents issued pursuant to this IFB are distributed electronically and available for download at no charge at <a href="www.mymanatee.org">www.mymanatee.org</a> > Business, Bids and Proposals. This link is located on the top of the County website home page under the business tab. Documents may be viewed and downloaded for printing using Adobe Reader software.

At its sole discretion, the County may utilize a third-party provider, such as DemandStar by Onvia® (DemandStar) to distribute Bids. Visit the DemandStar website at <a href="www.Demandstar.com">www.Demandstar.com</a> for more information regarding this service. Participation in the DemandStar system is not a requirement for doing business with Manatee County.

Additionally, the IFB and all related documents are available for public inspection at the Manatee County Procurement Division, 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205. Call (941) 749-3014 to schedule an appointment. Documents are available between the hours of 8:00 A.M. and 5:00 P.M., Monday through Friday, with the exception of County holidays.

As a courtesy, Manatee County notifies the Manatee County Chamber of Commerce and the Manatee County Black Chamber of Commerce of all active solicitations, who then distributes the information to its members.

#### A.08 ADDENDA

Any interpretations, corrections or changes to this IFB will be made by addendum. Addenda will be posted on the Procurement Division's web page of the County website at <a href="http://www.mymanatee.org/purchasing">http://www.mymanatee.org/purchasing</a> > Bids and Proposals. For those solicitations that are advertised on DemandStar, addenda will also be posted on the DemandStar distribution system on the 'Planholders' link.

All addenda are a part of the IFB and each Bidder will be bound by such addenda. It is the responsibility of each Bidder to read and comprehend all addenda issued. Failure of any Bidder to acknowledge an issued addendum in its Bid will not relieve the Bidder from any obligation contained therein.

#### A.09 BID EXPENSES

All costs incurred by Bidder in responding to this IFB will be the sole responsibility of the Bidder.

#### A.10 QUESTION AND CLARIFICATION PERIOD

Each Bidder shall examine all terms, conditions and requirements in the IFB documents and will judge all matters relating to the adequacy and accuracy of such documents. Any questions or request for changes or interpretations, clarification or additional information pertaining to this IFB shall be made in writing via email to the Manatee County Procurement Division to the Designated Procurement Contact or to <a href="mailto:purchasing@mymanatee.org">purchasing@mymanatee.org</a> prior to the Deadline for Questions and Clarifications. Bidder shall furnish any data or information it deems necessary for the County to evaluate requests to modify the terms, conditions or requirements of this IFB. Any changes or modifications to the terms, conditions and requirements of this IFB will be at the sole discretion of the County. All questions received and responses given will be provided to potential Bidders via an addendum to this IFB.

Manatee County will not be responsible for oral interpretations given including from County staff, representative, or others. The issuance of a written addendum by the Procurement Division is the only official method whereby interpretation, clarification, modifications, or additional information will be given.

#### A.11 FALSE OR MISLEADING STATEMENTS

Bids which contain false or misleading statements or which provide references which do not support an attribute or condition claimed by the Bidder, may be rejected. If, in the opinion of the County, such information was intended to mislead the County in its evaluation of the Bid, and the attribute, condition or capability is a requirement of this IFB. Such Bidder will be disqualified from consideration for this IFB and may be disqualified from submitting a response on future solicitation opportunities with the County.

#### A.12 UNBALANCED BIDDING

County recognizes that large and/or complex projects will often result in a variety of methods, sources, and prices. However, where in the opinion of the County such variation does not appear to be justified given bid requirements and industry and market conditions, the Bid will be presumed to be unbalanced. Examples of unbalanced Bids will include:

- 1. Bids showing omissions, alterations of form, additions not specified, or required conditional or unauthorized alternate bids.
- 2. Bids quoting prices that substantially deviate, either higher or lower, from those included in the Bids of competitive Bidders for the same line item unit costs.
- 3. Bids where the unit costs offered are in excess of, or below reasonable cost analysis values.

In the event County determines that a Bid is presumed unbalanced, it will request the opportunity to and reserves the right to, review all source quotes, bids, price lists, letters of intent, and other supporting documentation which the Bidder obtained and upon which the Bidder relied upon to develop its Bid. County reserves the right to deem any presumptive unbalanced Bid where the Bidder is unable to demonstrate the validity and/or necessity of the unbalanced unit costs as non-responsive.

#### A.13 WITHDRAWAL OR REVISION OF BIDS

Bidders may withdraw Bids under the following circumstances:

- a. If Bidder discovers a mistake(s) prior to the Due Date and Time. Bidder may withdraw its Bid by submitting a written notice to the Procurement Division. The notice must be received in the Procurement Division prior to the Due Date and Time for receiving Bids. A copy of the request shall be retained and the unopened Bid returned to the Bidder; or
- b. After the Bids are opened but before a contract is signed, Bidder alleges a material mistake of fact if:
  - 1. The mistake is clearly evident in the solicitation document; or
  - 2. Bidder submits evidence which clearly and convincingly demonstrates that a mistake was made in the Bid. Request to withdraw a Bid must be in writing and approved by the Procurement Official.

#### A.14 JOINT VENTURES

Bidders intending to submit a bid as a joint venture with another entity are required to have filed proper documents with the Florida Department of Business and Professional Regulation and all other State or local licensing agencies as required by Florida Statute Section 489.119, prior to the Due Date and Time.

#### A.15 LOBBYING

After the issuance of any solicitation, no prospective Bidders, or their agents, representatives or persons acting at the request of such Bidder, shall contact, communicate with or discuss any matter relating in any way to the solicitation with any County officers, agents or employees, other than the Procurement Official or designee, unless otherwise directed by the Procurement

Official or designee. This prohibition includes copying such persons on written communications (including email correspondence) but does not apply to presentations made to evaluation committees or at a County Commission meeting where the Commission is considering approval of a proposed contract. This requirement ends upon final execution of the contract or at the time the solicitation is cancelled. Violators of this prohibition will be subject to sanctions as provided in the Manatee County Code of Ordinances Section 2-26-31 and 2-26-32. Sanctions may include (a) written warning; (b) termination of contracts; and (c) debarment or suspension.

#### A.16 IRREVOCABLE OFFER

Any Bid may be withdrawn up until the Due Date and Time. Any Bid not so withdrawn shall, upon opening, constitute an irrevocable offer for a period of ninety (90) days to provide the goods or services set forth in this IFB or until one or more of the Bids have been duly accepted by County, whichever occurs first.

#### A.17 ERRORS OR OMISSIONS

Once a Bid is opened, the County will not accept any request by Bidder to correct errors or omissions in the Bid other than as identified in paragraph A.13.

#### A.18 DETERMINATION OF RESPONSIBLENESS AND RESPONSIVENESS

The County will conduct a due diligence review of all Bids received to determine if the Bidder is responsible and responsive.

To be responsive a Bidder must submit a Bid that conforms in all material respects to the requirements of this IFB and contains all the information, fully completed attachments and forms, and other documentation required. Bids that are deemed non-responsive will not be considered.

To be responsible, a Bidder must meet the minimum qualification requirements and have the capability to perform the Scope of Services contained in this IFB. Bids submitted by Bidders that are deemed non-responsible will not be considered.

#### A.19 SCRUTINIZED COMPANIES FORM

Pursuant to Florida Statute Section 287.135, as of July 1, 2012, a company that, at the time of submitting a response for a new contract or renewal of an existing contract, is on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to Florida Statute Section 215.473, is ineligible for, and may not submit a response for or enter into or renew a contract with an agency or local governmental entity for goods or services of \$1 million or more. To the extent certification is required, it shall be provided on Attachment F, *Vendor Certification Regarding Scrutinized Companies Lists*.

#### A.20 LOCAL PREFERENCE FORM

To qualify for local preference, a local business, as defined in Section B, Terms and Conditions, must provide certification to County by completing an 'Affidavit as to Local Business' form which is available for download at <a href="https://www.mymanatee.org/vendor">www.mymanatee.org/vendor</a>. Click on 'Affidavit for Local Business' to access and print the form. Complete, notarize, and return the original with Bidder's Bid. It

is the responsibility of the Bidder to ensure accuracy of the affidavit and notify County of any changes affecting its local business status.

#### A.21 COLLUSION

Bidder certifies that its Bid is made without prior understanding, agreement, or connection with any other corporation, firm or person submitting a Bid for the same materials, services, supplies, or equipment and is in all respects fair and without collusion or fraud.

Any such violation may result in contract cancellation, return of materials or discontinuation of services and the possible removal of Bidder from participation in future County solicitations for a specified period.

The County reserves the right to disqualify a Bidder during any phase of the solicitation process and terminate for cause any resulting contract upon evidence of collusion with intent to defraud on the part of the Bidder.

#### A.22 PUBLIC ENTITY CRIMES

In accordance with Section 287.133, Florida Statutes, a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017 for Category Two for a period of 36 months from the date of being placed on the convicted vendor list.

In addition, Manatee County Code of Laws Chapter 2-26 Article V prohibits the award of County contracts to any person or entity who/which has, within the past five years, been convicted of, or admitted to in court or sworn to under oath, a public entity crime or of any environmental law that, in the reasonable opinion of the Purchasing Official, establishes reasonable grounds to believe the person or business entity will not conduct business in a reasonable manner.

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime, as that term is defined in Section 287.133, Florida Statutes, may not submit a bid to provide any goods or services to a public entity; may not submit a bid with a public entity for the construction or repair of a public building or public work; may not submit bids on leases of real property to a public entity; may not be awarded or perform Work as a contractor, supplier, Subcontractor, or consultant under an agreement with any public entity; and may not transact business with any public entity in excess of the threshold amount provided

in Section 287.017, Florida Statutes, for CATEGORY TWO for a period of thirty-six (36) months following the date of being placed on the convicted list.

In addition, the Manatee County Code of Laws prohibits the award of any bid to any person or entity who/which has, within the past five (5) years, been convicted of, or admitted to in court or sworn to under oath, a public entity crime or of any environmental law that, in the reasonable opinion of the Purchasing Official, establishes reasonable grounds to believe the person or business entity will not conduct business in a responsible matter.

To ensure compliance with the foregoing, the Code requires all persons or entities desiring to do business with County to execute and file with the Purchasing Official an affidavit, executed under the pain and penalties of perjury, confirming that person, entity and any person(s) affiliated with the entity, does not have such a record and is therefore eligible to seek and be awarded business with County. In the case of a business entity other than a partnership or a corporation, such affidavit shall be executed by an authorized agent of the entity. In the case of a partnership, such affidavit shall be executed by the general partner(s). A Public Contracting and Environmental Crimes Certification form is attached herein for this purpose.

#### A.23 DISCOUNTS AND PRICING

All discounts must be incorporated in the prices contained in the bid and not shown separately. Unless otherwise specified in this IFB, pricing must be all inclusive, including delivery costs. The prices indicated on the Pricing Form shall be the prices used in determining award. When there is a discrepancy between the unit prices and any extended prices, the unit prices shall prevail.

#### A.24 PROTEST

Any actual bidder, proposer, or contractor who is aggrieved in connection with the notice of intent to award of a contract with a value greater than \$250,000 where such grievance is asserted to be the result of a violation of the requirements of the Manatee County Procurement Code or any applicable provision of law by the officers, agents, or employees of the County, may file a protest to the Procurement Official.

Protest must be in writing and delivered via email at <a href="mailto:purchasing@mymanatee.org">purchasing@mymanatee.org</a> or by hand delivery to the Procurement Division at 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205 by 5:00 p.m. on the fifth business day following the date of posting of the Notice of Intent to Award on the County website. There is no stay of the procurement process during a protest. The Procurement Official shall have the authority to settle and resolve a protest concerning the intended award of a contract.

For additional information regarding the County protest process, visit the Procurement Division webpage on the County website.

#### A.25 LICENSES AND PERMITS

The successful Bidder shall be solely responsible for obtaining all necessary license and permit fees, including, but not limited to, all license fees, permit fees, impact fees, or inspection fees, and responsible for the costs of such fees. Successful Bidder is solely responsible for ensuring all work complies with all Federal, State, local, and Manatee County ordinances, orders, codes, laws, rules, regulations, directives, and guidelines.

#### A.26 CONFLICT OF INTEREST

Manatee County Code of Laws prohibits contracts where conflicts are found to exist. Bidder shall not be currently engaged in, or if awarded, will not become engaged in any obligations, undertakings or contracts that will require Bidder to maintain an adversarial role against the County or that will impair or influence the advice or recommendations it provides to the County.

#### A.27 BASIS OF AWARD

Award(s) will be made to the responsive, responsible Bidder having the lowest Bid. The County, at its sole discretion, may make multiple awards based upon groups, price, or other such criteria. Whenever the lowest Bid is submitted by two or more Bidders and are equal with respect to price, quality, and/or service, the Bid received from a local business shall be given preference in the award. Whenever two or more lowest Bids are received from local businesses and are equal with respect to price, quality, and/or service, the award shall be determined by a chance drawing to be conducted by the Procurement Official in a publicly noticed meeting.

Local business is defined as a business legally authorized to engage in the sale of goods and/or services which, for at least six months prior to the announcement of the solicitation for Bids, has maintained a physical place of business in Manatee, Desoto, Hardee, Hillsborough, Pinellas, or Sarasota County, and which has had at least one full-time employee at that location during the qualifying period.

#### A.28 OTHER PUBLIC ENTITIES

The successful Bidder agrees to make available to all governmental agencies, authorities, departments, and municipalities (collectively referred to as Public Entities) the terms, conditions and agreed upon prices of the award resulting from this solicitation. Any Public Entity electing to utilize the award will enter into its own agreement with successful Bidder and coordinate the requirements. The County shall in no way be responsible for any such agreement between successful Bidder and Public Entity.

#### A.29 SOLICITATION SCHEDULE

The following schedule has been established for this Solicitation process. Refer to the County's website (<a href="www.mymanatee.org">www.mymanatee.org</a> > Business > Bids & Proposals) for meeting locations and updated information pertaining to any revisions to this schedule.

Scheduled Item	Scheduled Date
Non-Mandatory Solicitation Information Conference, 1112 Manatee Avenue West, Ste 803, Bradenton, FL 34205	May 21, 2019 2:30PM
Question and Clarification Deadline	May 28, 2019
Final Addendum Posted	June 4, 2019
Bid Response Due Date and Time	June 12, 2019, no later than 3:00 PM
Projected Award	July 2, 2019

**END OF SECTION A** 

## SECTION B TERMS AND CONDITIONS IFB No. 19-R071301CB

#### **B.01 AGREEMENT**

The agreement resulting from the acceptance of a bid shall be in the form of a contract and/or a purchase order. This agreement shall be for three years from the date of award with the option to renew for two one-year periods.

#### **B.02 NON-EXCLUSIVE**

Unless otherwise stated in this IFB, successful Bidder understands and agrees that any resulting contractual relationship is non-exclusive and the County reserves the right to contract with more than one Bidder or seek similar or identical goods and services elsewhere if deemed in the best interest of the County.

#### **B.03** CONFIDENTIALITY OF SECURITY RELATED RECORDS

- a. Pursuant to Florida Statutes § 119.071(3), the following records (hereinafter referred to collectively as "the Confidential Security Records") are confidential and exempt from the disclosure requirements of Florida Statutes § 119.07(1):
  - 1. A Security System Plan or portion thereof for any property owned by or leased to County or any privately owned or leased property held by County.
  - Building plans, blueprints, schematic drawings, and diagrams, including draft, preliminary, and final formats, which depict the internal layout and structural elements of a building, arena, stadium, water treatment facility, or other structure owned or operated by County.
  - 3. Building plans, blueprints, schematic drawings, and diagrams, including draft, preliminary, and final formats, which depict the internal layout or structural elements of an attractions and recreation facility, entertainment or resort complex, industrial complex, retail and service development, office development, or hotel or motel development in the possession of, submitted to County.
- b. Successful Bidder agrees that, as provided by Florida Statute, it shall not, as a result of a public records request, or for other reason disclose the contents of, or release or provide copies of the Confidential Security Records to any other party absent the express written authorization of County's Property Management Director or to comply with a court order requiring such release or disclosure. To the extent Successful Bidder receives a request for such records, it shall immediately contact the County's designated Contract administrator who shall coordinate County's response to the request.

#### **B.04 PURCHASING COOPERATIVE**

It is the intent of this IFB to include requirements and to obtain bids on behalf of Manatee County and reserve the right to authorize entities belonging to the Sarasota Bay Area Chapter of NIGP to obtain purchases utilizing the terms, conditions and pricing of this IFB. This opportunity is also made available to all local and county governments and agencies, public educational institutions, non-profits, and State of Florida agencies, pursuant to their own governing laws, and subject to the agreement of the supplier. Manatee County will not be financially responsible for the purchases of other entities utilizing this IFB and any resulting contract or purchase order.

#### **B.05** LOCAL PREFERENCE

Local business is defined as a business legally authorized to engage in the sale of the goods and/or services, and which certifies within its Bid that for at least six (6) full months prior to the advertisement of this IFB it has maintained a physical place of business in Manatee, Desoto, Hardee, Hillsborough, Pinellas or Sarasota County with at least one full-time employee at that location. Local preference shall not apply to the following categories of agreements:

- Purchases or agreements which are funded, in whole or in part, by a governmental or other funding entity, where the terms and conditions governing the funds prohibit the preference.
- 2. Any bid announcement which specifically provides that local preference, as set forth in this section, is suspended due to the unique nature of the goods or services sought, the existence of an emergency as found by either the County Commission or County Administrator, or where such suspension is, in the opinion of the County Attorney, required by law.
- 3. For a competitive solicitation for construction services in which fifty percent (50%) or more of the cost will be paid from state-appropriated funds which have been appropriated at the time of the competitive solicitation.
- 4. To qualify for local preference under this section, a local business must certify to County by completing an "Affidavit as to Local Business Form," which is available for download at <a href="https://www.mymanatee.org/vendor">www.mymanatee.org/vendor</a>. Click on "Affidavit for Local Business" to access and print the form. Complete, notarize, and <a href="mailto:m
- 5. It is the responsibility of the bidder to ensure accuracy of the Affidavit as to Local Business and notify County of any changes affecting same.

#### **B.06 SUPPLIER REGISTRATION**

Registering your business will provide Manatee County a sourcing opportunity to identify suppliers of needed goods and services and identify local businesses. To register as a supplier with the County go to <a href="www.mymanatee.org/vendor">www.mymanatee.org/vendor</a>. For assistance with supplier registration, call the Procurement Division main number at (941) 749-3014. Office hours are Monday – Friday, 8:00 A.M. to 5:00 P.M., excluding County holidays.

#### **B.07 RESERVED RIGHTS**

The County reserves the right to accept or reject any and all Bids, to waive irregularities and technicalities, to request additional information and documentation, and to cancel this solicitation at any time prior to execution of the contract. In the event only one bid is received, the County reserves the right to negotiate with the Bidder. The County reserves the right to award to the lowest responsive and responsible Bidder.

The County reserves the right to conduct an investigation as it deems necessary to determine the ability of any Bidder to perform the work or service requested. Upon request by the County, Bidder shall provide all such information to the County. Additional information may include, but will not be limited to, current financial statements prepared in accordance with generally accepted accounting practices and certified by an independent CPA or official of Bidder; verification of availability of equipment and personnel; and past performance records.

#### **B.08** APPLICABLE LAWS

Bidder must be authorized to transact business in the State of Florida. All applicable laws and regulations of the State of Florida and ordinances and regulations of Manatee County will apply to any resulting contract. This solicitation process will be conducted in accordance with Manatee County Code of Ordinances, Chapter 2-26.

#### B.09 TAXES

Manatee County is exempt from Federal Excise and State Sales Taxes. (F.E.T. Cert. No. 59-78-0089K; Florida Sales Tax Exempt Cert. No. 85-8012622206C-6). Therefore, the Bidder is prohibited from delineating a separate line item in its bid for any sales or service taxes.

The Successful Bidder will be responsible for the payment of taxes of any kind, including but not limited to sales, consumer, use, and other similar taxes payable on account of the work performed and/or materials furnished under the award in accordance with all applicable laws and regulations.

#### **B.10** CODE OF ETHICS

With respect to this and any bid, if a Bidder violates, directly or indirectly, the ethics provisions of the Manatee County Procurement Code and/or Florida criminal or civil laws related to public procurement, including but not limited to Florida Statutes Chapter 112, Part II, Code of Ethics for Public Officers and Employees, such Bidder will be ineligible for award to perform the work described in this IFB, and may be disqualified from submitting on any future quote or bid requests to supply goods or services to Manatee County. By submitting a bid, the Bidder represents to County that all statements made and materials submitted are truthful, with no relevant facts withheld.

#### **B.11 AMERICANS WITH DISABILITIES**

Manatee County does not discriminate upon the basis of any individual's disability status. This non-discrimination policy involves every aspect of County's functions including one's access to participation, employment, or treatment in its programs or activities. Anyone requiring reasonable accommodation for an information conference or bid opening should contact the person named on the cover page of this document at least twenty-four (24) hours in advance of either activity.

#### **B.12 EQUAL EMPLOYMENT OPPORTUNITY**

In accordance with Title VI of the Civil Rights Act of 1964, Title 15, Part 8 of the Code of Federal Regulations and the Civil Rights Act of 1992, Manatee County hereby notifies all Bidders that it will affirmatively ensure minority business enterprises are afforded full opportunity to participate in response to this Invitation for Bid and will not be discriminated against on the grounds of race, color, national origin, religion, sex, age, handicap, or marital status in consideration of award.

#### B.13 MINORITY AND/OR DISADVANTAGED BUSINESS ENTERPRISES

The State of Florida Office of Supplier Diversity provides the certification process and maintains the database of certified MBE/DBE firms. Additional information may be obtained at <a href="http://www.osd.dms.state.fl.us/iframe.htm">http://www.osd.dms.state.fl.us/iframe.htm</a> or by calling (850) 487-0915.

#### **B.14 QUALITY**

Unless otherwise specifically provided in the IFB documents, all goods provided shall be new, the latest make or model, of the best quality, of the highest grade of workmanship, and of the most suitable for the purpose intended.

Unless otherwise specifically provided in the IFB documents, reference to any equipment, material, article or patented process, by trade name, brand name, make or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition.

#### **B.15 DELIVERY**

Unless otherwise specified, all prices shall include all delivery cost (FOB Destination).

#### **B.16 AUTHORIZED PRODUCT REPRESENTATION**

Bidder, by virtue of submitting the name and specifications of a manufacturer's product, will be required to furnish the named manufacturer's product. Failure to do so may, in the County's sole discretion, be deemed a material breach of the resulting agreement and shall constitute grounds for County's immediate termination of the resulting agreement.

#### **B.17 ROYALTIES AND PATENTS**

The successful Bidder shall pay all royalties and license fees for equipment or processes in conjunction with the equipment and/or services being furnished. Successful Bidder shall defend all suits or claims for infringement of any patent, trademark or copyright, and shall save County harmless from loss on account thereof, including costs and attorney's fees.

#### **B.18 PUBLIC RECORDS**

Upon receipt, all inquiries and responses to inquiries related to this Bid become "Public Records", and shall be subject to public disclosure consistent with Florida Statute, Chapter 119.

Bids become subject to disclosure thirty (30) days after the opening or when notice of intent to award is made, whichever occurs first, as provided by Florida Statutes § 119.071(1)(b).

If County rejects all Bids and concurrently notices its intent to reissue the solicitation, the rejected Bids are exempt from public disclosure until such time the County provides notice of an intended decision concerning the reissued solicitation or until County withdraws the reissued solicitation. A bid is not exempt for longer than twelve (12) months after the initial notice of rejection of all Bids.

Pursuant to Florida Statute 119.0701, to the extent Successful Bidder is performing services on behalf of County, Successful Bidder must:

- Keep and maintain public records required by public agency to perform the service. That
  information and data it manages as part of the services may be public record in accordance
  with Chapter 119, Florida Statutes and Manatee County public record policies. Bidder
  agrees, prior to providing goods/services, it will implement policies and procedures, which
  are subject to approval by County, to maintain, produce, secure, and retain public records in
  accordance with applicable laws, regulations, and County policies including but not limited
  to Section 119.0701, Florida Statutes.
- Upon request from the public agency's custodian of public records, provide the public agency
  with a copy of the requested records or allow the records to be inspected or copied within a
  reasonable time at a cost that does not exceed the cost provided in Florida Statutes, Chapter
  119, or as otherwise provided by law.
- 3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the Successful Bidder does not transfer the records to the public agency.
- 4. Upon completion of the contract, transfer, at no cost, to the public agency all public records in possession of contractor or keep and maintain public records required by the public agency to perform the service. If the Successful Bidder transfers all public records to County upon completion of the contract, the Successful Bidder shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Successful Bidder keeps and maintains public records upon completion of the contract, the Successful Bidder shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to County, upon request from County's custodian of public records, in a format that is compatible with the information technology systems of County.

IF THE SUCCESSFUL BIDDER HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO ITS DUTY TO PROVIDE PUBLIC RECORDS RELATING TO ANY RESULTING CONTRACT, CONTACT COUNTY'S CUSTODIAN OF PUBLIC RECORDS AT: (941) 742-5845, DEBBIE.SCACCIANOCE@MYMANATEE.ORG, ATTN: RECORDS MANAGER, 1112 MANATEE AVENUE WEST, BRADENTON, FL 34205.

#### **B.19 TRADE SECRETS**

Manatee County is subject to Chapter 119, Florida Statutes. Therefore, all documents, materials, and data submitted as part of a Bid in response to a Request for Bid are governed by the disclosure, exemption and confidentiality provisions relating to public records in Florida Statutes.

Except for materials that are 'trade secrets' as defined by Chapter 812, Florida Statutes, ownership of all documents, materials and data submitted as part of a Bid in response to the Request for Bid shall belong exclusively to County.

To the extent that Bidder desires to maintain the confidentiality of materials that constitute trade secrets pursuant to Florida law, trade secret material submitted must be segregated from the portions of the Bid that are not declared as trade secret. In addition, Bidder shall cite, for each trade secret claimed, the Florida Statute number which supports the designation. Further, Bidder shall offer a brief written explanation as to why the cited Statute is applicable to the information claimed as trade secret. Additionally, Bidder shall provide a hard copy of its Bid that redacts all information designated as trade secret.

In conjunction with trade secret designation, Bidder acknowledges and agrees that:

- a. Trade secret requests made after the opening will not be considered. However, County reserves the right to clarify the Bidders request for trade secret at any time; and
- County and its officials, employees, agents, and representatives are hereby granted full rights to access, view, consider, and discuss the information designated as trade secret throughout the evaluation process and until final execution of any awarded purchase order or contract;
- c. That after notice from County that a public records request has been made pursuant to Bidder's bid, the Bidder at its sole expense, shall be responsible for defending its determination that submitted material is a trade secret and is not subject to disclosure. Action by Bidder in response to notice from the County shall be taken immediately, but no later than 10 calendar days from the date of notification or Bidder will be deemed to have waived the trade secret designation of the materials.

Notwithstanding any other provision in this solicitation, designation of the entire bid as 'trade secret', 'proprietary', or 'confidential' is not permitted and may result in a determination that the Bid is non-responsive.

#### **B.20 ePAYABLES**

Manatee County Board of County Commissioners and the Manatee County Clerk of the Circuit Court have partnered to offer the ePayables program, which allows payments to be made to vendors via credit cards.

The Clerk of the Circuit Court will issue a unique credit card number to vendor after goods are delivered or services rendered, vendors submit invoices to the remit to address on the purchase order. When payments are authorized, an email notification is sent to the vendor. The email notification includes the invoice number(s), invoice date(s), and amount of payment. There is no cost for vendors to participate in this program; however, there may be a charge by the company that processes your credit card transactions.

If Bidder is interested in participating in this program, complete the ePayables Application attached herein and return the completed form via email to <a href="mailto:lori.bryan@manateeclerk.com">lori.bryan@manateeclerk.com</a>.

#### **B.21 FUNDING**

This IFB is subject to the appropriation of funds in an amount sufficient to allow continuation of the County's performance in accordance with the terms and conditions herein. The County shall provide prompt written notice to the successful Bidder that sufficient funds have not been appropriated to continue its full and faithful performance under the terms of this IFB, and shall,

effective thirty (30) days after giving such notice or upon the expiration of the time for which funds were appropriated whichever occurs first, be thereafter released of all further obligations in any way related to this IFB.

#### **B.22 CONDITIONS FOR EMERGENCY EVENTS**

A critical challenge in emergency situations is to obtain essential supplies, goods and equipment in the affected areas. It is the County's priority that public property, life, safety, and health are protected during any emergency as declared by the State and/or the County. Therefore, before, during and after a disaster, hurricane, flood, act of terrorism, or other public emergency event, whether natural or man-made, successful Bidder shall make delivery to the County of the goods and services in this IFB its first-priority.

Successful Bidder will ensure that contract prices are billed to the County for deliveries as part of an emergency event. Upon award of a contract, successful Bidder shall furnish an email and phone number in which successful Bidder can be contacted twenty-four (24) hours per day, seven days per week for emergency services.

#### **B.23 TERMINATION**

The County, at its sole discretion, reserves the right to terminate any contract entered into pursuant to this IFB with or without cause immediately upon providing written notice to the successful Bidder. Upon receipt of such notice, the successful Bidder shall not incur any additional costs under the contract. The County shall be liable only for reasonable costs incurred by the successful Bidder prior to the date of the notice of termination.

The County reserves the right to terminate any contract entered into pursuant to this IFB, in part or in whole, or place the successful Bidder on probation in the event it fails to perform in accordance with the terms and conditions stated herein. Notification will be made by providing written notice of such failure or default and by specifying a reasonable time period within which the successful Bidder must cure any such failure to perform or default. If the successful Bidder fails to cure the default within the time specified, the County may then terminate the subject contract by providing written notice to the successful Bidder. The County further reserves the right to suspend or debar the successful Bidder in accordance with the appropriate County ordinances and/or policies. In the event of termination for default, the County may procure the required goods and/or services from any source and use any method deemed in its best interest.

#### **B.24 PRECEDENCE**

Statements contained in the Scope of Work or Bid Summary Sections of this IFB, which vary from the information contained in this Section D, shall have precedence.

#### **B.25** E-VERIFY

Prior to the employment of any person under this contract, the Successful Bidder shall utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of (a) all persons employed during the contract term by the Successful Bidder to perform employment duties within Florida and (b) all persons, including subcontractors, assigned by the Successful Bidder to perform work pursuant to the contract with Manatee County. For more information on this process, please refer to United States Citizenship and Immigration Service site at: <a href="http://www.uscis.gov/">http://www.uscis.gov/</a>.

Only those individuals determined eligible to work in the United States shall be employed under this contract. By submission of a bid in response to this IFB, the successful Bidder commits that all employees and subcontractors will undergo e-verification before placement on this contract.

The successful Bidder shall maintain sole responsibility for the actions of its employees and subcontractors. For the life of the contract, all employees and new employees brought in after contract award shall be verified under the same requirement stated above.

#### **B.26 SUBCONTRACTORS**

The successful bidder will obtain prior written approval from the County for any subcontractor(s) and the work they will perform. A subcontractor is defined as any entity performing work within the scope of the project who is not an employee of the successful Bidder.

Bidders subcontracting any portion of the work shall include a list of subcontractors along with their bid. The list shall include: name and address of subcontractor, type of work to be performed and the percent of the contract amount to be subcontracted.

Prior to the employment of any person under this contract, the successful Bidder shall utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of (a) all persons employed during the contract term by the successful Bidder to perform employment duties within Florida and (b) all persons, including subcontractors, assigned by the successful Bidder to perform work pursuant to the contract with Manatee County. For more information on this process, please refer to United States Citizenship and Immigration Service site at: http://www.uscis.gov/.

Only those individuals determined eligible to work within the United States shall be employed to perform the work specified in this IFB.

By submission of a Bid in response to this IFB, the successful Bidder commits that all employees and subcontractors will undergo e-verification before placement on this contract.

If County has reasonable objection to any subcontractor, the County may request the successful bidder to submit an acceptable substitute without an increase in contract sum or contract time.

If successful Bidder declines to make any such substitution, the County may award the resulting agreement to the next lowest qualified bidder that proposes to use acceptable subcontractors, who County does not make written objection to. In the event the successful Bidder declines to make any such substitution post award, the County may exercise its right to terminate the agreement.

The successful Bidder shall maintain sole responsibility for the actions of its employees and subcontractors. New employees brought in after contract award shall follow the same requirement stated above for the life of the contract.

#### **B.27 RECOMMENDATION FOR AWARD**

Upon successful completion of evaluations, a recommendation for award to the successful Bidder(s) will be presented for approval per County ordinances, policies and procedures.

**END SECTION B** 

#### **Bid Forms**

(To be completed and returned with Bid)

## ATTACHMENT A ACKNOWLEDGMENT OF ADDENDA IFB No. 19-R071301CB

The undersigned acknowledges receipt of the following addenda:

Addendum No	Date Recei	ved:	
Addendum No	Date Received:		
Addendum No	Date Received:		
Addendum No	Date Recei	ved:	
Addendum No	Date Recei	ved:	
Addendum No	Date Received:		
Addendum No	Date Received:		
Addendum No	Date Received:		
Addendum No	Date Received:		
Print or type Bidder's information below:			
Name of Bidder		Telephone Number	
Street Address		City/State/Zip	
Email Address		Website Address	
Print Name & Title of Authorized Officer		Signature of Authorized Official	Date
Bidder must fully e	execute and	return this form with its Bid.	

## ATTACHMENT B BID SIGNATURE FORM IFB No. 19-R071301CB

The undersigned represents that:

- (1) By signing the bid, that he/she has the authority and approval of the legal entity purporting to submit the bid and any additional documentation which may be required such as the Joint Venture Agreement or Joint Venture Affidavit, if applicable;
- (2) All facts and responses set forth in the bid are true and correct;
- (3) By submitting a bid and signing below, the Bidder agrees to all terms and conditions in this IFB, which incorporates all addenda, appendices, exhibits, and attachments, in its entirety, and is prepared to sign the Contract as written. The Respondent understands that if it submits exceptions to the Contract in its Response, the Respondent's Response may be determined non-responsive; and
- (4) The Bidder, which includes all companies included in a partnership or joint venture, is not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List.

Print or type Bidder's information below:

Name of Bidder	Telephone Number
	·
Street Address	City/State/Zip
Email Address	Web Address
Print Name & Title of Authorized Officer	Signature of Authorized Officer Date

Bidder must fully execute and return this form with its Bid.

## ATTACHMENT C PUBLIC CONTRACTING AND ENVIRONMENTAL CRIMES CERTIFICATION IFB No. 19-R071301CB

### SWORN STATEMENT PURSUANT TO SECTION 2-26 ARTICLE V, MANATEE COUNTY PROCUREMENT CODE

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

11115 5	worn statement is submitted to Manatee County by
For _	
	[name of entity submitting sworn statement]
whos	e business address is:
	if applicable) its Federal Employer Identification Number (FEIN) is If the entity has no include the Social Security Number of the individual signing this sworn statement:
	I understand that no person or entity shall be awarded or receive a county contract for public improvements, procurement of goods or services (including professional services) or a county lease, franchise, concession or management agreement, or shall receive a grant of county monies unless such person or entity has submitted a written certification to County that it has not:
	(1) been convicted of bribery or attempting to bribe a public officer or employee of Manatee County, the State of Florida, or any other public entity, including, but not limited to the Government of the United States, any state, or any local government authority in the United States, in that officer's or employee's official capacity; or
	(2) been convicted of an agreement or collusion among Bidders or prospective Bidders in restraint of freedom of competition, by agreement to bid a fixed price, or otherwise; or
	(3) been convicted of a violation of an environmental law that, in the sole opinion of the County's Purchasing Director, reflects negatively upon the ability of the person or entity to conduct business in a responsible manner; or
	(4) made an admission of guilt of such conduct described in items (1), (2) or (3) above, which is a matter of record, but has not been prosecuted for such conduct, or has made an admission of guilt of such conduct, which is a matter of record, pursuant to formal prosecution. An admission of guilt shall be construed to include a plea of nolo contendere; or

(5) where an officer, official, agent or employee of a business entity has been convicted of or has admitted guilt to any of the crimes set forth above on behalf of such and entity and pursuant to the direction or authorization of an official thereof (including the person committing the offense, if he is an official of the business entity), the business shall be chargeable with the conduct herein above set forth. A business entity shall be chargeable with the conduct of an affiliated entity, whether wholly owned, partially owned, or one which has common ownership or a common

Board of Directors.

For purposes of this Form, business entities are affiliated if, directly or indirectly, one business entity controls or has the power to control another business entity, or if an individual or group of individuals controls or has the power to control both entities. Indicia of control shall include, without limitation, interlocking management or ownership, identity of interests amount family members, shared organization of a business entity following the ineligibility of a business entity under this Article, or using substantially the same management, ownership or principles as the ineligible entity.

Any person or entity who claims that this Article is inapplicable to him/her/it because a conviction or judgment has been reversed by a court of competent jurisdiction, shall prove the same with documentation satisfactory to Manatee County's Purchasing Official. Upon presentation of such satisfactory proof, the person or entity shall be allowed to contract with Manatee County.

I UNDERSTAND THAT ANY CONTRACT OR BUSINESS TRANSACTION SHALL PROVIDE FOR SUSPENSION OF PAYMENTS, OR TERMINATION, OR BOTH, IF THE PROCUREMENT DIVISION OR THE COUNTY ADMINISTRATOR DETERMINES THAT **SUCH PERSON OR ENTITY HAS MADE FALSE CERTIFICATION.** 

		[Signature]
STATE OF FLORIDA COUNTY OF		
Sworn to and subscribed before me this	day of	, 201by
Personally known OR Produced	d identification_	[Type of identification]
Notary Public Signature	My comm	nission expires
[Print type or stamp Commissioned name of	Notes D. L.P. J.	

**Signatory Requirement** - In the case of a business entity other than a partnership or a corporation, this affidavit shall be executed by an authorized agent of the entity. In the case of a partnership, this affidavit shall be executed by the general partner(s). In the case of a corporation, this affidavit shall be executed by the corporate president.

Bidder must fully execute and return this form with its Bid.

## ATTACHMENT D INSURANCE AND BOND REQUIREMENTS IFB No. 19-R071301CB

Work under the resulting Agreement cannot commence until all insurance coverages indicated herein have been obtained. The cost for insurance coverages is the sole responsibility of successful Proposer. The Successful Proposer shall obtain and submit to the Procurement Division within ten (10) calendar days from the date of notice of intent to award, proof the following minimum amounts of insurance on a standard ACORD form (inclusive of any amounts provided by an umbrella or excess policy):

STANDARD INS	URANCES	REQUIRED LIMITS
1. 🛭 Automo	obile Liability:	Coverage must be afforded under a per occurrence policy form including coverage for all owned, hired and non-owned vehicles for bodily injury and property damage of not less than:  \$ 1,000,000 combined single limit; OR \$ 500,000 bodily injury and \$ 500,000 property damage. \$10,000 Personal Injury Protection (No Fault) \$1,000,000 Hired, Non-Owned Liability \$10,000 Medical Payments.  This policy shall contain severability of interests' provisions.
(Per Occurr	rcial General Liability: ence form only; le form is not )	Coverage shall be afforded under a per occurrence policy form, policy shall be endorsed and name "Manatee County, a political subdivision of the State of Florida" as an Additional Insured, and include limits not less than:  \$ 1,000,000 single limit per occurrence; \$ 2,000,000 aggregate \$ 1,000,000 Products/Completed Operations Aggregate \$ 1,000,000 Personal and Advertising Injury Liability \$ 100,000 Fire Damage Liability \$ 10,000 Medical Expense, and \$ 1,000,000, Third Party Property Damage. \$ Project Specific Aggregate (Required on projects valued at over \$10,000,000)
		This policy shall contain severability of interests' provisions.
3. 🗵 Employ	er's Liability	Coverage limits of not less than: \$\frac{100,000}{200,000}\$ each accident \$\frac{500,000}{200,000}\$ disease each employee \$\frac{500,000}{200}\$ disease policy limit
		Coverage limits of not less than:
US Long Workers Ac	's Compensation gshoremen & Harbor ct coverage ct coverage	<ul> <li>Statutory workers' compensation coverage shall apply for all employees in compliance with the laws and statutes of the State of Florida and the federal government.</li> <li>If any operations are to be undertaken on or about navigable waters, coverage must be included for the US Longshoremen</li> </ul>
		& Harbor Workers Act and Jones Act.

	Should 'leased employees' be retained for any part of the project or service, the employee leasing agency shall provide evidence of Workers' Compensation coverage and Employer's Liability coverage for all personnel on the worksite and in compliance with the above Workers' Compensation requirements.  Note: Workers' Compensation coverage is a firm requirement. Elective exemptions are considered on a case-by-case basis and are approved in a very limited number of instances.
OTHER INSURANCES	REQUIRED LIMITS
5. Aircraft Liability	Aircraft Coverage shall be afforded under a per occurrence policy form, policy shall be endorsed and name 'Manatee County' a political subdivision of the State of Florida' as an Additional Insured, and include limits not less than:  \$ Each Occurrence Property and Bodily Injury with no less than \$100,000 per passenger each occurrence or a 'smooth' limit.  \$ General Aggregate.  Unmanned Aircraft (Drone)
5. Aircraft Liability	Coverage shall be afforded under a per occurrence policy form, policy shall be endorsed and name 'Manatee County' a political subdivision of the State of Florida' as an Additional Insured, and include limits not less than:  \$ Each Occurrence Property and Bodily Injury. Coverage shall specifically include operation of Unmanned Aircraft Systems (UAS), including liability and property damage.  \$ General Aggregate.
6.	When the contract or agreement <b>does not</b> include construction of, or additions to, above ground building or structures, but does involve the installation of machinery or equipment, Installation Floater Insurance shall be afforded under a per occurrence policy form, policy shall be endorsed and name "Manatee County, a political subdivision of the State of Florida" as an Additional Insured, and include limits not less than:  • 100% of the completed value of such addition(s), building(s), or structure(s)
<ol> <li>Professional Liability and/or Errors and Omissions (E&amp;O) Liability Insurances</li> </ol>	Coverage shall be afforded under either an occurrence policy form or a claims-made policy form. If the coverage form is on a claims-made basis, then coverage must be maintained for a minimum of three years from termination of date of the contract. Limits must not be less than:  \$ Bodily Injury and Property Damage Each Occurrence \$ General Aggregate

8. Builder's Risk Insurance	When the contract or agreement includes the construction of roadways and/or the addition of a permanent structure or building, including the installation of machinery and/or equipment, Builder's Risk Insurance shall be afforded under a per occurrence policy form, policy shall be endorsed and name "Manatee County, a political subdivision of the State of Florida" as an Additional Insured, and include limits not less than:  • An amount equal to 100% of the completed value of the project, or the value of the equipment to be installed • The policy shall not carry a self-insured retention/deductible greater than \$10,000
	Coverage shall be for all risks and include, but not be limited to, storage and transport of materials, equipment, supplies of any kind whatsoever to be used on or incidental to the project, theft coverage, and Waiver of Occupancy Clause Endorsement, where applicable.
9.	Coverage shall comply with Florida Statute 501.171, shall be afforded under a per occurrence policy form, policy shall be endorsed and name "Manatee County, a political subdivision of the State of Florida" as an Additional Insured, and include limits not less than:  \$ Security Breach Liability \$ Security Breach Expense Each Occurrence \$ Security Breach Expense Aggregate \$ Replacement or Restoration of Electronic Data \$ Extortion Threats \$ Business Income and Extra Expense \$ Public Relations Expense  • Policy must not carry a self-insured retention/deductible greater than \$25,000.
10. Hazardous Materials Insurances (as noted)	Hazardous materials include all materials and substances that are currently designated or defined as hazardous by the law or rules of regulation by the State of Florida or federal government.  All coverage shall be afforded under either an occurrence policy form or a claims-made policy form, and the policy shall be endorsed and name "Manatee County, a political subdivision of the State of Florida" as an Additional Insured. If the coverage form is on a claims-made basis, then coverage must be maintained for a minimum of three years from termination of date of the contract. Limits must not be less than:    Pollution Liability

	<ul> <li>Amount equal to the value of the contract, subject to a \$1,000,000 minimum, for Bodily Injury and Property Damage to include sudden and gradual release, each claim and aggregate.</li> </ul>
	Asbestos Liability (If handling within scope of Contract)
	<ul> <li>Amount equal to the value of the contract, subject to a \$1,000,000 minimum, for Bodily Injury and Property Damage to include sudden and gradual release, each claim and aggregate.</li> </ul>
	☐ Disposal
	When applicable, Successful Proposer shall designate the disposal site and furnish a Certificate of Insurance from the disposal facility for Environmental Impairment Liability Insurance covering liability.
	<ul> <li>Amount equal to the value of the contract, subject to a \$1,000,000 minimum, for Liability for Sudden and Accidental Occurrences, each claim and an aggregate.</li> <li>Amount equal to the value of the contract, subject to a \$1,000,000 minimum, for Liability for Non-Sudden and Accidental Occurrences, each claim and an aggregate.</li> </ul>
11.  Hazardous Waste Transportation Insurance	Successful Proposer shall designate the hauler and have the hauler furnish a Certificate of Insurance for Automobile Liability insurance with Endorsement MCS-90 for liability arising out of the transportation of hazardous materials. EPA identification number shall be provided.  All coverage shall be afforded under either an occurrence policy form or a claims-made policy form and the policy shall be endorsed and name "Manatee County, a political subdivision of the State of Florida" as an Additional Insured. If the coverage form is on a claims-made basis, then coverage must be maintained for a minimum of three years from termination of date of the contract. Limits must not be less than:  Amount equal to the value of the contract, subject to a \$1,000,000 minimum, per accident.
12.  Liquor Liability Insurance	Coverage shall be afforded under a per occurrence policy form, policy shall be endorsed and name "Manatee County, a political subdivision of the State of Florida" as an Additional Insured, and include limits not less than:  • \$1,000,000 Each Occurrence and Aggregate.

<b>13.</b> Garage Keeper's Liability Insurance	Coverage shall be required if the maintenance, servicing, cleaning or repairing of any County motor vehicles is inherent or implied within the provision of the contract.
	Coverage shall be afforded under a per occurrence policy form, policy shall be endorsed and name "Manatee County, a political subdivision of the State of Florida" as an Additional Insured, and include limits not less than:  • Property and asset coverage in the full replacement value of the lot or garage.
<b>14.</b> Bailee's Customer Liability Insurance	Coverage shall be required for damage and/or destruction when County property is temporarily under the care or custody of a person or organization, including property that is on, or in transit to and from the person or organization's premises. Perils covered should include fire, lightning, theft, burglary, robbery, explosion, collision, flood, earthquake and damage or destruction during transportation by a carrier.
	Coverage shall be afforded under a per occurrence policy form, policy shall be endorsed and name "Manatee County, a political subdivision of the State of Florida" as an Additional Insured, and include limits not less than:  Property and asset coverage in the full replacement value of the County asset(s) in the Successful Proposer's care, custody and control.
	Coverage shall be afforded under a per occurrence policy form, policy shall be endorsed and name "Manatee County, a political subdivision of the State of Florida" as an Additional Insured, and include limits not less than:
15. Hull and Watercraft	\$ Each Occurrence;
Liability Insurance	• \$ General Aggregate
	\$ Fire Damage Liability
	• \$ <u>10,000</u> Medical Expense, and
	<ul> <li>\$ Third Party Property Damage.</li> <li>\$ Project Specific Aggregate (Required on projects</li> </ul>
	valued at over \$10,000,000)
16. Other (Please Specify)	

#### **BOND REQUIREMENTS**

	A Bid Bond in the amount of \$ or% of the total offer. Bid bond shall be submitted with the sealed response and shall include project name, location, and / or address and project number.
17. 🗌 Bid Bond	In lieu of the bond, the bidder may file an alternative form of security in the amount of \$ or% of the total offer. in the form of a money order, a certified check, a cashier's check, or an irrevocable letter of credit issued to Manatee County.
	NOTE: A construction project over \$200,000 requires a Bid Bond in the amount of 5% of the total bid offer.
18. Payment and Performance Bond	A Payment and Performance Bond shall be submitted by Successful Bidder for 100% of the award amount and shall be presented to Manatee County within ten (10) calendar days of issuance of the notice of intent to award.
	NOTE: A construction project over \$200,000 requires a Payment and Performance Bond.
Approved:	Date:

#### **INSURANCE REQUIREMENTS**

- I. THE POLICIES BELOW ARE TO CONTAIN, OR BE ENDORSED TO CONTAIN, THE FOLLOWING PROVISIONS:
  - 1. Commercial General Liability and Automobile Liability Coverages
    - a. "Manatee County, a Political Subdivision of the State of Florida," is to be named as an Additional Insured in respect to: Liability arising out of activities performed by or on behalf of the Successful Proposer, his agents, representatives, and employees; products and completed operations of the Successful Proposer; or automobiles owned, leased, hired or borrowed by the Successful Proposer. The coverage shall contain no special limitation(s) on the scope of protection afforded to the County, its officials, employees or volunteers.

In addition to furnishing a Certificate of Insurance, the Successful Proposer shall provide the endorsement that evidences Manatee County being listed as an Additional Insured. This can be done in one of two ways: (1) an endorsement can be issued that specifically lists "Manatee County, a Political Subdivision of the State of Florida," as Additional Insured; or, (2) an endorsement can be issued that states that all Certificate Holders are Additional Insured with respect to the policy.

- b. The Successful Proposer's insurance coverage shall be primary insurance with respect to the County, its officials, employees and volunteers. Any insurance or self-insurance maintained by the County, its officials, employees or volunteers shall be excess of Successful Proposer's insurance and shall be non-contributory.
- c. The insurance policies must be on an occurrence form, unless specifically noted otherwise.

#### 2. Workers' Compensation and Employers' Liability Coverages

The insurer shall agree to waive all rights of subrogation against the County, its officials, employees and volunteers for losses arising from work performed by the Successful Proposer for the County.

- II. GENERAL INSURANCE PROVISIONS APPLICABLE TO ALL POLICIES:
  - 1. Prior to the execution of contract, or issuance of a Purchase Order, and then annually upon the anniversary date(s) of the insurance policy's renewal date(s) for as long as this contract remains in effect, Successful Proposer shall furnish the County with a Certificate(s) of Insurance (using an industry accepted certificate form, signed by the Issuer, with applicable endorsements, and containing the solicitation or contract number, and title or description) evidencing the coverage set forth above and naming "Manatee County, a Political Subdivision of the State of Florida" as an Additional Insured on the applicable coverage(s) set forth above. In addition, when requested in writing from the County, Successful Proposer will provide the County with a certified copy of all applicable insurance policies. The address where such certificates and certified policies shall be sent or delivered is as follows unless otherwise provided:

Manatee County, a Political Subdivision of the State of Florida Attn: Purchasing Division - Procurement 1112 Manatee Avenue West Bradenton, FL 34205

- **2.** The project's solicitation number and title shall be listed on each Certificate of Insurance or policy.
- **3.** If the policy contains an aggregate limit, confirmation is needed in writing (letter, email, etc.) that the aggregate limit has not been eroded to procurement representative when supplying Certificate of Insurance.
- **4.** Successful Proposer shall provide thirty (30) days written notice of any cancellation, non-renewal, termination, material change, or reduction in coverage of any insurance policies to procurement representative including solicitation number and title with all notices.
- **5.** Successful Proposer agrees that should at any time Successful Proposer fail to meet or maintain the required insurance coverage(s) as set forth herein, the County may terminate this contract.
- **6.** The Successful Proposer waives all subrogation rights against Manatee County, a Political Subdivision of the State of Florida, for all losses or damages which occur during the contract and for any events occurring during the contract period, whether the suit is brought during the contract period or not.
- **7.** The Successful Proposer has sole responsibility for all insurance premiums and policy deductibles.
- **8.** It is the Successful Proposer's responsibility to ensure that his agents, representatives and subcontractors comply with the insurance requirements set forth herein. Successful Proposer shall include his agents, representatives, and subcontractors working on the project or at the worksite as insured under its policies, or Successful Proposer shall furnish separate certificates and endorsements for each agent, representative, and subcontractor working on the project or at the worksite. All coverages for agents, representatives, and subcontractors shall be subject to all the requirements set forth to the procurement representative.
- **9.** All required insurance policies must be written with a carrier having a minimum A.M. Best rating of A- FSC VII or better. In addition, the County has the right to review the Successful Proposer's deductible or self-insured retention and to require that it be reduced or eliminated.
- III. Successful Proposer understands and agrees that the stipulated limits of coverage listed herein in this insurance section shall not be construed as a limitation of any potential liability to the County, or to others, and the County's failure to request evidence of this insurance coverage shall not be construed as a waiver of Successful Proposer's obligation to provide and maintain the insurance coverage specified.
- IV. Successful Proposer understands and agrees that the County does not waive its immunity and nothing herein shall be interpreted as a waiver of the County's rights, including the limitation of waiver of immunity, as set forth in Florida Statutes 768.28, or any other statutes, and the County expressly reserves these rights to the full extent allowed by law.
- **V.** The enclosed Hold Harmless Agreement shall be signed by the Successful Proposer and shall become a part of the contract.
- VI. No award shall be made until the Procurement Division has received the Certificate of Insurance and Hold Harmless Agreement in accordance with this section.

[Remainder of page intentionally left blank]

## ATTACHMENT E INSURANCE STATEMENT IFB No. 19-R071301CB

**THE UNDERSIGNED** has read and understands the insurance requirements applicable to any contract resulting from this solicitation and shall provide the insurances required by this Attachment within ten (10) days from the date of Notice of Intent to Award.

Bidder Name:	Date:
Signature (Authorized Official):	
Printed Name/Title:	
Insurance Agency:	
Agent Name:	Agent Phone:

Return this signed statement with your bid or proposal.

## ATTACHMENT F CONFLICT OF INTEREST AFFIDAVIT IFB No. 19-R071301CB

The award of this contract is subject to the provisions of Manatee County Code of Laws. Bidder must disclose within its Bid: the name of any officer, director, or agent who is also an employee of Manatee County. Furthermore, all Bidders must disclose the name of any County employee who owns, directly or indirectly, an interest of more than five percent (5%) in the Bidder's firm or any of its branches.

By signing below, Bidder confirms that it is not currently engaged or will not become engaged in any obligations, undertakings or contracts that will require the firm to maintain an adversarial role against the County or that will impair or influence the advice or recommendations it provides to the County.

Please check of	one of the following statements and attach additional documentation if necessary:
	To the best of our knowledge, the undersigned firm has no potential conflict of interest for this IFB.
	The undersigned firm, by attachment to this form, submits information which may be a potential conflict of interest for this IFB.
Acknowledge	d and attested to by:
Firm N	Name
Signat	ture
Name	and Title (Print or Type)
Date	

Return this fully executed form with your bid.

## ATTACHMENT G Scrutinized Company Certification IFB No. 19-R071301CB

This certification is required pursuant to Florida State Statute Section 287.135.

As of July 1, 2011, a company that, at the time of bidding or submitting a proposal for a new contract or renewal of an existing contract, is on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List is ineligible for, and may not bid on, submit a proposal for, enter into, or renew a contract with an agency or local governmental entity for goods or services of \$1 million or more.

#### Bidder must fully complete and return this form with its Bid.

Company	FID or EIN No		
Address			
City	State	Zip	
l,	, as a representative of		
certify and affirm that this con	mpany is not on the Scrutinized Companies w	ith Activities in Sudan List or	
the Scrutinized Companies wit	th Activities in the Iran Petroleum Energy Secto	or List.	
Signature	Title		
Printed Name	Date		

# ATTACHMENT H PRICING FORM IFB No. 19-R071301CB

- 1. Bidders must complete Attachment H in Micro Soft Excel® format, which is posted on the Procurement webpage of the County's website with this solicitation and available for download. Bidder must provide hard copies and electronic copies of the Pricing Form with its Bid per the requirements of this IFB.
- 2. Provide a firm, fixed cost. Costs must be all-inclusive, including any delivery fees, to provide the goods and/or services.

Trigge   Mode   Mode	<del></del>	-				I	T			1			1		1		1	1	T
Group A   A1   31/102   AUGNET SEGOLOGY   F. A   3   5   5   6   7   7   7   7   7   7   7   7   7						Three-				<u> </u>		Lead Time			3-Yr Ext				Alternate
Group A. 24   341102   AUSSIGN BESTOLOGY   E. A. 3									J	_		-							
Group A   A2   SATIOS   ALEXANER SOULCRC   EA   3				·	_	Usage	(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
Second A						3													
Group A. 54   Add 1975   Nigorment Ring Vib Data Boloock   CA   26						3													
Group A. A. 5. 3, 1,200   General PVC CL Pt MyDrysh   E.A. 78						3													
STORD A A B   \$1.500   General PK, WeyDry Pt   EA   375																			
Security A					_														
Security A				·															
Group A   AB   S14/200   Primer PVE Print vyPorts   Factor   AB   282																			
Group A ATS   391005   Play 5770 PYC SCHOLD   EA   3372																			
Group A   A13   SP1005   Pipe 3/12/20 PVC Sch00   EA   200																			
Group A   A13   91'000   91'05   91'					_														<u> </u>
Group A   A3   971066   Pipe 1**020 PVC Sch40   EA   130																			<u> </u>
Group A   34   3P1070   Pipe 1-3/4*X2D PVX-ScH00   EA   584   EA   EA   EA   EA   EA   EA   EA   E				*															<u> </u>
Group A   A15   9P1075   Pipe 1-1/2*/320 PVC ScH00   EA   138   EA   Pipe 3*				•															<u> </u>
Group A A15   3P1080   Pipe 2"X20" PVC ScH40   EA   99				•	_														<u> </u>
Group A A17   SP1005   Pipe 3*A20*PVC Sch40   EA   114				*															
Group A   A38   SP1000   Pipe 6**20*PVC Sch10   EA   16				*	_														
Group A 29   39/105   Pipe 6*320 PVC Sch40   EA   12				*															
Group A 20    39/1250   Valve 1-1/4* Ball PVC Trutinon				·	_														
Group A   A21   39/1255   Valve 1-1/2* Ball PVC TrUnion   EA   D     EA   D   EA   D   EA   D   EA   EA				•															
Group A   A22   3V1260   Valve 2" Ball PVC TrUnion																			
Group A   A23   3V1495   Valve 12" Ball PVC TrUnion   EA   9																			
Group A   A24   SV1405   Valve 1" Ball PVC TrUnion   EA   10   EGroup A   A25   SV1410   Valve 1/2" Ball PVC Sx5 Tef   EA   10   EA   EA   EA   EA   EA   EA   EA   E						16													
Group A   A25   39/1410   Valve 1/2" Ball PVC Sx5 Tef   EA   10   EA   10				·		,													
Group A   A26   3V1415   Valve 3/4" Ball PVC Sx5 Tef   EA   23																			
Group A   A27   3V1420   Valve 1" Ball PVC SxS Tef   EA   10   EGroup A   A28   3V1425   Valve 1-1/4" Ball PVC SxS Tef   EA   26   EA   29   3V1430   Valve 1-1/2" Ball PVC SxS Tef   EA   12   EA   26   EA   27   EA   27   EA   27   EA   28   EA   29   EA   29   EA   29   EA   20   E																			
Group A   A28   3V1425   Valve 1-1/A* Ball PVC SxS Tef   EA   26   EGroup A   A29   3V1430   Valve 1-1/Ball PVC SxS Tef   EA   12   EA   EA   EA   EA   EA   EA   EA   E																			
Group A   A29   3V1430   Valve 1-1/2" Ball PVC SxS Tef   EA   12																			
Group A   A30   3V1435   Valve 2" Ball PVC SXS TEF   EA   31																			
Group A   A31   3Z1004   Plug 1-1/2" Flush PVC DWV   EA   0																			
Group A   A32   3Z1010   Bushing 1-1/4"x1" MXF PVC   EA   3						31													
Group A A33 3Z1026 Bushing 1-1/4"x3/4" MXF PVC EA 31						0													
Group A   A34   3Z1020   Bushing 1-1/2"x3/4" MXF PVC   EA   2   2   2   3   3   3   3   3   3   3						3													
Group A A35 3Z1025 Bushng 1-1/2x1-1/4 MxF Sch80 EA 12						31													
Group A A36 3Z1030 Bushing 2-1/2"x2" MxF PVC EA 35						2													
Group A A37 3Z1035 Cap 3/4" PVC FIPT EA 80																			
Group A         A38         3Z1040         Cap 1-1/4" PVC FIPT         EA         8																			
Group A       A39       3Z1045       Cap 1-1/2" PVC FIPT       EA       6         Group A       A40       3Z1050       Cap 3" PVC FIPT       EA       5         Group A       A41       3Z1055       Coupling 3/4" PVC FIPT       EA       1418         Group A       A42       3Z1060       Coupling 1" PVC FIPT       EA       105         Group A       A43       3Z1065       Ell 3/4" PVC FIPT 90deg Sch80       EA       1490         Group A       A44       3Z1070       Ell 1/2" PVC FIPT 90deg Sch80       EA       0         Group A       A45       3Z1075       Ell 1" PVC FIP 90deg Sch80       EA       33				•		80													
Group A       A40       3Z1050       Cap 3" PVC FIPT       EA       5         Group A       A41       3Z1055       Coupling 3/4" PVC FIPT       EA       1418         Group A       A42       3Z1060       Coupling 1" PVC FIPT       EA       105         Group A       A43       3Z1065       Ell 3/4" PVC FIPT 90deg Sch80       EA       1490         Group A       A44       3Z1070       Ell 1/2" PVC FIPT 90deg Sch80       EA       0         Group A       A45       3Z1075       Ell 1" PVC FIP 90deg Sch80       EA       33						8													
Group A         A41         3Z1055         Coupling 3/4" PVC FIPT         EA         1418						6													
Group A         A42         3Z1060         Coupling 1" PVC FIPT         EA         105         Image: Company of the company						5													
Group A         A43         3Z1065         Ell 3/4" PVC FIPT 90deg Sch80         EA         1490           Group A         A44         3Z1070         Ell 1/2" PVC FIPT 90deg Sch80         EA         0           Group A         A45         3Z1075         Ell 1" PVC FIP 90deg Sch80         EA         33																			
Group A         A44         3Z1070         Ell 1/2" PVC FIPT 90deg Sch80         EA         0           Group A         A45         3Z1075         Ell 1" PVC FIP 90deg Sch80         EA         33																			
Group A						1490													
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Group A   A46   3Z1080   Ell 1-1/4" PVC FIP 90deg Sch80   EA   2						33													
	Group A	A46				2													
Group A				_		3													
Group A	Group A	A48	3Z1090	Ell 2" PVC FIP 90deg Sch80		8													
Group A   A49   3Z1095   Ell 3" PVC FIP 90deg Sch80   EA   10   EA   10   EA   EA   EA   EA   EA   EA   EA   E						10													
Group A	Group A	A50	3Z1100	Nipple 1"x12" PVC Sch80	EA	1													
Group A A51 3Z1105 Nipple 1-1/4"x8" PVC Sch80 EA 0		Δ51	3Z1105	Nipple 1-1/4"x8" PVC Sch80	ΕA	0													
Group A   A52   3Z1110   Nipple 1-1/4"x12" PVC Sch80   EA   0																	i		

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		NAC Charle			Three-	Manufacturer	NATC Dowt	N4fa Dowt	Fansian	Damastia	Lead Time	Ctd Dools		3-Yr Ext		Altoriosto AAEC Dout	Altonometo	Alternate
C	140.00	MC Stock	Dogavintian	11014	Year Est.	Manufacturer	MFG Part	Mfg Part		Domestic	(Working	Std Pack	Duine	1	Alternate	Alternate MFG Part	Alternate	Part Ext
· ·	Item A53		Description Nipple 1-1/2"x12" PVC Sch80	UOM	Usage	(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
Group A	A54		Plug 3/4" MIPT PVC	EA EA	0													
Group A	A54		Plug 1" MIPT PVC	EA	466													
	A56		Plug 1-1/2" MIPT PVC	EA	400													
	A57		Plug 2" MIPT PVC	EA	2													
Group A Group A	A58		Plug 3" MIPT PVC	EA	0													
Group A	A59		Tee 3/4" PVC FIPT Sch80	EA	0													
Group A	A60		Tee 1" PVC FIPT Sch80	EA	6													
Group A	A61		Tee 1-1/4" PVC FIPT Sch80	EA	12													
Group A	A62		Tee 1-1/2" PVC FIPT Sch80	EA	8													
Group A	A63		Tee 2" PVC FIPT Sch80	EA	18													
Group A	A64		Union 1/2" PVC FIPT Sch80	EA	10													
Group A	A65		Union 3/4" PVC FIPT Sch80	EA	1													
Group A	A66		Union 1" PVC FIPT Sch80	EA	3													
Group A	A67		Union 2" PVC FIPT Sch80	EA	1													
Group A	A68		Union 3" PVC FIPT Sch80	EA	10													
Group A	A69		Union 1-1/4" PVC FIPT Sch80	EA	0													
Group A	A70		Union 1-1/2" PVC FIPT Sch80	EA	30													
Group A	A71		Adapter 1/2" PVC SxMIP	EA	95													
<u> </u>	A72		Adapter 3/4" PVC SxMIP	EA	119													
Group A	A73		Adapter 1" PVC SxMIP	EA	129													
Group A	A74		Adapter 1-1/4" PVC SxMIP	EA	25													
Group A	A75		Adapter 1-1/4"x1" PVC SxMIP	EA	23													
Group A	A76		Adapter 1-1/2" PVC SxMIP	EA	98													
Group A	A77		Adapter 2" PVC SxMIP	EA	55													
Group A	A78	3Z1260	Adapter 2-1/2" PVC SxMIP	EA	4													
Group A	A79	3Z1265	Adapter 3" PVC SxMIP	EA	30													
Group A	A80		Adapter 4" PVC SxMIP	EA	2													
Group A	A81		Adapter 6" PVC SxMIP	EA	0													
Group A	A82		Adapter 1/2" PVC SxFIP	EA	39													
Group A	A83		Adapter 3/4" PVC SxFIP	EA	546													
Group A	A84		Adapter 3/4"x1/2" PVC SxMIP	ΕA	31													
Group A	A85		Adapter 1" PVC SxFIP	EΑ	213													
			Adapter 1-1/4" PVC SxFIP	EΑ	29													
			Adapter 1-1/2" PVC SxFIP	EA	9													
Group A	A88	3Z1320	Adapter 2" PVC SxFIP	EA	39													
Group A	A89	3Z1325	Adapter 2-1/2" PVC SxFIP	EA	10													
Group A	A90	3Z1330	Adapter 3" PVC SxFIP	EA	2													
Group A	A91	3Z1335	Adapter 4" PVC SxFIP	EA	10													
Group A	A92	3Z1340	Adapter 6" PVC SxFIP	EA	6													
Group A	A93	3Z1345	Bushing 3/4"x1/2" PVC SxS	EA	123													
Group A	A94	3Z1350	Bushing 1"x1/2" PVC SxS	EA	12													
Group A	A95	3Z1355	Bushing 1"x3/4" PVC SxS	EA	171													
	A96		Bushing 1-1/4"x3/4" PVC SxS	EA	14													
			Bushing 1-1/4"x1" PVC SxS	EA	58													
			Bushing 1-1/2"x3/4" PVC SxS	EA	108													
			Bushing 1-1/2"x1" PVC SxS	EA	39													
			Bushing 1-1/2"x1-1/4" PVC SxS	EA	36													
			Bushing 2"x3/4" PVC SxS	EA	26													
			Bushing 2"x1" PVC SxS	EA	20				ļ									
			Bushing 2"x1-1/4" PVC SxS	EA	34													
Group A	A104	3Z1400	Bushing 2"x1-1/2" PVC SxS	EA	59													

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					Three-						Lead Time			3-Yr Ext				Alternate
		MC Stock			Year Est.	Manufacturer	MFG Part	Mfg Part		Domestic	(Working	Std Pack			Alternate	Alternate MFG Part	Alternate	Part Ext
Group		Number	Description	UOM		(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
Group A			Bushing 3"x2" PVC SxS	EA	30													
			Bushing 4"x2" PVC SxS	EA	2													
	A107		Bushing 4"x3" PVC SxS	EA	14													
	A108		Bushing 6"x4" PVC SxS	EA	22													
	A109		Bushing 3/4"x1/2" PVC SxFIP	EΑ	108													<del></del>
	A110		Bushing 1"x1/2" PVC SxFIP	EΑ	81													<del></del>
	A111		Bushing 1"x3/4" PVC SxFIP Bushing 1-1/4"x3/4" PVC SxFIP	EA EA	136													<del></del>
	A112		•	EA	3													<del></del>
	A113		Bushing 1-1/4"x1" PVC SxFIP		47													<del></del>
	A114		Bushing 1-1/2"x3/4" PVC SxFIP	EA	17													<del></del>
			Bushing 1-1/2"x1" PVC SxFIP	EΑ	0													<del></del>
	A116		Bushing 1-1/2"x1" PVC MxFIP	EΑ														<del></del>
	A117		Bushing 1-1/2x1-1/4 PVC SxFIP	EΑ	23													<del></del>
	A118		Bushing 2"x1/2" PVC SxFIP	EΑ	14													<del></del>
	A119 A120		Bushing 2"x3/4" PVC SxFIP Bushing 2"x1" PVC SxFIP	EA EA	1 1 1													<del></del>
	A120		Bushing 2 X1 PVC SXFIP  Bushing 2"X1-1/4" PVC SXFIP		14													$\vdash$
	A121		Bushing 2 X1-1/4 PVC SXFIP Bushing 2"x1" PVC MxFIP Sch80	EA EA	0													$\vdash$
					9													$\vdash$
	A123 A124		Bushing 2"x1-1/2" PVC SxFIP Bushing 2x1-1/4 MxFIP Sch80	EA EA	9													<del></del>
	A124		Bushing 2"x1-1/2" PVC MxFIP	EA	42													$\vdash$
	A125		Bushing 2 ×1-1/2 PVC INIXFIP  Bushing 2-1/2"x2" PVC SxFIP	EA														$\vdash$
	A126		Cap 1/2" PVC Slip	EA	13 75													$\vdash$
	A127		Cap 3/4" PVC Slip	EA	159													$\vdash$
	A128		Cap 1" PVC Slip	EA	28													$\vdash$
	A130		Cap 1" PVC SIIP	EA	20													
	A131		Cap 1-1/4" PVC Slip	EA	31													
	A131		Cap 1-1/4 FVC Slip	EA	8													
	A133		Cap 2" PVC Slip	EA	40													
	A134		Cap 2" PVC FIP	EA	48													
	A135		Cap 2-1/2" PVC Slip	EA	0													
			Cap 3" PVC Slip	EA	17													
			Cap 4" PVC Slip	EA	25													
			Cap 6" PVC Slip	EA	13													
			Cap 8" PVC Slip	EA	2													
			Coupling 1/2" PVC SxS	EA	210													
			Coupling 3/4" PVC SxS	EA	573													
			Coupling 1" PVC SxS	EA	235													
			Coupling 1-1/4" PVC SxS	EA	86													
			Coupling 1-1/2" PVC SxS	EA	351													
			Coupling 2" PVC SxS	EA	130													
			Coupling 2-1/2" PVC SxS	EA	5													
			Coupling 3" PVC SxS	EA	13													
			Coupling 4" PVC SxS	EA	14													
			Coupling 6" PVC SxS	EA	2													
			Ell 1/2" PVC SxS 45deg	EA	10													
			Ell 3/4" PVC SxS 45deg	EA	296													
			Ell 1" PVC SxS 45deg	EA	180													
			Ell 1-1/4" PVC SxS 45deg	EA	8													
			Ell 1-1/2" PVC SxS 45deg	EA	16													
			Ell 2" PVC SxS 45deg	EA	46													
			Ell 2-1/2" PVC SxS 45deg	EA	0													
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					Three-				L .		Lead Time			3-Yr Ext				Alternate
		MC Stock			Year Est.	Manufacturer	MFG Part	Mfg Part	_	Domestic	(Working	Std Pack		1	Alternate	Alternate MFG Part	Alternate	Part Ext
Group		Number	Description	UOM	Usage	(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
			Ell 3" PVC SxS 45deg	EA	2													
			Ell 4" PVC SxS 45deg	EA	13													<del>                                     </del>
			Ell 6" PVC SxS 45deg	EA	4													
	A160		Ell 8" PVC SxS 45deg	EA	0													
	A161		Ell 1/2" PVC SxS 90deg	EA	182													
	A162		Ell 3/4" PVC SxS 90deg	EA	528													
	A163		Ell 3/4" PVC 90deg St	EA	20													
	A164		Ell 3/4" PVC FxM 90deg St	EA	67													
	A165		Ell 3/4" PVC SxF 90deg	EA	140													
	A166		Ell 1" PCV SxF 90deg	EA	198													
	A167		Ell 1" PVC SxS 90deg	EA	297													
	A168		Ell 1-1/4" PVC SxS 90deg	EA	18													<b></b>
	A169		Ell 1-1/2" PVC SxS 90deg	EA	60													<b></b>
	A170		Ell 2" PVC SxS 90deg	EA	126													
	A171		Ell 2-1/2" PVC SxS 90deg	EA	0													
			EII 3" PVC SxS 90deg	EA	8													
	A173		EII 4" PVC SxS 90deg	EA	16													
	A174		Ell 6" PVC SxS 90deg	EA	7													
			Ell 8" PVC SxS 90deg	EA	0													
	A176		Tee 1/2" PVC Slip	EA	58													
	A177		Tee 3/4" PVC Slip	EA	61													
	A178		Tee 1" PVC Slip	EA	52													
	A179		Tee 1-1/4" PVC Slip	EA	0													
Group A	A180		Tee 1-1/2" PVC Slip	EA	45													
Group A	A181	3Z1775	Tee 2" PVC Slip	EA	43													
Group A	A182		Tee 2-1/2" PVC Slip	EA	1													
Group A	A183	3Z1785	Tee 3" PVC Slip	EA	22													1
Group A	A184	3Z1790	Tee 4" PVC Slip	EA	0													1
Group A	A185		Tee 6" PVC Slip	EA	0													1
Group A	A186	3Z1800	Tee 8" PVC Slip	EA	0													
Group A	A187	3Z1810	Nipple 3/4"x2" PVC Sch80	EA	17													
			Nipple 3/4"x4" PVC Sch80	EA	2672													
Group A	A189	3Z1820	Nipple 3/4"x8" PVC Sch80	EA	0													ĺ
Group A	A190	3Z1825	Nipple 3/4"x12" PVC Sch80	EA	2													
Group A	A191	3Z1830	Nipple 1"x2" PVC Sch80	EA	1													
Group A	A192	3Z1835	Nipple 1"x4" PVC Sch80	EA	0													
Group A	A193	3Z1840	Nipple 1"x6" PVC Sch80	EA	0													
Group A	A194	3Z1845	Nipple 1-1/4"x2" PVC Sch80	EA	9													
Group A	A195	3Z1850	Nipple 1-1/4"x4" PVC Sch80	EA	6													
Group A	A196	3Z1855	Nipple 1-1/2"x2" PVC Sch80	EA	20													
Group A	A197	3Z1860	Nipple 1-1/2"x4" PVC Sch80	EA	0													
Group A	A198	3Z1865	Nipple 1-1/2"x8" PVC Sch80	EA	0													
			Nipple 2"xClose PVC Sch80	EA	20													
			Nipple 2"x4" PVC Sch80	EΑ	5													
			Nipple 2"x8" PVC Sch80	EA	22													
			Nipple 2"x12" PVC Sch80	EA	14													
			Nipple 3"xClose Sch 80	EA	10													
			Plug 4" PVC Screw	EA	779													
			Plug 6" PVC Screw	EA	1854													
			Adapter 3" PVC FIPxFLG	EA	6													
			Adapter 4" PVC FIPxFLG	EA	12													
			Adapter 6" PVC FIPxFLG	EA	2													
~p- · ·														1		I.		

			I		Thron						Load Timo			3-Yr Ext				Alternate
		NAC Charle			Three-	Manufaatuus	NACC Down	Mfa Dawt	Fausian	Domostis	Lead Time	Ctd Dool			Altoropoto	Altonomic AAEC Dont	Altaroata	
	l	MC Stock	5		Year Est.	Manufacturer	MFG Part	Mfg Part		Domestic	(Working	Std Pack		1	Alternate	Alternate MFG Part	Alternate	Part Ext
Group			Description	UOM	Usage	(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
Group A			Adapter 3" PVC SxFLG	EA	/													<b></b>
Group A			Adapter 4" PVC SxFLG	EA	31													<b></b>
			Adapter 6" PVC SxFLG	EA	8													
			Flng Spigot 4" Van Stone Sch80	EA	4													
			Flng Spig 2-1/2" VStone Sch80	EA	10													
			Coupling 4" PVC SxS Sch80	EA	22													
			Coupling 6" SxS PVC Sch80	EA	0													
Group A	A216		EII 2" PVC SxS 90deg Sch80	EA	76													1
Group A	A217	3Z2640	Ell 4" PVC SxS 90deg Sch80	EA	6													1
Group B	B1	3J1030	Clmp 4" Bell Restraint C900	EA	44													1
Group B	B2	3J1035	Clmp 6" Bell Restraint C900	EA	19													
Group B	В3	3J1040	Clmp 8" Bell Restraint C900	EA	53													
Group B	B4	3J1185	Clmp 6" Leak Bell Joint C900	EA	2													
Group B	B5		Clmp 8" Leak Bell Joint C900	EΑ	3				1									
Group B	В6		Clmp 10" Leak Bell Joint C900	EA	0													
Group B	В7		Clmp 12" Leak Bell Joint C900	EA	0				1									
Group B	В8		Pipe 4"x20' PVC C900 Blue	ΕA	33				1									
Group B	В9		Pipe 4"x20' PVC C900 Green	EA	8				†					1				
Group B	B10		Pipe 6"x20' PVC C900 Blue	EA	78													
Group B	B11		Pipe 6"x20' PVC C900 Green	EA	28													
Group B	B12		Pipe 8"x20' PVC C900 Blue	EA	9													
Group B	B13		Pipe 8"x20' PVC C900 Green	EA	18													
Group B	B14		Pipe 10"x20' PVC C900 Blue	EA	Ω				<del> </del>									
Group B	B15		Pipe 10 x20 PVC C900 Green	EA	7													
Group B	B16		Pipe 12"x20' PVC C900 Green	EA	11													
<u> </u>	B17		Pipe 16"x20' PVC C900 Green	EA	11													
Group B				EA					<u> </u>									
Group B	B18		Pipe 12"x20' PVC C900 Blue Pipe 16"x20' PVC C900 Blue	EA	23				<u> </u>									
Group B	B19																	<del></del>
Group B			Pipe 4"x20' PVC C900 Purp	EA	0													
Group B	B21		Pipe 6"x20' PVC C900 Purp	EA	8													<del></del>
Group B	B22		Pipe 8"x20' PVC C900 Purp	EA	13				-									
Group B	B23		Pipe 10"x20' PVC C900 Purp	EA	0													<b></b>
			Pipe 12"x20' PVC C900 Purp	EA	0													<b></b>
Group C			Pipe 10"x14' SDR26 Green	EA	8													
Group C			Pipe 4"x13' SDR26 Green	EA	224													
Group C			Pipe 6"x14' SDR26 Green	EA	482				1					1				
Group C			Pipe 8"x13' SDR26 Green	EA	54				<del>                                     </del>					<u> </u>				
Group C			Cam Loc 3"x15" Hose Asm Strain	EA	143				ļ					ļ				
Group C	C6		Hose Asm 3" Strain RHS35	EA	11				<del>                                     </del>					<u> </u>				
Group C			Pipe 3/4"x100' Poly Purp	RO	2													
Group C			Pipe 3/4"x100' Poly Blue	RO	229													
Group C			Pipe 1"x100' Poly Blue	RO	954									<u> </u>				
Group C			Pipe 1-1/2"x100' Poly Blue	RO	7													
Group C			Pipe 2"x100' Poly Blue	RO	461													
Group C	C12	3P1303	Pipe 2"x20'SDR 21 CL200 Purple	EA	0													
Group C	C13	3P1310	Pipe Cutter Poly #SC125	EA	103													
Group C	C14	3P1315	Pipe 1"x100' Poly Purp	RO	14													
Group C			Plastic Tube Cutter	EΑ	193													
Group C			Pipe 1-1/2"x100' Poly Purp	RO	0													
Group C			Pipe 2"x100' Poly Purp	EA	6													
Group C			Pump w/6' Hose Thirsty Mate	EA	175				1									
Group C			Adapter 4" Cleanout M PVC	EA	609				†					1				
	, J-J	<b> </b>	1		003	1		1			<u> </u>	<u> </u>			I	I .		

					Three-						Lead Time			3-Yr Ext				Alternate
		NAC Stock				Manufacturor	MFG Part	Mfg Dart	Foreign	Domostic		Std Pack			Altornato	Altarnata MEG Bart	Altornato	
Cuarra	ltom	MC Stock	Description	11014	Year Est.	Manufacturer		Mfg Part		Domestic (D)	(Working		Drico	1	Alternate MFG	Alternate MFG Part Number	Alternate	Part Ext
Group Group C	Item C20		Description Adapter 6" Cleanout F PVC	UOM EA	Usage 1580	(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	IVIFG	Number	Purt Price	Price (J x W)
Group C	C21		Ell 4" SDR26 BxB 45deg	EA	1360													
Group C	C21		Ell 4" SDR26 SxB 45deg	EA	651													
Group C	C23		Ell 6" SDR26 BxB 45deg	EA	18													
Group C	C24		Ell 6" SDR26 SxB 45deg	EA	1171													
	C25		Ell 4" SDR26 BxB 22-1/2deg	EA	11/1													
Group C Group C	C26		Ell 4" SDR26 SxB 22-1/2deg	EA	113													
Group C	C27		Ell 6" SDR26 BxB 22-1/2deg	EA	113													
Group C	C27		Ell 6" SDR26 SxB 22-1/2deg	EA	211													
Group C	C29		Wye 4" SDR26 Gasketed	EA	537													
Group C	C30		Wye 6" SDR26 Gasketed	EA	708													
Group C	C31		WYE 10"x6" HW SWR GxGxG	EA	708													
Group C	C32		Wye 8"x6" SDR26 Gasketed	EA	119													
Group C	C33		Wye 6"x6"x6" SDR26 Gasketed	EA	98													
Group C	C34		Plug 4" Push	EA	256													
Group C	C35		Lug 6" Push	EA	221													
Group C	C36		Increaser 6"x4" SDR26	EA	221 Q													
Group C	C37		Tee 6"x4" SDR26 Sanitary	EA	36													
Group D	D1		Insert 3/4" Poly Tubing	EA	21													
Group D	D2		Insert 1" Poly Tubing	EA	664													
Group D	D3		Insert 2" Poly Tubing	EA	210													
Group D	D4		Insert 1-1/2" Poly Tubing	EA	5													
Group E	E1		Valve 3" w/pet cock OSY	EA	2													
Group E	E2		Valve 4" w/pet cock OSY	EA	5													
Group E	E3		Valve 6" w/pet cock OSY	EA	5													
Group E	E4		Valve 10" w/pet cock OSY	EA	2													
Group E	E5		Valve 3" Gate Fing	EA	1													
Group E	E6		Valve 6" Gate Fing	EA	18													
Group E	E7		Valve 4" Gate Fing	EA	35													
Group E	E8		Valve 8" Gate Fing	EA	12													
Group E	E9		Valve 10" Gate Fing	EA	0													
Group E	E10		Valve 12" Gate Fing	EA	0													
			Valve 3" Gate MJ EPDM	FA	1													
Group E			Valve 4" Gate MJ EPDM	EA	73													
Group E			Valve 6" Gate MJ EPDM	EA	136													
Group E			Valve 8" Gate MJ EPDM	EA	36													
Group E			Valve 10" Gate MJ EPDM	EA	6													
			Valve 12" Gate MJ EPDM	EA	13													
Group E			Valve 16" Gate MJ EPDM	EA	3													
			Valve 4" Tap MJ EPDM	EA	14													
			Valve 6" Tap MJ EPDM	EA	24													
			Valve 8" Tap MJ EPDM	EA	4													
Group E			Valve 10" Tap MJ EPDM	EA	5				1					1				
Group E			Valve 12" Tap MJ EPDM DI	EA	3				1					1				
Group E			Valve 3' Stem Ext	EA	7													
Group E			Valve 4' Stem Ext	EA	6				1					1				
Group E			Valve 5' Stem Ext	EA	4				1					1				
Group E			Valve ID Tag Brass Hyd GV	EA	57													
Group E			Valve ID Tag Brass GV	EA	320				1					1				
Group E			Valve ID Tag Brass BFV	EA	80				1					1				
Group E			Valve ID Tag Brass Blank	EA	109				1					1				
Group E			Valve ID Tag Brass BFV Reclaim	EA	5				1					1				

		1		1	Thron				l		Load Time			3-Yr Ext		T	Ī	Alternate
		MC Stock			Three- Year Est.	Manufacturer	MFG Part	Mfg Part	Foreign	Domostic	Lead Time (Working	Std Pack			Alternate	Alternate MFG Part	Altornato	Part Ext
Group	Item		Description	UOM		(MFG)	Number	Description	(F)	Domestic (D)	Days)	Qty	Price	S)	MFG	Number	Alternate	Price (J x W)
Group Group E			Valve ID Tag Brass GV Reclaim	EA	Usage 5	(IVII G)	Number	Description	(1)	(D)	Daysj	Qty	rrice	3)	WITO	Number	runtrice	Trice (3 X VV)
Group E	E32		Valve 2" Air Release Sewer E	EA	323													
Group E	E33		VALVE PRESSURE RELIEF 3/4"3000"	EA	20													
	E34		Valve 1" Air Release Water	EA	65													
Group E	E38		Gauge Pressure 0-200# 1/4"npt	EA	97													
Group F	F1		Adapter 3" FLGxMJ DI	EA	3													
Group F	F2		Adapter 4" FLGxMJ DI	ΕA	3													
Group F	F3	3A1015	Adapter 6" FLGxMJ DI	EΑ	0													
Group F	F4	3A1016	Adapter 8" FLGxMJ DI	EA	20													
Group F	F5	3A1025	Adapter 3" Fing Coup Di	EA	0													
Group F	F6	3A1030	Adapter 4" Fing Coup DI	EA	4													
Group F	F7	3A1035	Adapter 6" Fing Coup DI	EA	0													
Group F	F8	3A1040	Adapter 8" Fing Coup DI	EA	8													
Group F	F9		Adapter 3" Uniflg CI 400-C	EA	8													
Group F	F10		Adapter 4" Uniflg CI MOD 400-C	EA	23													
Group F	F11		Adapter 6" Uniflg CI MOD 400-C	EA	10													
Group F	F12		Adapter 6" MJ w/kit SDR11	EA	62													
Group F	F13		Adapter 8" MJ w/kit SDR11	EA	16													
Group F	F14		Ell 4" Fing Di 45deg Epoxy	EA	0													
Group F	F15		Ell 6" Fing Di 90deg Epoxy	EA	2													
Group F	F16		Ell 8" Fing Di 90deg Epoxy	EA	4													<b></b>
Group F	F17		Blind 6" Flng DI Epoxy	EA	19													<b></b>
Group F	F18		Blind 8" Flng DI	EA	13													<b></b>
Group F	F19		Cross 4" Fing DI Epoxy	EA	0													
Group F	F20		Cross 6" Fing DI Epoxy	EA	5													<b></b>
Group F	F21		Cross 8" Fing DI Epoxy	EA	1													<b></b>
Group F	F22		Ell 3" Fing DI 90deg Epoxy	EA	2													<del>                                     </del>
Group F	F23		Ell 4" Fing DI 90deg Epoxy	EA	2													<del>                                     </del>
Group F	F24		Ell 12" Fing DI 90deg	EA	0													<del>                                     </del>
Group F	F25		Ell 3" Fing DI 45deg Epoxy	EA	0													<del>                                     </del>
Group F	F26		Ell 6" Fing DI 45deg Epoxy Fing 3"x2" Tapped DI Epoxy	EA EA	0													<del>                                     </del>
Group F	F27			EA	10 15													<del></del>
Group F	F20	3F1070	Fing 4"x2" Tapped DI Epoxy Fing 6"x2" Tapped DI Epoxy	EA	13													
	F30		Fing 8"x2" Tapped DI Epoxy	EA	2													
			Spool 3"x2' Fing DI	EA	1													
			Spool 4"x2' Fing DI Epoxy	EA	4													
			Spool 6"x2' Fing DI	EA	2													
			Spool 6"x4' Fing DI	EA	2													
	F35		Spool 6"x5' Fing DI	EA	0													
			Tee 3" Fing DI Epoxy	EA	2													
	F37		Tee 4" Fing DI Epoxy	EA	12				1									
	F38		Tee 6" Fing DI Epoxy	EA	1													
Group F	F39		Gasket 2" Flng Full Face	EA	14													
	F40		Gasket 3" Fing Full Face	EA	79													
Group F	F41		Gasket 4" Fing Full Face	EA	234													
Group F	F42		Gasket 6" Flng Full Face	EA	164													
	F43	3F1150	Gasket 8" Fing Full Face	EA	117													
Group F	F44		Gasket 10" Flng Full Face	EA	67													
	F45		Gasket 12" Fing Full Face	EA	83													
	F46		Kit 3" MJ Acc	EA	51													
Group F	F47	3K1006	Kit 3" MJ Acc w/gland	EA	0													

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					Three-						Lead Time			3-Yr Ext				Alternate
		MC Stock			Year Est.	Manufacturer	MFG Part	Mfg Part	_	Domestic	(Working	Std Pack			Alternate	Alternate MFG Part	Alternate	Part Ext
		Number	Description	UOM		(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
Group F	F48		Kit 4" MJ Acc	EA	256													
Group F	F49		Kit 4" MJ Acc w/gland	EA	600													
Group F	F50		Kit 6" MJ Acc	EA	698													
Group F	F51		Kit 6" MJ Acc w/gland	EA	/													
Group F	F52		Kit 8" MJ Acc	EΑ	181													
Group F	F53		Kit 10" MJ Acc	EΑ	32													
Group F	F54		Kit 10" MJ Acc w/gland	EA EA	96													
Group F	F55		Kit 12" MJ Acc	EA														
Group F	F56		Kit 4" Grip Ring w/acc Kit 6" Grip Ring w/acc	EA	9													
Group F	F57																	
Group F	F58		Kit 8" Grip Ring w/acc	EA EA	0													
Group F	F59 F60		Kit 10" Grip Ring w/acc Kit 12" Grip Ring w/acc		1													
Group F	F61		Kit 14" MJ Acc	EΑ	16													
Group F	F62		Kit 16" MJ Acc	EA EA	31													
Group F	F63		Kit 18" MJ Acc	EA	22													
Group F Group F	F64		Kit 20" MJ Acc	EA	24													
Group F	F65		Clmp 3" Megalug DI	EA	37													
Group F	F66		Clmp 4" Megalug DI	EA	121													
Group F	F67		Clmp 6" Megalug DI	EA	273													
Group F	F68		Clmp 8" Megalug DI	EA	120													
Group F	F69		Clmp 10" Megalug DI	EA	120													
Group F	F70		Clmp 12" Megalug DI	EA	42													
Group F	F71		Clmp 14" Megalug DI	EA	10													
Group F	F72		Clmp 16" Megalug DI	EA	13													
Group F	F73		Clamp 3" Megalug C900 w/Kit	EA	40													
Group F	F74		Clamp 4" Megalug C900 w/Kit	EA	295													
Group F	F75		Clamp 6" Megalug C900 w/Kit	EA	513													
Group F	F76		Clamp 8" Megalug C900 w/Kit	EA	110													
Group F	F77		Clamp 10" Megalug C900 w/Kit	EA	51													
Group F	F78		Clamp 12" Megalug C900 w/Kit	EA	112													
			Clmp 14" Megalug C900	EA	0													
			Clmp 16" Megalug C900	EA	8													
			Clmp 20" Megalug C900	EA	12													
			Ell 4" MJ DI 11-1/4deg Epoxy	EA	2													
			Ell 6" MJ DI 11-1/4deg Epoxy	EA	2													
			Cross 4" MJ DI	EA	5													
Group F			Cross 6" MJ DI Epoxy	EA	21													
Group F	F86		Cross 8" MJ DI Epoxy	EA	1													
Group F			Ell 4" MJ DI 22-1/2deg Epoxy	EA	12													
Group F			Ell 6" MJ DI 22-1/2deg Epoxy	EA	8													
Group F			Ell 8" MJ DI 22-1/2deg Epoxy	EA	5													
Group F			Cap 3" MJ DI Epoxy	EA	0													
Group F			Cap 4" MJ DI Epoxy	EA	2													
Group F			Cap 6" MJ DI Epoxy	EA	5													
			Cap 8" MJ DI Epoxy	EA	2													
Group F			Cap 10" MJ DI Epoxy	EA	0													
			Cap 3"x2" MJxFIPT MJ DI Epoxy	EA	12													
			Cap 4"x2" MJxFIPT DI Epoxy	ΕA	32													
			Cap 6"x2" MJxFIPT DI Epoxy	EA	12													
			Cap 8"x2" MJxFIPT DI Epoxy	EA	0													
Group F			Cap 10"x2" MJxFIPT DI	EA	0													

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		NAC CLASS			Three-	N4 C	145C D	MC D. I			Lead Time	CL I D. I		3-Yr Ext	A.11	A44	A4	Alternate
		MC Stock			Year Est.	Manufacturer	MFG Part	Mfg Part		Domestic	(Working	Std Pack			Alternate	Alternate MFG Part	Alternate	Part Ext
		Number	Description	UOM	Usage	(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
			Ell 3" MJ DI 45deg Epoxy	EA	5													<del></del>
			Ell 4" MJ DI 45deg Epoxy	EA	14													<del></del>
			Ell 6" MJ DI 45deg Epoxy	EA	62													<del></del>
			Ell 8" MJ DI 45deg Epoxy	EA	24													<del></del>
			Ell 10" MJ DI 45deg	EA	1													<b>——</b>
			Ell 12" MJ DI 45deg	EA	10													<del></del>
			Ell 12" MJ DI 45deg Epoxy	EA	2													<del></del>
			Ell 3" MJ DI 90deg Epoxy	EA	0													<b></b>
			Ell 4" MJ DI 90deg Epoxy	EA	13													<b></b>
Group F			Ell 6" MJ DI 90deg Epoxy	EA	7													
Group F			Ell 8" MJ DI 90deg Epoxy	EA	11													
			Ell 10" MJ DI 90deg Epoxy	EA	0													
Group F			Ell 12" MJ DI 90deg	EA	8													
Group F			Ell 12" MJ DI 90deg Epoxy	EA	13													
Group F			Ell 16" MJ DI 90deg	EA	0													
			Plug 20" MJ DI	EA	4													
			Plug 3" MJ DI Epoxy	EA	0													
			Plug 4" MJ DI Epoxy	EA	8													1
			Plug 6" MJ DI Epoxy	EA	0													
			Plug 8" MJ DI Epoxy	EA	0													
Group F	F120	3M1230	Plug 10" MJ DI	EA	0													
Group F	F121	3M1242	Plug 3"x2" MJxFIP DI Epoxy	EA	3													
			Plug 4"x2" MJxFIP DI Epoxy	EA	6													
Group F	F123	3M1252	Plug 6"x2" MJxFIP DI Epoxy	EA	7													
			Plug 8"x2" MJxFIP DI Epoxy	EA	10													
Group F		-	Plug 10"x2" MJxFIP DI Epoxy	ΕA	0													
Group F		-	Plug 12"x2" MJxFIP DI Epoxy	EA	2													
Group F			Reducer 4"x3" MJ DI Epoxy	EA	8													
			Reducer 6"x3" MJ DI Epoxy	EA	3													
			Reducer 6"x4" MJ DI Epoxy	EA	10													
Group F			Reducer 8"x3" MJ DI	EA	0													
			Reducer 8"x4" MJ DI Epoxy	EA	0													
			Reducer 8"x6" MJ DI Epoxy	EA	6													
			Reducer 20"x14" MJ DI	EA	2													
			Reducer 20"x14" MJ DI Epoxy	EA	2													
			Reducer 24"x12" MJ DI Epoxy	EA	2													
			Reducer 30"x14" MJ DI	EA	2													
			Reducer 8"x6" PExMJ DI	EA	3													
			Tee 3" MJ DI Epoxy	EA	0													
			Reducer 8"x6" PE DI Epoxy	EA	13							<del> </del>						<del>                                     </del>
			Tee 4" MJ DI Epoxy	EA	0													<del>                                     </del>
			Tee 6"x4" MJ DI Epoxy	EA	2													<del>                                     </del>
			Tee 6" MJ DI Epoxy	EA	12													<del></del>
			Tee 8" MJ DI	EA	0							<del>                                     </del>		<del>                                     </del>				<del>                                     </del>
				EA	_													<del></del>
			Tee 8" MJ DI Epoxy	EA	3													<del></del>
			Tee 10" MJ DI		_													<del></del>
			Tee 8"x6" MJ DI	EΑ	0													<del></del>
			Tee 8"x6" MJ DI Epoxy	EΑ	2													<del></del>
			Tee 10"x4" MJ DI Epoxy	EA	0							<u> </u>		<u> </u>				$\vdash$
	_		Tee 10"x6" MJ DI	EA	0													
			Tee 10"x8" MJ DI Epoxy	EA	2													<b></b>
Group F	F151	3M1473	Sleeve 6" MJ DI Epoxy	EA	80							<u> </u>						

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		NAC CL			Three-	N4	145C D	MC D. I			Lead Time	CL I D. I		3-Yr Ext	A4	A// A 450 D /	A4	Alternate
	l	MC Stock	<b>.</b>		Year Est.	Manufacturer	MFG Part	Mfg Part	_	Domestic	(Working	Std Pack			Alternate	Alternate MFG Part	Alternate	Part Ext
			Description	UOM		(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
Group F			Sleeve 8" MJ DI Epoxy	EA	61													<del></del>
Group F			Sleeve 3" MJ DI Epoxy	EA	10													<del></del>
			Sleeve 4" MJ DI Epoxy	EA	35													<del></del>
			Sleeve 4" MJ Protecto 401	EA	20													<del></del>
			Sleeve 6" MJ Protecto 401	EA	19													<del></del>
			Ell 4" Protecto 401 45 Deg	EA	6													<del></del>
Group F			Sleeve 10" MJ DI Epoxy	EA	2													<del></del>
			Sleeve 8" MJ Protecto 401	EA	12													<del></del>
Group F			Sleeve 10" MJ Protecto 401	EA	14													<del></del>
Group F	F161		Sleeve 12" MJ DI Epoxy	EA	24													<del></del>
Group F	F162		Sleeve 12" MJ Protecto 401	EA	17													<b></b>
Group F			Ell 6" Protecto 401 45 Deg	EA	12													<b></b>
Group F			Ell 8" Protecto 401 45 Deg	EA	14													<b></b>
Group F			Ell 10" Protecto 401 45 Deg	EA	4													
Group F			Sleeve 14" MJ DI Epoxy	EA	2													
Group F			Ell 12" Protecto 401 45 Deg	EA	5													
Group F			Sleeve 16" MJ DI Epoxy	EA	3													
Group F			Sleeve 18" MJ DI Epoxy	EA	2													
			Sleeve 20" MJ DI Epoxy	EA	3													
			Sleeve 24" MJ DI	EA	2													
			Sleeve 30" MJ DI	EA	0													
			Sleeve 36" MJ DI	EA	0													
			Gasket 3" MJ	EA	6													
			Gasket 6" MJ	EA	18													
Group F			Gasket 8" MJ	EA	32													
Group F	F177		Gasket 10" MJ	EA	19													
Group F			Gasket 12" MJ	EA	31													
Group F			Gasket 3" Trans	EA	9													
Group F			Gasket 4" Trans	EA	66													
Group F			Gasket 6" Trans	EA	84													
Group F			Gasket 8" Trans	EA	40													
Group F			Gasket 10" Trans	EA	3													1
Group F	F184	3M1585	Gasket 12" Trans	EA	15													1
Group F	F185	3M1595	Gasket 16" Trans	EA	7													
Group F	F186	3M1601	Sleeve 4" MJ C153 Permox	EA	20													
Group F	F187	3M1602	Sleeve 6" MJ C153 Permox	EA	20													
Group F	F188	3M1603	Sleeve 8" MJ C153 Permox	EA	10													
Group F	F189	3M1604	Sleeve 10" MJ C153 Permox	EA	10													
Group F	F190	3M1605	Sleeve 12" MJ C153 Permox	EΑ	5													
Group F	F191	3M1650	Ell 4" MJ Permox 45 Deg	EA	20													
Group F	F192	3M1651	Ell 6" MJ Permox 45 Deg	EA	20													
Group F	F193	3M1652	Ell 8" MJ Permox 45 Deg	EA	10													
Group F	F194	3M1653	Ell 10" MJ Permox 45 Deg	EΑ	5													
			Ell 12" MJ Permox 45 Deg	ΕA	5													
			ELL 4" MJ PERMOX 45 DEG	ΕA	20													
			ELL 6" MJ PERMOX 45 DEG	EA	20													
			ELL 8" MJ PERMOX 45 DEG	EA	10													
			TEE 4" MJ PERMOX C153	EA	5													
Group F			TEE 6" MJ PERMOX C153	ΕA	5													
			TEE 8" MJ PERMOX C153	EA	5													
			REDUCER 8X6 MJ PERMOX C153	EA	10													
			REDUCER 6X4 MJ PERMOX C153	EA	10													
						1								1		1		

-					I	Г						1						
					Three-						Lead Time			3-Yr Ext				Alternate
		MC Stock			Year Est.	Manufacturer	MFG Part	Mfg Part	_	Domestic	(Working	Std Pack		•	Alternate	Alternate MFG Part	Alternate	Part Ext
		Number	Description	UOM		(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
			Pipe 4"x20' CL52 DI	EA	24													
	F205		Gasket 4" DI Pipe Amer	EA	11													
	F206		Pipe 6"x20' CL52 DI	EA	66													
	F207		Gasket 6" DI Pipe Amer	EA	41													
Group F	F208		Pipe 8"x20' CL52 DI	EA	53													
Group F	F209		Gasket 8" DI Pipe Amer	EA	67													
Group F	F210		Pipe 10"x20' CL52 DI	EA EA	1													
Group F	F211		Gasket 10" DI Pipe Amer	EA	3													
Group F	F212		Pipe 12"x20' CL52 DI	EA	12													
Group F	F213		Gasket 12" DI Pipe Amer		12													
Group F	F214		Pipe 16"x20' CL50 DI	EΑ	9													
Group F	F215		Pipe 3"x20' FLGxFLG DI	EΑ	0													
Group F	F216 F217		Pipe 4"x20' FLGxFLG DI Pipe 6"x20' FLGxFLG DI	EΑ	4													
Group F			•	EΑ	1													
Group F	F218		Slv 36x8 412 38.05-38.55 SS	EA EA	2													
	F219		Slv 36x10 412 38.05-38.55 SS		0													
	F220 F221			EΑ	3													
	F221		Slv 36x12 412 38.30-38.50 SS Saddle 2"x1" Tap 2.38 PVC	EA EA	100													
Group F	F222		Saddle 2" Tap 2.125x1IP Poly	EA	87													
Group F	F223			EA	54													
Group F	F224		Saddle 3"x1" Tap DI AC Epoxy Saddle 4"x1" Tap AC 4.80-5.40	EA	188													
Group F	F225		Saddle 3"x2" Tap AC 4.80-5.40	EA	100													
Group F	F227			EA	31													
Group F	F227		Saddle 4"x2" Tap AC 4.80-5.40 Saddle 6"x1" Tap AC 6.90-7.50	EA	209													
Group F Group F	F229		Saddle 6 "x2" Tap AC 6.90-7.50	EA	40													
Group F	F230		Saddle 8"x1" Tap AC 9.05-9.62	EA	37													
Group F	F230		Saddle 8 "x2" Tap AC 9.05-9.62	EA	7													
Group F	F232		Saddle 10x2 Tap AC 11.10-12.12	EA	0													
Group F	F233		Saddle 12x2 Tap AC 11:10-12:12 Saddle 12x2 Tap AC 13:20-14:38	EA	13													
Group F	F234		Saddle 14x2 Tap AC 15.30-16.80	EA	1													
			Saddle 16x2 Tap AC 17.40-18.90	EA	7													
			Saddle 16"x2" AC CL200	EA	Δ													
			Saddle 18x2 Tap AC 19.50-21.10	EA	4													
			Saddle 24"x2" Tap DI Epoxy	EA	0													
			Saddle 30x2 Tap AC 30.50-32.10	EA	1													
		3T1110		EA	0													
	F241		Saddle 1-1/2"x1" Tap PVC 1.90	EA	10													
			Saddle 2-1/2"x1" Tap PVC 2.88	EA	8													
			Saddle 3"x1" Tap PVC 3.50	EA	18													
			Saddle 3"x2" Tap PVC 3.50	EA	8													
			Saddle 4"x2" Tap PVC 4.50	EA	48													
			SDL IP SS DBL BLT 4X2 4.4-4.8	EA	51													
			Saddle 4"x1" Tap PVC 4.50	EA	140													
			Saddle 6"x1" Tap PVC 6.63	EA	255													
			Saddle 6"x2" Tap PVC 6.63	EA	55													
			SDL IP SS DBL BLT 6X2 6.5-6.9	EA	54													
			Saddle 8"x1" Tap PVC 8.63	EA	73													
			SDL IP SS DBLBLT 8X2 8.63-9.05	EA	47													
			Saddle 8"x2" Tap PVC 8.63	EA	28													
			Saddle 10"x2" Tap PVC 10.75	EA	7													
			Saddle 12"x2" Tap PVC 12.75	EA	13													
						l .						1		1			<u> </u>	

Miles   Miles   Miles   Description   Miles   Description   Miles		1	1		1 1					1			_		I 1				
Ecology   1925   ST192   System   Cology   Col						Three-						Lead Time			3-Yr Ext				Alternate
Group   Fig.   1971    Dec									J	_									
Compage   Part   ST   ST   ST   ST   ST   ST   ST   S				·	_	Usage	(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
Compart   Part   Comp						0													$\vdash$
Compage   Part   Comp						4													
Group   7.95   37520   Store March 1974   Special St.						0													
Second   Fig.   Second   Sec																			$\vdash$
Group   Pack   171285   Development   Pack   10				·	_	4													$\vdash$
Group   Fig.   283   1712-0   28   100-8421 (1.0714.75   5   E.A.   0						2													$\vdash$
Emorgin				·															$\vdash$
Group   766   71755   71756						- 0													$\vdash$
Group   1269   317529   3175						/													
Group F 2007 3171265 St 1566 412 18.07 19.19 FA 1 Group F 2008 3171260 St 1566 412 19.64 12.00 155 EA 2 Group F 7008 3171260 St 1566 412 19.64 12.00 155 EA 0 Group F 7008 3171260 St 1566 412 19.64 12.00 155 EA 0 Group F 7008 3171260 St 1566 412 19.64 12.00 155 EA 0 Group F 7008 3171260 St 1566 412 19.64 12.00 155 EA 0 Group F 7008 3171260 St 1566 412 19.64 12.00 155 EA 0 Group F 7008 3171260 St 1566 412 19.64 12.00 155 EA 0 Group F 7008 3171260 St 1566 412 19.64 12.00 156 EA 0 Group F 7008 317150 St 1566 412 15.50 12.00 155 EA 0 Group F 7008 317150 St 1566 412 15.50 12.00 156 EA 0 Group F 7008 317150 St 1566 412 15.50 12.00 156 EA 0 Group F 7008 317150 St 1566 412 15.50 12.00 156 EA 0 Group F 7008 317150 St 1566 412 15.50 12.00 156 EA 0 Group F 7008 317150 St 1566 412 15.50 12.00 156 EA 0 Group F 7008 317150 St 1566 412 15.50 12.00 156 EA 0 Group F 7008 317150 St 1566 412 15.50 156 EA 0 Group F 7008 317150 St 1566 412 15.50 156 EA 0 Group F 7008 317150 St 1566 412 15.50 156 EA 0 Group F 7008 317150 St 1566 412 156 EA 0 Group F 7008 317150 St 1566						0													
Group F   7968   37172F   St 186 412 19.41 20.01 S   EA   2						3													
Group F   729   371380   59   236   421   241   201   55   5   6   6   6   6   6   6   6						1													
Group   1270   317205   3172					_	2													
Group F   727, ST1900   39-208-412 27.13-72.13-55   EA   0	· ·				_	0													$\vdash$
Group   1772   317300   337408   3472 8571-2841 85						3													$\vdash$
From   Frank   1773   317310   30-3006   123152322225   E.A. 0					_	0													$\vdash$
Figure   First   Strate   St					_	2													
First   F   F   F   F   F   F   F   F   F					_	0													
Forup F   7276   317130   Sleeve 8*% "Far PVC   EA   1						0													
Group F   F277   31739   581 10.6 422 1075 65 S	Group F				_	3													
Group F   728   371340   39+126-422 (086396 SS   EA   3   3   3   3   3   3   3   3   3					_	1													
Group 6   G1   G1   G1   G1   G1   G1   G1	Group F				_	2													
Group G   GL   301225   Wire Tracer Access Box   EA   SL	Group F				_	3													
Group G   G2   36126   Wire 3-Way WaterProof Conn   EA   5.18	Group F	_																	
Group G   G3   361230   Wire Tracer Box Wrench   EA   22		_																	
Group G G G G G G G G G G G G G G G G G G G		_	-																
Group G   G5   SC1285   Key Curb Stop   EA   22	Group G	_																	
Group G   G6   G31156   Wire Blue #10 Steel Coat Solid   EA   40	Group G	_																	
Group G   G7   351005   Clean Out 132K C1 7621   EA   1770   EGroup G   G8   351007   Clean Out 1d 7621   EA   2   EA   2   EA   2   EA   EA					_														
Group G   G8   3S1007   Clean Out Lid 7621   EA   2	Group G				_														
Group G   G9   3S1008   Valve Box Lid Sewer	Group G				_	1770													
Group G   G10   3S1010   Manhole Lid Cl 24" #33A   EA   650						2													
Group G   G11   351015   Manhole Rim CI 24" #33A   EA   555   EA   C   C   C   C   C   C   C   C   C			-																
Group G   G12   381017   Manhole 23-3/4" Prot   EA   0																			
Group G   G13   381018   Manhole 23-3/4" Prot SS   EA   1774						555													
Group G G14 3W1001 Lid 11-1/2"x17" RU C528 EA 267						0													
Group G   G15   3W1006   Box Meter Water w/Non-lock lid   EA   285																			
Group G   G16   3W1009   Box Meter Reclaim w/nolock lid   EA   19																			
Group G   G17   3W1010   Box Meter Reclaim Rome 1910   EA   G5   EA   C6																			
Group G G18 3W1015 Box Meter 2" Fiberglass EA 26																			
Group G G19 3W1016 Box Meter 2" Cast Iron Lid EA 28																			
Group G         G20         3W1021         Box 24" 2pc VIv CI SCR Type18         EA         678         678         679         670																			
Group G         G21         3W1025         Valve Box Lid Water         EA         698 <td></td>																			
Group G         G22         3W1026         Lid,Valve Deep Cover #6800         EA         46																			
Group G         G23         3W1030         Valve Box Riser 1"         EA         193 <td></td> <td></td> <td></td> <td></td> <td></td> <td>698</td> <td></td>						698													
Group G         G24         3W1035         Valve Box Riser 1-1/2"         EA         188	Group G	G22	3W1026	Lid,Valve Deep Cover #6800	EA	46													
Group G         G25         3W1040         Valve Box Riser 2"         EA         284           Group G         G26         3W1042         Valve Box Riser 3"         EA         398	Group G	G23	3W1030	Valve Box Riser 1"	EΑ	193													
Group G G26 3W1042 Valve Box Riser 3" EA 398	Group G	G24	3W1035	Valve Box Riser 1-1/2"	EA	188													
						284													
Group G   G27   3W1045   Valve Box 3pc Reclaim w/Sq Lid   EA   49	Group G	G26	3W1042	Valve Box Riser 3"	ΕA	398													
					EΑ	49													
Group G G28 3W1046 Valve Box Riser 2" Sq Reclaim EA 0	Group G	G28	3W1046	Valve Box Riser 2" Sq Reclaim	ΕA	0													

	1				Thurs	I I					Land Time			2 V. F. 4		I		A/4 = == = + =
		NAC Charle			Three-	N A a a cufa atu una n	MEC Down	Mfa Dawt	Famaian	Domostis	Lead Time	Ctd Dool		3-Yr Ext	Altoropoto	Altaria eta AACC Deret	Altaroata	Alternate
6	140.00	MC Stock	Description	11014	Year Est.	Manufacturer	MFG Part	Mfg Part		Domestic		Std Pack	Dries	'	Alternate	Alternate MFG Part	Alternate	Part Ext
Group			Description Valve Box Riser 3" Sq Reclaim	UOM EA	Usage	(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
Group G Group G			Lid 3/4" Meter Box CI Water	EA	534													
Group G			Lid 3/4 Meter Box Cr Water Lid 2" Hole Meter Box Water	EA	52													
Group G			Lid Meter Water Lock	EA	40													
Group G	G33		Lid Meter Water Non-lock	EA	20													
Group G	G34		Lid Meter Reclaim Lock	EA	31													
Group G			Lid 3/4" Meter Box Reclaim	EA	38													
Group G	G36		Lid 2" Hole Meter Box Reclaim	EA	11													
Group G			Lid Meter Reclaim Non lock	EA	10													
Group G	G38		Lid Sq Valve Box Reclaim	EA	6													
Group G			Washer 3/4"x1/8" Rub Meter	EA	66700													
Group G			Washer 3/4 x1/16" Rub Meter	EA	30998													
Group H	H1		Fire Hyd 6"x12" Grade Lok	EA	19													
Group H	H2		Fire Hyd 6"x24" Grade Lok	EA					<u> </u>									
Group H	H3		Fire Hyd 5-1/4"x24" (Fire)	EA	4													
Group H	H4		Fire Hyd 5-1/4"x30" (Fire)	EA														
Group H	H5		Fire Hyd 5-1/4"x36" (Fire)	EA	22													
Group H	Н6		Fire Hyd 5-1/4"x42" (Fire)	EA	26													
Group H	H7		Fire Hyd 5-1/4"x48" (Fire)	EA	35													
Group H	Н8		Fire Hyd Ext 5-1/4"x6" Ken	EA	10													
Group H	Н9		Fire Hyd Ext 5-1/4"x6" Clow	EA	1													
Group H	H10		Fire Hyd Ext 5-1/4"x6" Ame	EA	25													
Group H	H11		Fire Hyd Ext 5-1/4"x12" Mue	EA	5													
Group H	H12		Fire Hyd Mue Bonnet Repair Kit	EΑ	3													
Group H	H13		Fire Hyd Mue Main Vlv Rep Kit	EA	4													
Group H	H14		Fire Hyd Mue Shoe Repair Kit	EA	3													
Group H	H15		Fire Hyd Ext 5-1/4"x12" Ame	EA	10													
Group H	H16		Fire Hyd Ame B-84-B Repair Kit	ΕA	3													
Group H	H17	3H1063	FIRE Hyd AME B-84-B Shoe Repair Kit	EA	0													
Group H	H18		Fire Hyd Ext 5-1/4"x12" Ken	EA	5													
Group H	H19	3H1066	Fire Hyd Kennedy K81 Valve Kit	EA	3													
Group H	H20	3H1067	Fire Hyd Ext 5-1/4"x12" Clow	EA	0													
Group H	H21	3H1070	Fire Hyd Ext 5-1/4"x6" Mue	EA	13													
			Fire Hyd Ext 5-1/4"x18" Mue	EA	1													
Group H	H23	3H1080	Fire Hyd Ext 5-1/4"x18" Ame	EA	10													
			Fire Hyd Ext 5-1/4"x18" Ken	EA	4													
Group H	H25	3H1090	Fire Hyd Ext 5-1/4"x24" Mue	EA	0													
Group H	H26		Fire Hyd Ext 5-1/4"x24" Ame	EA	4													
Group H	H27		Fire Hyd Ext 5-1/4"x24" Ken	EA	0													
Group H	H28		Fire Hyd Tee 6" MJxSwivel	EA	19													
Group H			Fire Hyd Tee 8"x6" MJxSwivel	EA	7													
Group H			Fire Hyd Tee 10"x6" MJxSwivel	EA	5													
Group H			Fire Hyd Tee 12"x6" MJxSwivel	EA	2													
Group H			Fire Hyd Tee 16"x6" MJxSwivel	EA	1													
Group H			Fire Hyd Wrench	EA	5													
Group H			Fire Hyd Wrench Storz	EA	31													
Group H			Fire Hyd Wrench Reclaim	EA	74													
Group H			Fire Hyd Nozzle Adpt	EA	22													
Group H			Fire Hyd Repair Kit Ame B-84-B	EA	78													
			Fire Hyd Repair Kit Ken K-81-A	EA	102													
			Fire Hyd Repair Kit Clow	EA	24													
Group H	H40	3H1150	Fire Hyd Repair Kit Mue A-301	EA	65													

				l l	Th	I I					Land Time			2 V. F. 4		I		A/4 = == = + =
		NAC Charle			Three-	Manufacturar	MEC Dowt	Mfa Dawt	Famaian	Domostis	Lead Time	Ctd Dool		3-Yr Ext	Alternate	Altaria eta AACC Deret	Altaronata	Alternate
6	l th come	MC Stock	Description	11014	Year Est.	Manufacturer	MFG Part	Mfg Part		Domestic	,	Std Pack	Dries	,		Alternate MFG Part	Alternate	Part Ext
Group Group H			Description Fire Hyd Repair Kit M&H	UOM EA	Usage	(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
Group H	H42		Fire Hyd Ext 5-1/4"x6" AVK	EA					<u> </u>									
-			Fire Hyd Ext 5-1/4 xb AVK Fire Hyd Ext 5-1/4"x12" AVK		<u> </u>													
Group H	H43			EA	3													
Group H	H44		Fire Hyd Ext 5-1/4"x18" AVK	EA	0													
Group H	H45		Fire Hyd Ext 5-1/4"x24" AVK	EA	- 0													
Group H	H46		Fire Hyd Repair 27-150-75 AVK	EA	4													
Group H	H47		Fire Hyd Repair Kit B-62-B Ame Hyd Hold Down Nut Ame	EΑ	8													
Group H	H48		•	EΑ	4													
Group H	H49		Hyd Hold Down Nut AVK	EA	0													
Group H	H50		Hyd Hold Down Nut Ken	EA	0													
Group H			Hyd Hold Down Nut Clow	EA	0													
Group H	H52		Hyd Hold Down Nut Mue	EA	2													
Group H	H53		Fire Hyd Oil A51 Gal	EA	24													
Group J	J1		Bushing 1"x3/4" Brass	EA	418													
Group J	J2		Bushing 1-1/4"x3/4" Brass	EA	11													
Group J	J3		Bushing 1-1/4"x1" Brass	EA	67													
Group J	J4		Nipple 1-1/2"x2" Brass	EA	58													
Group J	J5		Nipple 1-1/2"x4" Brass	EA	280													
Group J	J6		Nipple 1-1/2"x6" Brass	EA	139													
Group J	J7		Nipple 2"xClose Brass	EA	346													
Group J	J8		Nipple 2"x4" Brass	EA	537													
Group J	J9		Nipple 2"x6" Brass	EA	412													
Group J	J10		Nipple 1-1/2" x 12" Brass	EA	36													
Group J	J11		Nipple 2"x12" Brass	EA	167													
Group J	J12		Bushing 1/4"x1/8" Brass	EA	18													
Group J	J13		Bushing 3/8"x1/4" Brass	EA	16													
Group J	J14		Bushing 1/2"x1/4" Brass	EA	43													
Group J	J15		Bushing 1/2"x3/8" Brass	EA	38													
Group J	J16		Bushing 3/4"x1/4" Brass	EA	69													
Group J	J17		Bushing 3/4"x1/2" Brass	EA	109													
Group J	J18		Coupling 1/4" Brass FIPT	EA	34													
Group J	J19		Coupling 1/2" Brass FIPT	EA	20													
Group J			Coupling 3/8" Brass FIPT	EA	2													
Group J			Coupling 3/4" Brass FIPT	EA	158													
Group J			Coupling 1" Brass FIPT	EA	212													
Group J			Coupling 1-1/4" Brass FIPT	EA	17													
Group J	J24		Coupling 1-1/2" Brass FIPT	EA	24													
Group J	J25		Coupling 2" Brass FIPT	EA	164													
Group J	J26	3B1155	Ell 1/4" Brass 90deg St	EA	35													
Group J	J27		Ell 3/8" Brass 90deg St	EA	1													
Group J	J28	3B1165	Ell 1/2" Brass 90deg St	EA	114													
Group J	J29	3B1170	Ell 3/4" Brass 90deg St	EA	168													
Group J	J30	3B1175	Ell 1" Brass 90deg St	EA	352													
Group J	J31	3B1176	Ell 1-1/4" Brass 90deg St	EA	4													
Group J			Ell 1-1/2" Brass 90deg St	EA	36													
Group J			ELL 2" 304SS 90DEG ST	EA	20													
Group J	J34		Ell 2" Brass 90deg St	EA	176													
Group J	J35		Nipple 1/4"x2" Brass	EA	84													
Group J	J36		Nipple 1/4"x3" Brass	EA	44													
Group J			Nipple 1/4"x4" Brass	EA	30													
Group J			Nipple 1/4"x6" Brass	EA	36													
Group J	J39		Nipple 3/8"x2" Brass	EA	22													
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					Three-				L .		Lead Time			3-Yr Ext				Alternate
		MC Stock			Year Est.	Manufacturer	MFG Part	Mfg Part		Domestic	(Working	Std Pack			Alternate	Alternate MFG Part	Alternate	Part Ext
Group			Description	UOM		(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
Group J	J40		Nipple 3/8"x3" Brass	EA	17													$\vdash$
Group J	J41		Nipple 3/8"x4" Brass	EA	2													$\vdash$
Group J	J42		Nipple 1/2"x2" Brass	EA	77													$\vdash$
Group J	J43		Nipple 1/2"x3" Brass	EA	20													
Group J	J44		Nipple 1/2"x4" Brass	EA	37													$\vdash$
Group J	J45		Nipple 1/2"x6" Brass	EA	35													$\vdash$
Group J	J46		Nipple 3/4"xClose Brass	EA	165													$\vdash$
Group J	J47		Nipple 3/4"x2" Brass	EA	164													
Group J	J48		Nipple 3/4"x4" Brass	EA	102													
Group J	J49		Nipple 3/4"x6" Brass	EA	56													
Group J	J50		Nipple 1"xClose Brass	EA	234													
Group J	J51		Nipple 1"x2" Brass	EA	156													
Group J	J52		Nipple 1"x4" Brass	EA	107													
Group J	J53		Nipple 1"x6" Brass	EA	99													
Group J	J54		Nipple 1-1/4"xClose Brass	EA	2													
Group J	J55		Nipple 1-1/4"x2" Brass	EA	14													
Group J	J56		Nipple 1-1/4"x4" Brass	EA	26													
Group J	J57		Nipple 1-1/4"x6" Brass	EA	31													
Group J	J58		Plug 1/4" MIPT Brass	EA	7													
Group J	J59		Plug 3/8" MIPT Brass	EA	7													
Group J	J60		Plug 1/2" MIPT Brass	EA	33													
Group J	J61		Plug 3/4" MIPT Brass	EA	17													
Group J	J62		Plug 3/4" CC Brass	EA	11													
Group J	J63	3B1300	Plug 1" MIPT Brass	EA	37													
Group J	J64	3B1305	Plug 1" CC Brass	EA	1													
Group J	J65	3B1307	Plug 1-1/4" MIPT Brass	EA	3													
Group J	J66	3B1310	Plug 1-1/2" MIPT Brass	EA	8													
Group J	J67	3B1315	Plug 2" MIPT Brass	EA	42													
Group J	J68		Tee 1/4" FIPT Brass	EA	19													
Group J	J69		Tee 3/8" FIPT Brass	EA	1													
Group J	J70	3B1330	Tee 1/2" FIPT Brass	EA	13													
Group J	J71		Tee 3/4" FIPT Brass	EA	24													
Group J	J72	3B1340	Tee 1" FIPT Brass	EA	25													
Group J	J73	3B1343	Tee 1-1/4" FIPT Brass	EA	3													
Group J	J74	3B1345	Tee 1-1/2" FIPT Brass	EA	35													
Group J			Tee 2" FIPT Brass	EA	68													
Group J	J76	3B1355	Bushing 2"x3/4" Brass	EA	55		-											
Group J	J77	3B1360	Bushing 2"x1" Brass	EA	287													
Group J	J78	3B1365	Bushing 1-1/2"x1" Brass	EA	181		-											
Group J	J79	3B1370	Bushing 2"x1-1/4" Brass	EA	15													
Group J	J80		Bushing 2"x1-1/2" Brass	EΑ	148													
Group J	J81		Ell 1/4" Brass 45deg	EΑ	1													
Group J	J82		Ell 1/2" Brass 45deg	EΑ	10													
Group J			Ell 3/4" Brass 45deg	EΑ	32													
Group J			Ell 1" Brass 45Deg	EA	68													
Group J			Ell 1-1/4" Brass 45deg	EA	0													
Group J	J86		Ell 1-1/2" Brass 45deg	EA	8													
Group J			Ell 2" Brass 45deg	EA	138													
Group J			Ell 1/4" Brass 90deg	EA	23													
			Ell 3/8" Brass 90deg	EA	0													
			Ell 1/2" Brass 90deg	EA	37													
Group J	J91		Ell 3/4" Brass 90deg	EA	58													
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		NAC Charle			Three-	Manufacturar	MEC Down	Mfa Dawt	Famaian	Domostis	Lead Time	Ctd Dool		3-Yr Ext	Altoropoto	Altaria eta AACC Deret	Altonometo	Alternate
C	140.00	MC Stock	Description	11014	Year Est.	Manufacturer	MFG Part	Mfg Part		Domestic	,	Std Pack	Dries	'	Alternate	Alternate MFG Part	Alternate	Part Ext
Group	Item J92		Description Ell 1" Brass 90deg	UOM EA	Usage 110	(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
Group J	J92 J93		Ell 1-1/4" Brass 90deg	EA	110													
Group J	J93		Ell 1-1/2" Brass 90deg	EA	7													
Group J	J95		Ell 2" Brass 90deg	EA	179													
Group J Group J	J96		ELL 2" 304SS 90DEG	EA	179													
Group J	J97		Nipple 3"x6" Brass	EA	6													
Group J	J98		Valve 1/4" Ball Brass FIP	EA	66													
Group J	J99		Valve 1/4" Ball Brass FIP	EA	513													
Group J	J100		Valve 3/4" Ball Brass FIP	EA	117													
Group J	J101		Valve 1" Ball Brass FIP	EA	557													
Group J	J102		Valve 1-1/2" Ball Brass FIP	EA	32													
Group J	J103		Valve 2" Ball Brass FIP	EA	61													
Group J	J104		Valve 3/4" Swing Check Brass	EA	1													
Group J	J105		Valve 1" Swing Check Brass	EA	0													
Group J	J106		Valve 1-1/4" Swing Check Brass	EA	0													
Group J	J107		Valve 1-1/2" Swing Check Brass	EA	1													
Group J	J108		Valve 2" Swing Check Brass	EA	120													
Group J	J109		Valve 2-1/2" Swing Check Brass	EA	0													
Group J	J110		Valve 3" Swing Check Brass FIP	EA	15													
Group J	J111		Valve 4" Swing Check Brass FIP	EA	4													
Group J	J112		Valve 3/4" Gate Brass	EA	27													
Group J	J113	3V1310	Valve 1/2" Gate Brass	EA	20													
Group J	J114	3V1315	Valve 1" Gate Brass	EA	58													
Group J	J115	3V1320	Valve 1-1/4" Gate Brass	EA	8													
Group J	J116	3V1325	Valve 1-1/2" Gate Brass	EA	28													
Group J	J117	3V1330	Valve 2" Gate Brass	EA	105													
Group J	J118	3V1335	Valve 2" Gate w/operating nut	EA	167													
Group J	J119		Valve 2-1/2" Gate Brass	EA	1													
Group J	J120		Valve 3" Gate Brass	EA	15													
Group J	J121		Valve 4" Gate Brass	EA	0													
Group J	J122		Valve 3/4" Hose Bib Brass	EA	1575													
Group K	K1		Coupling 3/4" Quick Joint	EA	42													
			Coupling 1" Quick Joint	EA	48													
Group K	К3		Coupling 1"x3/4" MTR	EA	4782													
Group K	K4		Coupling MTR 3/4"x2"	EA	503													
Group K	K5		Meter Adaptor 5/8"x3/4"x3/4"	EA	153													
Group K	К6		Coupling MTR 3/4"x2.5"	EA	3028													
Group K	K7		Coupling 1" MTR Brass	EA	365													
Group K	K8		Coupling 1-1/2" MTR Brass	EA	4													
Group K	K9		Coupling 2" MTR Brass	EA	14													
Group K			Adapter 3/4" CPxMIP Brass	EA	1037				ļ									
Group K			Adapter 3/4" PVCxMIP Brass	EA	64													
Group K			Adapter 1" CPxMIP Brass	EA	2317				1									
Group K			Adapter 1 1 / 2" CDv/MIP Brass	EΑ	84													
Group K			Adapter 1-1/2" CPxMIP Brass	EΑ	99													
Group K			Adapter 1-1/2" MIPxPVC Brass	EΑ	48				-									
Group K			Adapter 1-1/4" MIPXPVC Brass	EA EA	18 643				<u> </u>									
Group K			Adapter 2" CPxMIP Brass Adapter 2" IPxMIP Brass	EA	220				<del> </del>									
Group K			Adapter 2 IPXIMIP Brass Adapter 3/4" CPxFIP Brass	EA	235				1									
Group K Group K			Adapter 3/4 CPXFIP Brass Adapter 3/4" PVCxFIP Brass	EA	235				1									
Group K			Adapter 1" CPxFIP Brass	EA	324													
Group K	NZI	001000	Lunahici T CLVIIL DI 1922	LA	324				I									

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		NAC 61			Three-	NA	NASC D	MC D			Lead Time	CL I D I		3-Yr Ext	A4	A/1		Alternate
		MC Stock	<b>5</b>		Year Est.	Manufacturer	MFG Part	Mfg Part	_	Domestic	(Working	Std Pack			Alternate	Alternate MFG Part	Alternate	Part Ext
			Description	UOM		(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
Group K	K22		Adapter 1 PVCxFIP Brass	EA	158													
Group K	K23		Adapter 1-1/2" CPxFIP Brass	EΑ	28													
Group K	K24		Adapter 1-1/2" FIPxPVC Brass	EΑ	17 31													
Group K	K25		Adapter 1-1/4" FIPxPVC Brass Adapter 2" CPxFIP Brass	EΑ	196													
Group K	K26 K27		Adapter 2" FIPxPVC Brass	EA EA	196													
Group K	K27		·	EA	564													$\vdash$
Group K	K29		Loc Pac 1-1/2" Ford CT35-66 Loc Pac 2" Ford CT35-77	EA	625													
Group K	K30		Tee 3/4" Comp Brass	EA	65													
Group K	K31		Tee 3/4"x3/4"x1" Comp Brass	EA	35													
Group K	K32		Tee 1"x1"x3/4" Comp Brass	EA	47													
Group K	K33		Tee 1" Comp Brass	EA	226													
Group K	K34		Tee 2"x1" Comp Brass	EA	46													
Group K	K35		Ell 1" Comp Brass CTS	EA	227													$\vdash$
Group K Group K	K35		Union 3/4" Comp Brass CTS	EA	400							-						$\vdash$
	K37		Coupling 3/4"x1" CTS	EA	466													$\vdash$
Group K Group K	K37		Union 1" Comp Brass CTS	EA	678							-		1				$\vdash$
Group K	K39		Union 1-1/2" Comp Brass CTS	EA	29													
Group K	K40		Union 2" Comp Brass CTS	EA	114													
Group K	K41		Union 2" Comp Brass IPS	EA	100													
Group K	K41		Wye 1"x3/4" Comp Brass CTS	EA	282													$\vdash$
Group K	K43		Wye 1" x1" Ford	EA	285													
Group K	K44		Wye 2"x1" Ford Y44-274	EA	45													
Group K	K45		Valve Corp 3/4" CMPSxCC	EA	80													$\vdash$
Group K	K45		Valve Corp 1" CMPSxCC	EA	150													
Group K	K47		Bell Nut 3/4" FNGD4 CRB/CRP	EA	982													
Group K	K48		Bell Nut 1" NG-FF4 CRP	EA	1586													
Group K	K49		Bell Nut 1" NG-F4 CRB	EA	1638													
Group K	K50		Valve Corp 1-1/2" FIPxMIPT	EA	36													
Group K	K51		Valve Corp 1-1/2" FIPTxCC	EA	10													
Group K	K52		Valve Corp 2" FIPTxCC	EA	12													
			Valve Corp 2" MIPxFIP	EA	229													
			Valve Corp 3/4" CMPSxMIP	EA	38													
			Valve Ball-Corp 1" Ford FB1100	EA	1315													
			Valve Curb 3/4" w/lkwing PVC	EA	173													
			Valve Curb 3/4" w/lkwing CP	EA	2660													
			Valve Curb 1" w/lkwing PVC	EA	125													
Group K	K59		Valve Curb 1" w/lkwing CP	EA	5795													
	K60		Coupling 3/4" CTSx3/4" PVC	EA	93													
	K61		Coupling 1" CTSx1" PVC	EA	99													
			Valve Curb 3/4" FIPxFIP	EA	119													
			Valve Curb 1" FIPxFIP	EA	132													
			Valve Curb 1-1/2" FIPxFIP	EA	78													
			Valve Curb 2" FIPxFIP	EA	223													
			Wye Multiserv 2"x4-1"	EA	57													
Group K			Meter VB42-7W Reset	EA	1564													
			Meter VB42-9W Reset	EA	200													
			Meter FVB4212W 3/4"x12" Reset	EA	83													
			Meter FVB4218W 3/4"x18" Reset	EA	4													
			Meter FVB4224W 3/4"x24" Reset	EA	6													
			Meter VB44 1"x10W Reset	ΕA	34													
			Meter VB44 1"x15W Reset	EA	2													
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		NAC Stock				Manufacturar	MCC Dort	Mfg Dort	Foreign	Domostic		C+d Dook				Altornato MEC Dart	Altornato	
	l	MC Stock	5		Year Est.	Manufacturer	MFG Part	Mfg Part	_	Domestic	(Working	Std Pack	<u> </u>		Alternate	Alternate MFG Part	Alternate	
Group			Description	UOM	Usage	(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
Group K			Meter Fing Set 1 1/2" w/SS N/B	EA	27													
Group K			Meter Fing Set 2" w/SS NB	EA	41													
Group K	-		Meter FVB4215W 3/4"x15" Reset	EA	12													
Group L	L1		Valve 3/4" Bkfl Dbl Check	EA	3													
Group L	L2		Valve 1" Bkfl Dbl Check	EA	3													
Group L	L3	3V1240	Valve 2" Bkfl Dbl Check	EA	4													
Group L	L4	3V1245	Valve 1-1/2" Bkfl Dbl Check	EA	4													
Group L	L5	3V1360	Valve 3/4" Bkfl Red Pres	EA	4													
Group L	L6	3V1365	Valve 1" Bkfl Red Pres	EA	2													
Group L	L7	3V1370	Valve 1-1/2" Bkfl Red Pres	EA	3													
Group L	L8	3V1375	Valve 2" Bkfl Red Pres	EA	16													
Group I	I1		Coupling Dresser 1/2"	EA	1													
Group I	12		Coupling Dresser 3/4"	EA	43													
Group I	13			EA	27													
Group I	14		Coupling Dresser 1-1/4"	EA	13	ļ												
Group I	15		Coupling Dresser 1-1/2"	EA	33													<del>                                     </del>
Group I	16		Coupling Dresser 1-1/2 Coupling Dresser 2"	EA	58													+
Group I	17		Clmp 3/4"x3" SS CTS Redi	EA	257										1		+	+
	ł — —		Clmp 3/4 x3 SS CTS Redi	EA	116												1	+
Group I	18			_														<del>                                     </del>
Group I	19		Clmp 1"x3" SS CTS Redi	EA	283													
Group I	110		Clmp 1"x6" SS CTS Redi	EA	116										-			
Group I	111		Clmp 1-1/4"x3" SS CTS Redi	EA	7													
Group I	112		Clmp 1-1/4"x6" SS CTS Redi	EA	6													
Group I	113		Clmp 1-1/2"x3" SS CTS Redi	EA	15													
Group I	114		Clmp 1-1/2"x6" SS CTS Redi	EA	15													
Group I	115	3R1045	Clmp 2"x3" SS CTS Redi	EA	27													
Group I	116	3R1050	Clmp 2"x6" SS CTS Redi	EA	18													
Group I	117	3R1055	Clmp 2"x7" SS PVC CI Rep	EA	42													
Group I	118	3R1060	Clmp 2"x12" SS PVC CI Rep	EA	63													
Group I	119	3R1065	Clmp 3"x7" SS AC RB Rep	EA	8													
Group I	120	3R1070	Clmp 3"x15" SS AC RB Rep	EA	24													
Group I	121	3R1075	Clmp 4"x7" SS CL200 AC Rep	EA	18													
Group I	122		Clmp 4"x15" SS CL150 AC Rep	EA	39													
Group I	123		Clmp 6"x7" SS CL150 AC Rep	EA	13													
Group I	124		Clmp 6"x15" SS CL150 AC Rep	EA	61													
Group I	125		Clmp 8"x15" SS CL150 AC Rep	EA	15										<u> </u>			
Group I	126		Clmp 10"x15" SS CL200 AC Rep	EΑ	0													
Group I	127		Clmp 12"x15" SS CL200 AC Rep	EA	6													
	128		Clmp 14"x15" SS AC RB Rep	EA	2													
Group I			Clmp 16"x20" SS AC RB Rep	EA											-		+	+
Group I	129		·	_	10													<del>                                     </del>
Group I	130		Clmp 4"x7" SS CL150 AC Rep	EA	16										ļ		1	<del>                                     </del>
Group I	131		Clmp 4"x15" SS CL200 AC Rep	EA	32												1	
Group I	132		Clmp 6"x7" SS CL200 AC Rep	EA	4												1	<u> </u>
Group I	133		Clmp 6"x15" SS CL200 AC Rep	EA	19									ļ			1	<b></b>
Group I	134		Clmp 8"x15" SS CL200 AC Rep	EA	27													
Group I	135		Clmp 10"x15" SS C900 Rep	EA	5													
Group I	136		Clmp 12"x15" SS C900 Rep	EA	13													
Group I	137	3R1175	Clmp 14"x15" SS CI Rep	EA	2													
Group I	138	3R1180	Clmp 16"x20" SS CI Rep DIPS	EA	12													
Group I	139	3R1185	Clmp 18"x20" SS CI Rep	EA	2													
Group I	140		Clmp 20"x30" SS CI Rep	EΑ	6													
Group I	141		Clmp 24"x20" SS CI Rep	EA	5													
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		NAC Charle			Three-	Manufacturer	NATC Dowt	N4fa Dowt	Faraian	Domostic	Lead Time	Ctd Dools		3-Yr Ext		Altarianto MEC Darit	Altorometo	Alternate
Cuarra	ltom	MC Stock	Description	LIONA	Year Est.	Manufacturer (MFG)	MFG Part	Mfg Part	Foreign		(Working	Std Pack	Drico	1	Alternate MFG	Alternate MFG Part	Alternate	Part Ext
· ·	Item I42		Clmp 30"x30" SS CI Rep	UOM EA	Usage	(IVIFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	IVIFG	Number	Puit Piice	Price (J x W)
Group I Group I	143		Clmp 36"x30" SS CI Rep	EA	2													
Group I	143		Clmp 20"W 2"IP TAP SS Rep	EA	0													
Group I	145		Clmp 2-1/2"x12" SS CL160 PVC	EA	3													
Group I	146		Clmp 3"x7" SS CL160 PVC Rep	EA	11													
Group I	147		Clmp 3"x15" SS CL160 PVC Rep	EA	22													
Group I	148		Clmp 4"x7" SS CL160 PVC Rep	EA	6				1									
Group I	149		Clmp 4"x15" SS CL160 PVC Rep	EA	60				1									
Group I	150		Clmp 6"x7" SS CL160 PVC Rep	EA	11				1									
Group I	151		Clmp 6"x15" SS CL160 PVC Rep	EA	63													
Group I	152		Clmp 8"x15" SS CL160 PVC Rep	EA	23													
Group I	153		Clmp 10"x15" SS CL160 PVC Rep	EA	2													
Group I	154		Clmp 12"x15" SS CL160 PVC Rep	EA	5													
Group I	155		Clmp 16"x20" SS PVC IPS	EA	4													
Group I	156		Coupling 10" Hy Max Oversize	EA	4													
Group I	157		Coupling 12" Hy Max Oversize	EA	16													
Group I	158		Coupling 16" Hy Max	EA	8													
Group I	159		Coupling 2" Hy Max20000303260	EA	77				1									
Group I	160		Coupling 3" Hy Max02620429026	EA	46													
Group I	161		Coupling 4" Hy Max02620511026	EA	183				1									
Group I	162		Coupling 6" Hy Max02620768026	EA	177													
Group I	163		Coupling 8" Hy Max02620984026	EA	49													
Group I	164		Coupling 12" Hy Max02621366026	ΕA	43													
Group I	165		Coupling 10" Hy Max02621200026	EA	25													
Group I	166		Coupling 4"x4" CLxPL Fernco	EA	138													
Group I	167		Coupling 4"x4" PLxPL Fernco	ΕA	1238													
Group I	168		Coupling 4"x3" PLxPL Fernco	ΕA	109													
Group I	169	3S1135	Coupling 4"x4" CLxCL Fernco	EA	35													
Group I	170	3S1140	Coupling 6"x4" PLxPL Fernco	EΑ	584													
Group I	171	3S1145	Coupling 6"x4" CLxPL Fernco	EA	156													
Group I	172	3S1150	Coupling 6"x6" CLxPL Fernco	EA	538													
Group I	173	3S1155	Coupling 6"x6" PLxPL Fernco	EΑ	1161													
Group I	174	3S1160	Coupling 6"x6" CLxCL Fernco	EA	5													
Group I			Coupling 8"x8" CLxCL Fernco	EA	5													
Group I	176	3S1170	Coupling 8"x8" CLxPL Fernco	EA	40													
Group I	177	3S1175	Coupling 8"x6" CLxPL Fernco	EA	108													
Group I	178		Coupling 8"x8" PLxPL Fernco	EA	56													
Group I	179		Coupling 8"x6" PLxPL Fernco	EA	27													
Group I	180	3S1191	Coupling 6"x6" CLxPL Shld 1002	EA	42													
Group I	181		Coupling 6"x6"PLxPL Shld 1056	EA	83													
Group I	182	3S1193	Coupling 8"x8" CLxPL Shld 1002	EA	120													
Group I	183		Coupling 8"x8" PLxPL Shld 1056	EA	171													
Group I	184		Coupling 10x10 CLxPL Shld 1002	EA	18													
Group I	185		Coupling 10x10 PLxPL Shd 1056	EA	30													
Group I			Ell 6" Sch80 PVC 90deg	EA	0													
			Ell 1/2" SS St	EA	905													
			Nipple 1/2"x2" SS	EA	1105													
			Nipple 1"x2" SS	EA	705				1									
			COUPLING 1" 304 SS	EA	10													
			Nipple 2x4" SS"	EA	29				1									
			Nipple 2xClose SS"	EA	29				1									ļ
Group M	M7	3V3005	Valve 1/2 Ball FIP SS"	EA	146													

					Three-						Lead Time			3-Yr Ext				Alternate
		MC Stock			Year Est.	Manufacturer	MFG Part	Mfg Part	Foreign	Domestic	(Working	Std Pack		Price (J x	Alternate	Alternate MFG Part	Alternate	Part Ext
		Number		UOM	Usage	(MFG)	Number	Description	(F)	(D)	Days)	Qty	Price	S)	MFG	Number	Part Price	Price (J x W)
Group M	M8	3V3010	Valve 1 Ball FIP SS"	EA	141													
Group M	M9	3V3025	Valve Corp 2 MIPxFIP PCV SS"	EA	60													
Group N	N1	3G1017	Grease Copper Tool Joint	EA	15													
Group N	N2	3G1198	Survey Stake 1/2"x1-1/2"x48"	EA	2552													
Group N	N3	3G1300	Rod Rebar #3 3/8"x20'	EA	281													
Group N	N4	3X1055	Tape 2" Duct	RO	711													
Group N	N5	3X1056	Tape 3" Water Met	EA	4													
Group N	N6	3X1057	Tape 3" Reclaim Met	EA	2													
Group N	N7	3X1058	Tape 3" Sewer Met	EA	11													
Group N		3X1060	Lube Pipe Qt	EA	86													
Group N	N9	3X1065	Lube Pipe Gal	GA	50													
		3X1095	Tape OD Measuring	EA	83													

# EXHIBIT 1 SCOPE OF WORK

#### C.01 BACKGROUND INFORMATION

Manatee County (County) is requesting Bids from qualified firms for the provision of water and sewer materials and accessories including no lead brass water, sewer, and backflow products for the Manatee County Utilities Department.

The Manatee County Utilities Department currently inventories an estimated 2,700 water, sewer, and backflow products and accessories. The County is seeking to establish a strategic business partnership with multiple bidders to supply water, sewer, backflow products, and related parts and accessories to the Manatee County Utilities Warehouse and Utilities Maintenance locations within the County.

The primary goal of the Agreement is to obtain expedited acquisition of water and sewer materials and accessories. Therefore, Successful Bidder's delivery responsiveness under the terms of this Agreement is critical.

#### C.02 SCOPE

Successful Bidder (hereinafter in this Scope referred to as Supplier) shall furnish all equipment, labor, materials, supplies, licensing, transportation, and other components necessary to provide and deliver water, sewer, backflow products, and related parts and accessories that will meet the requirements of the County.

Multiple awards shall be made to the lowest responsive, responsible Bidder(s) on each individual item. Awards shall be to the Primary (lowest responsive, responsible Bidder) and a Secondary (second lowest responsive, responsible Bidder) per item.

The agreement resulting from the acceptance of a bid shall be made by issuing a zero-dollar blanket purchase order(s) and be bound by the terms and conditions of the purchase order and the specifications of this Invitation for Bid. Release orders shall be issued on an "as required" basis.

It is the intent of the County to place orders with the lowest priced responsive, responsible Bidder who can provide the products at the time needed. However, the County reserves the right to place orders with other Bidders in the event of an urgent, immediate need and the availability of the products requested cannot be met by the lowest price Successful Bidder at the time of need.

#### **C.03 GENERAL REQUIREMENTS**

Supplier shall provide the following requirements:

- A. Furnish and deliver requested materials within three business days to the Manatee County Utilities Warehouse.
- B. As instructed by the County, deliver large project orders to the project site or to a Utilities Maintenance location within Manatee County.
- C. Provide same day delivery for emergency orders.
- D. Provide a 24/7 contact name and phone number who can be contacted for assistance for after-hours emergencies.

- E. Keep the minimum agreed upon inventory in stock at its warehousing facility for each item awarded.
- F. Meet with the Utilities warehouse staff to review Supplier stocking levels on a monthly basis and and make adjustments to minimize stock

#### C.04 DELIVERY AND LEAD-TIME REQUIREMENTS

Supplier shall:

- A. Make all deliveries to the Utilities Warehouse Facility unless otherwise instructed by the County.
- B. Upon request by the County, make deliveries on holidays and weekends
- C. Deliver orders based on the lead-time provided in Exhibit B, Pricing Form. For any deliveries that cannot be completed based on the lead-time provided, contact the Utilities representative within 24-hours from receipt of the order and provide a delivery date. NOTE: The County reserves the right to cancel an order that cannot be delivered in the specified delivery time.
- D. Make all deliveries between the hours of 9:00 A.M. and 2:30 P.M., Monday through Friday, excluding County holidays, to the location identified in the release order unless otherwise agreed to by the County
- E. Provide at least 24-hour notice to the County for all large shipments, i.e., truckloads requiring material handling equipment.
- F. Not make drop shipments unless otherwise agreed to by the County.
- G. Provide a separate delivery ticket for each delivery and obtain the signature of an authorized County representative on each.
- H. Provide at least one copy of the delivery ticket with pricing with the County representative receiving each delivery.
- I. Conditions for First Priority Service
  - i. Supplier shall, in conditions when a local emergency has been declared by the County or regional authority or when national supply allocations occur, grant the County delivery on a "first priority" basis for water and sewer material and accessories.
  - ii. Supplier shall furnish the County with a twenty-four (24) hour, seven days a week phone number(s) and contact name upon award of this Agreement.

#### **C.05 TECHNICAL SPECIFICATIONS**

Supplier shall deliver goods in accordance with the Technical Specifications in the Approved Products List included in the Agreement as Exhibit 3.

#### A. WATER AND SEWER MATERIALS AND ACCESSORIES

All materials delivered by Supplier shall comply with the County published Utility Specifications Standards. See Utilities' Approved Products Listing for the current specifications for each of the following groups:

- o GROUP A PVC FITTINGS AND PIPE- SCHEDULE 40 AND SCHEDULE 80
- O GROUP B PVC C900 PIPE & PARTS (4" AND ABOVE)
- GROUP C PVC PIPE & FITTINGS GRAVITY SEWER (SDR 26)
- O GROUP D HDPE PIPE AND FITTINGS (DR-11)
- GROUP E MISC. WATER & SEWER VALVES & ACCESSORIES
- GROUP F DUCTILE IRON PIPE, FITTINGS, & ACCESSORIES
- GROUP G METER & VALVE BOXES & RELATED ACCESSORIES

- GROUP H FIRE HYDRANTS & RELATED PARTS
- GROUP I MISC. WATER AND SEWER CLAMPS
- GROUP M STAINLESS STEEL PARTS
- GROUP N MISC. WATER AND SEWER PARTS

#### B. NO LEAD BRASS PARTS

All materials delivered by Supplier shall comply with the County published Utility Specifications Standards (available upon request, Manatee County Utilities)per Public Law 111-380, (January 4, 2011 S.3874, 111 Congress, "Reduction of Lead in Drinking Water Act").

All brass fittings 2" and under wetted by potable water shall be "No Lead" certified and carry the "NL" designation on the casting.

All brass parts for potable water shall be in accordance with the Safe Drinking Water Act restricting products in contact with drinking water to a 0.25% maximum lead content in the base material for all wetted components using a surface based averaging formula.

See Utilities' Approved Products Listing for the current specifications for each of the following groups:

- GROUP J MISCELLANEOUS BRASS
- GROUP K BRASS SERVICE LINE FITTINGS AND ACCESSORIES
- GROUP L BACKFLOW PREVENTION DEVICES

#### **C.06 QUANTITIES**

The County reserves the right to add or delete items as required.

#### C.07 PRICES/PRICING FORM

Pricing shall be shown for each item in Attachment H. The Microsoft Excel file has hidden columns with data for County use. Hidden Column "I" is used for calculating the Three-Year Estimated Usage in Column J.

Data <u>must</u> be entered into the following columns for each item quoted:

- Column L, Manufacturer OR Column U, Alternate Manufacturer
- Column O, Foreign OR Column P, Domestic
- Column Q, Lead Time (in number of Working Days, excluding weekend and holidays)
- Column R, Standard Pack Quantity
- Column S, Price OR Column W, Alternate Part Price

Please enter data, if available, into the following columns for each item quoted:

- Column M, Manufacturer Part Number (associated with Column L), <u>OR</u> Column V, Alternate Manufacturer Part Number (associated with Column U)
- Column N, Manufacturer Part Description

#### C.08 RENEWAL

Written notice of intention not to renew must be submitted by the Supplier at least 120 days prior to the expiration of an Agreement period.

The County shall provide the Supplier with a written notice of intent to renew no sooner than 90 days prior to the expiration of an Agreement period.

#### C.09 PRICE ESCALATION/DE-ESCALATION

Suppliers fees for water and sewer materials and accessories including no lead brass water, sewer, and backflow products and other related materials and accessories shall remain firm for a minimum of one (1) year after execution of the Agreement. Requested price changes may be submitted annually, at least ninety (90) days prior to the expiration of the Agreement term. Documentation supporting any increases or decreases in pricing shall be submitted to the County for review and approval.

Any escalation or de-escalation in pricing will be based on change in the most recent 12-month period for the applicable Bureau of Labor Statistics Index (e.g., WPU1015021 Metals and metal products, Pressure pipe & fittings, cast iron; WPU07210604 Rubber and plastic products, Plastic pipe fittings and unions). Price changes on foreign products due to tariffs will be evaluated on a case-by-case basis when such tariff is implemented.

**END OF EXHIBIT 1** 

# EXHIBIT 2 MINIMUM QUALIFICATIONS

Bidders must submit the information and documentation requested that confirms Bidder meets the following minimum qualification requirement(s):

1. Must be registered with the State of Florida, Division of Corporations to do business in Florida.

No documentation is required. The County will verify registration.

- 2. The Bidder has provided ductile iron water and sewer materials and accessories, or no-lead brass water, sewer, and backflow products, for at least ten (10) clients since November 1, 2014. Provide the following information for the ten qualifying clients.
  - a) Name of client
  - b) Location (City/State)
  - c) Client contact name
  - d) Contact phone
  - e) Contact email
  - f) Service dates (Start/End)
  - g) Components
- 3. Bidder is not on the Federal Convicted Vendor or Excluded Parties list (SAM/EPLS)

No documentation is required. The County will verify

4. Bidder has not been convicted of a public entity crime per Section 287.133, Florida Statutes or environmental law in the past five years.

Bidder must complete Attachment C and submit with its Offer attesting that it has not been convicted of a public entity crime or environmental law in the past five years.

5. If Bidder is submitting as a joint venture must file the required documents with the Florida Department of Business and Professional Regulation as required by Florida Statute Section 489.119, prior to the Due Date and Time.

If Bidder is a joint venture, provide a copy of Bidder's approved filing with the Florida Department of Business and Professional Regulation. If Bidder is not a joint venture, provide a statement to that effect.

6. Bidder has no reported conflict of interests in relation to this IFB.

Disclose the name of any officer, director or agent who is also an employee of the County. Disclose the name of any County employee who owns, directly or indirectly,

any interest in the Bidder's firm or any of its branches. If no conflicts of interests are present, Bidder must submit a statement to that affect.

END OF EXHIBIT 2



		Category		Submittal Potable Water Reclaimed Water Wastewater	Manufacturer	Model Number	Notes
				< < <	JM Eagle	Blue Brute (C900)/ Big Blue (C905)	14" diameter pipe shall only be used with written approval by Manatee County  All PVC pipe shall be color-coded per service application
		Standard Push-	411	< <	Diamond Plastics Corp.	C900/Trans-21	Water/Reclaimed:  4" - 12": Pressure Class 235, DR 18, Ductile Iron Pipe Size (DIPS), AWWA C900-16  For uncontaminated soils: Shall have EPDM rubber gaskets with the letters "EPDM" embossed or formed into the gasket
	Pressurized	On Joint	4" and Larger	< < <	North American Pipe Corp.	C900/IB	For contaminated soils: Shall have NBR or FKM rubber gasket Refer to PVC Pressurized Pipe and Fittings Section 02622 for gasket material details Pipe shall be NSF61 certified for potable water
	PVC AWWA C900-16			< < <	National Pipe & Plastics	Dura-Blue C900	<u>Wastewater:</u> 4" - 36": Pressure Class 235, DR 18, DIPS, AWWA C900-16 <u>Self-Restrained Push-On Joint:</u>
		Self-Restrained	On Joint	< < <	Bulldog Restraint	Bulldog Gasket	All self-restrained push-on joint pipe shall be field checked for proper engagement per manufacturer's recommendations  Shall come with weather-resistant, min. 6 mil thick, 4" wide, solid red PVC marking tape around bell
Piping		Push-On Joint	ined	< < <	RieberLok	RieberLok Gasket	RieberLok: Gaskets shall only be used on manufacturer approved pipe  Bulldog Restraint: Gaskets shall only be factory applied to Diamond Plastics "Lok 21" and JM Eagle's  "Eagle Loc 900" Pipe
				~	JM Eagle	Ring-Tite Gravity Sewer	14" diameter pipe shall only be used with written approval by Manatee County
	Gravity Sewer PVC ASTM	4" and	Larger	~	Diamond Plastics Corp.	Sani-21	Push-on joints shall use elastomeric gaskets in accordance with ASTM D3212 Pipe shall be color coded green for sewer applications
	D3034/F679	4 und	Lurger	~	North American Pipe Corp.	ASTM D3034/IB	4"-15": SDR 26, ASTM D3034
				~	National Pipe & Plastics	Sewer ASTM D3034/F679	18"-54": SDR 35, ASTM F679
		3" and Smaller	<b>✓</b> ✓	JM Eagle	Ring-Tite		
	Pressurized PVC		< <	Diamond Plastics Corp.	D2241	Shall only be used for water/reclaimed water service casings in roadway	
	ASTM D2241	3 and	Sindiff	< <	North American Pipe Corp.	ASTM D2241/IB	Pressure Class 200, SDR 21, Iron Pipe Size (IPS), ASTM D2241
				<b>/</b>	National Pipe & Plastics	Dura-Flow SDR Series	



				·	APPNOVED PN	1000C13 E131
		Category	Submittal Potable Water Reclaimed Water Wastewater	Manufacturer	Model Number	Notes
			~	North American Pipe Corp. Products	-	
			<b>✓</b>	JM Eagle Products	-	
	Pressurized Sch. 80 PVC ASTM D1785	2" and Smaller	~	GF Central Plastics Products	-	Shall only be used for grinder pump stations Iron Pipe Size (IPS), ASTM D1785 Only for working pressures up to 125 psi
			~	Charlotte Pipe Products	-	
			~	Harrison Plastic Products	-	
			<b>~ ~ ~</b>	JM Eagle	HDPE (DIPS) Pressure Pipe	Pressure Class 200, PE4710, Ductile Iron Pipe Size (DIPS), DR 11, AWWA C906 Min. Cell Classification per ASTM D3350 shall be 445574
8			~ <mark>~</mark> ~	WL Plastics	PE 4710 (DIPS)	3" & 14" diameter pipe shall only be used with written approval by Manatee County
Piping	HDPE	2" and Larger	< < < < < < < < < < < < < < < < < < <	GF Central Plastics	Design-Flow PE100/PE4710	All HDPE pipe must have color coded striping on 3-sides (120 degree apart) per service application  Water/Reclaimed:
			~ <b>~</b> ~	Performance Pipe	DriscoPlex 4000	For pipe sizes 2" or larger Pipe shall be NSF61 certified for potable water
			< <	Charter Plastics	PE 4710 - Blue/Lavender/ Green Stripe	<u>Wastewater:</u> For pipe sizes 4" - 36"
	PEX	Tubing 2" and Cm-"	<b>~</b>	Endot	Endopure	Pressure Class 250, PE4710, Copper Tube Size (CTS), SDR 9, AWWA C901 Min. Cell Classification per ASTM D3350 shall be 445574 Tubing shall be fully color coded blue for potable or purple for reclaimed services
		Tubing: 2" and Smaller	<b>✓</b> ✓	Charter Plastics	4710 - CTS Tubing	Tubing shall be NSF61 certified for potable water  Butt-Fusion or CTS brass connections shall be used
		Tubing: 2" and Smaller	<b>~</b>	Rehau	Municipex	Pressure Class 200, PEXa 3306, Copper Tube Size (CTS), SDR 9, AWWA C904 Tubing shall be fully color coded blue for potable or purple for reclaimed services Tubing shall be NSF61 certified for potable water
						Butt-Fusion or CTS brass connections shall be used



		Category		Submittal	Potable Water Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
				,	<b>/ /</b>		American Cast Iron Pipe Company	Fastite Joint	Pipe Ratings:  Aboveground Installation: 250 PSI, Special Class 53  Buried Installation: 350 PSI for 4"-16", 250 PSI for 18" and larger
		Standard Push- On Joint		,	<b>/ /</b>	<b>✓</b>	McWane Ductile	Tyton Joint	Pipe shall have an approved external polyethylene encasement color coded blue for water, purple for reclaimed water, and green for sewer  Water/Reclaimed: For pipe sizes 4" and larger Interior Coating: Std. thickness cement lining per AWWA C104
	Ductile Iron AWWA		4" and Larger	,	<b>/</b>	<b>✓</b>	U.S. Pipe	Tyton Joint	Exterior Coating: Std. 1-mil asphaltic coating per AWWA C151 or a factory-applied epoxy coating per AWWA C116  For uncontaminated soils: Shall have EPDM rubber gaskets with the letters "EPDM" embossed or formed into gasket  For contaminated soils: Shall have NBR or FKM rubber gasket  Refer to Ductile Iron Pipe and Fittings Section 02615 for gasket material details
Piping	C150/C151		6	,	<b>/</b>	✓ <sup>1</sup>	American Cast Iron Pipe Company	Fastite Joint w/ Amarillo Fast-Grip Gasket	Pipe shall be NSF61 certified for potable water  Wastewater:  For pipe sizes 36" or larger  Preshipment holiday-free factory certification per ASTM G62 shall be provided for the interior and
		Self-Restrained Push-On Joint		,	<b>/</b>	✓	McWane Ductile	Tyton Joint w/ Barracuda Gasket	exterior coatings  Interior Coating: Green, factory applied dry film thickness 40-mil Tnemec Series 431 Perma-Shield PL or Permox CTF coating  Exterior Coating: Std. 1-mil asphaltic coating per AWWA C151 or a factory-applied epoxy coating per AWWA C116
				,	<b>/ /</b>	✓	U.S. Pipe	Tyton Joint w/ Barracuda Gasket	Self-Restrained Push-On Joint:  Restrained Gasket shall be colored Safety Yellow (Amarillo Fast-Grip Gasket)/Orange (Barracuda Gasket)  Shall come with weather-resistant, min. 6 mil thick, 4" wide, solid red PVC marking tape around bell
	Fiberglass	Centrifu	gally Cast			✓	Hobas Products	-	Shall only be used for slip lining existing gravity sewer main  Bell and Spigot shall meet requirements of ASTM D3262
	i ioci giass	Filamen	t Wound			<b>✓</b>	Flowtite Products	-	O-ring or profile type elastomeric gasket shall meet requirements of ASTM F477



		Category	Submittal Potable Water Reclaimed Water Wastewater	Manufacturer	Model Number	Notes
			<i>*</i> * *	Sigma Corp. Products	-	Contractor shall provide certification letter by manufacturer stating hardware material and coating (if applicable)  Letter shall state project and contractor's name  Letter shall be provided with the shop drawing submittal  For buried installations: T-bolts, bolts, tie rods, nuts, and washers shall be High Strength, Low Alloy  Steel conforming to AWWA C111/ANSI A21.11-17 or ASTM A242.
			<b>* * *</b>	Star Pipe Products	-	Hardware referenced above shall be coated with a blue fluoropolymer coating (Xylan 1424, FluoroKote #1 or AFT-PTFE-Blue).  Alternatively, hardware shall be 316 SS.  For aboveground installations: T-bolts, bolts, tie rods, nuts, and washers shall be 316 SS  Mechanical Joint Fittings:  4" - 16": 350 psi pressure rating
Fittings	Ductile Iron AWWA C110/C153	For Pressurized PVC C900-16 and DI Pipe	<i>y y</i>	Infact Corp.	Flex T-2/T-3	18" and larger: 250 psi pressure rating  Flanged Fittings:  All sizes: 250 psi pressure rating  Water/Reclaimed:  Interior Coating: Double the std. thickness cement lining per AWWA C104
			<b>* * *</b>	SIP Industries	-	Exterior Coating: Std. 1-mil asphaltic coating per AWWA C110/C153 or a factory-applied epoxy coating per AWWA C116  For uncontaminated soils: Shall have EPDM rubber gaskets with the letters "EPDM" embossed or formed into gasket  For contaminated soils: Shall have NBR or FKM rubber gasket  Refer to Ductile Iron Pipe and Fittings Section 02615 for gasket material details  Fittings shall be NSF61 certified for potable water
			<i>y y y</i>	Tyler/Union Products	-	Wastewater:  Preshipment holiday-free factory certification per ASTM G62 shall be provided for the interior and exterior coatings  Interior Coating: Green, factory applied dry film thickness 40-mil Tnemec Series 431 Perma-Shield PL or Permox CTF coating  Exterior Coating: Std. 1-mil asphaltic coating per AWWA C110/C153 or a factory-applied epoxy coating per AWWA C116



		Category	Submittal	Potable Water Reclaimed Water Wastewater		Model Number	Notes
	Molded and Fabricated HDPE	For HDPE AWWA C906 Pipe		~	GF Central Plastics Products	-	
				~	Charter Plastics Products	-	Shall only be used in lift stations
				~	Performance Pipe Products	-	Pressure Class 160, PE4710, Ductile Iron Pipe Size (DIPS), DR 11, AWWA C906 Min. Cell Classification per ASTM D3350 shall be 445574
				~	Specified Fittings Products	-	Fittings shall be fused per manufacturer's recommendations
				~	Integrity Fusion Products	-	
Fittings		For Pressurized PVC AWWA C900-16 Pipe		~	NACO	Pressure Gasketed Fittings	Shall only be used for P-traps and drop manholes
Ħ				~	Multi Fittings Corp.	C900/C905 Fittings	All fittings shall be connected via water-tight push-on joints using elastomeric gaskets per ASTM D3212 rated for pressurized PVC
				~	Specified Fittings	C900 Fittings	Pressure Class 235, DR 18, AWWA C900-16/C907
	Molded and Fabricated PVC			~	Harrington Corp.	SDR 26/35 Fittings	
		For Gravity Sewer PVC ASTM D3034/F679 Pipe		~	Multi Fittings Corp.	Trench Tough Plus	All fittings shall be connected via water-tight push-on joints using elastomeric gaskets per ASTM D3212 rated for gravity sewer PVC
				~	Tigre-ADS USA	SDR 26/35 Gasketed	All fittings shall conform to ASTM D3034/F679 4" - 15": Shall be SDR 26 16" - 54": Shall be SDR 35
				~	North American Pipe Corp.	G/H-Series	



			1			/	APPROVED PR	CODOCIO LIST
		Category		Submittal Potable Water	Reclaimed Water	Manufacturer	Model Number	Notes
	PVC AWWA C900-16 (4" - 12")	Pipe to Pipe connections	Split-Casing (Only for Existing Construction)	~	<b>/ /</b>	Ford Meter Box Co.	Series UFR1390-C (DI, PVC) (4" - 12")	
				✓ ✓	<b>/</b>	Star Pipe Products	PVC Series 1100G2C (4" - 12")	New Construction:
					<b>/</b>	Śigma Corp.	PV-LOK Series D-PWP (DI, PVC) (4" - 12")	All sizes: 235 psi rating  Contractor shall provide certification letter by manufacturer stating hardware material and coating (if
			Wedge- Restraint (New Construction)	~	<b>/</b>	Star Pipe Products	PVC Stargrip Series 4100P (4" - 12")	applicable)  Letter shall state project and contractor's name  Letter shall be provided with the shop drawing submittal
ses				<b>~</b>	<b>/</b>	Śigma Corp.	ONE-LOK Series SLCEH (4" - 12")	For buried installations: T-bolts, tie rods, nuts, and washers shall be High Strength, Low Alloy Steel conforming to AWWA C111/ANSI A21.11-17 or ASTM A242.  Side clamping bolts shall be medium carbon steel per SAE J429 Grade 5/ASTM A449
External Thrust Restraint Devices		Pipe to MJ Fittings connections	Split-Casing (Only for Existing Construction)	~	<b>/</b>	Star Pipe Products	PVC Series 1000G2 (DI, PVC) (4" - 12")	Side clamping boits shall be medium carbon steel per SAE 1429 Grade 5/ASTM A449  Side clamping nuts shall be medium carbon steel per SAE 1995 Grade 2/ASTM A449  Hardware referenced above shall be coated with a blue fluoropolymer coating (Xylan 1424, FluoroKote #1, or AFT-PTFE-Blue).
st Restra				<b>~</b>	<b>/</b> /	Sigma Corp.	PV-LOK Series PWM-C (4" - 12")	Alternatively, hardware shall be 316 SS.
nal Thrus			Wedge- Restraint (New Construction)	~	<b>/</b>	EBAA Iron	Series 2000PV (4" - 12")	For aboveground installations: T-bolts, tie rods, nuts, and washers shall be 316 SS Side clamping bolts shall be min. 316 SS per ASTM A193 Grade B8M, Class 2 Side clamping nuts shall be min. 316 SS per ASTM A194 Grade 8M, Class 1
Exteri				traint New	· • •	Star Pipe Products	PVC Stargrip Series 4000 (HDPE, PVC) (4" - 12")	Restraint devices shall have the following factory applied high performance coatings:  Star Pipe Products: Starbond System  Sigma Corp.: CORRSAFE System  EBAA Iron: MEGA-BOND System
					<b>/</b>	Śigma Corp.	ONE-LOK Series D-SLCE (4" - 12")	Ford Meter Box Co.: Armorguard E-Coat System  Water/Reclaimed:
			All Construction	uction	<b>/</b>	EBAA Iron	Series 2600 (4" - 12")	For uncontaminated soils: Shall have EPDM rubber gaskets with the letters "EPDM" embossed of formed into gasket  For contaminated soils: Shall have NBR or FKM rubber gasket
		Pipe to PVC Fittings connections			<b>/</b>	Star Pipe Products	Series 1200G2C (4" - 12")	Refer to Valves and Appurtenances Section 02640 for gasket material details
				~	<b>/</b>	Śigma Corp.	PV-LOK Series PWPF (4" - 12")	



		Category		Submittal Potable Water	Reclaimed Water Wastewater	Manufacturer	Model Number	Notes
	PVC AWWA C900-16 (14" - 36")	Pipe to Pipe connections	Split-Casing (Only for Existing Construction)	<b>~</b>	. 🗸	Star Pipe Products	Series 1100C (14" - 36")	
				~		Śigma Corp.	PV-LOK Series D-PWP (DI, PVC) (14" - 36")	New Construction: All sizes: 235 psi rating
			Wedge- Restraint (New Construction)	~		EBAA Iron	Megalug Series 2800 (14" - 16")	Contractor shall provide certification letter by manufacturer stating hardware material and coating (if applicable)  Letter shall state project and contractor's name  Letter shall be provided with the shop drawing submittal
				<b>✓</b>	·	PVC Stargrip Series 4400 (14" - 20")  Star Pipe Products  Series 1100C* (24" - 36")  PVC Stargrip Series 4400 (14" - 20")  For buried installations: T-bolts, tie rods, nuts, and was conforming to AWWA C111/ANSI A: Side clamping bolts shall be medium carbon stee Side clamping nut shall be medium carbon stee Hardware referenced above shall be coated with a blue fl	For buried installations: T-bolts, tie rods, nuts, and washers shall be High Strength, Low Alloy Steel conforming to AWWA C111/ANSI A21.11-17 or ASTM A242.	
evices				) /	· • •		(24" - 36")	Side clamping bolts shall be medium carbon steel per SAE J429 Grade 5/ASTM A449 Side clamping nut shall be medium carbon steel per SAE J995 Grade 2/ASTM A449 Hardware referenced above shall be coated with a blue fluoropolymer coating (Xylan 1424, FluoroKo
straint D				<b>✓</b>	·	Ford Meter Box Co.	Series UFR1390-C* (DI, PVC) (24" - 36")	#1, or AFT-PTFE-Blue). Alternatively, hardware shall be 316 SS.
External Thrust Restraint Devices			Split-Casing (Only for Existing Construction)	<b>✓</b>	•	Star Pipe Products	Series 1000C (14" - 36")	For aboveground installations: T-bolts, tie rods, nuts, and washers shall be 316 SS Side clamping bolts shall be min. 316 SS per ASTM A193 Grade B8M, Class 2 Side clamping nuts shall be min. 316 SS per ASTM A194 Grade 8M, Class 1
External				<b>~</b>	. 🗸	Śigma Corp.	PV-LOK Series D-PWM (14" - 24")	Restraint devices shall have the following factory applied high performance coatings:  Star Pipe Products: Starbond System  Sigma Corp.: CORRSAFE System  EBAA Iron: MEGA-BOND System
		Pipe to MJ  Fittings  connections	Wedge- Restraint (New Construction)	nt 🗸	· 🗸 🗸	EBAA Iron	Series 2000PV (HDPE, PVC) (14" - 16", 24")	Ford Meter Box Co.: Armorguard E-Coat System  Water/Reclaimed:
						Star Pipe Products	PVC Stargrip Series 4000 (HDPE, PVC) (14" - 36")	For uncontaminated soils: Shall have EPDM rubber gaskets with the letters "EPDM" embossed or formed into gasket  For contaminated soils: Shall have NBR or FKM rubber gasket  Refer to Valves and Appurtenances Section 02640 for gasket material details
				<b>✓</b>	· 🗸 🗸	Śigma Corp.	ONE-LOK Series D- SLCE (HDPE, PVC) (24" - 36")	*This split-casing model is allowed for new construction for these specific sizes to ensure entire size range is covered
		Pipe to PVC Fittings connections	All Construction	<b>✓</b>	<b>/</b>	Sigma Corp.	PV-LOK Series PWPF (14" - 24")	



		Category		Submittal Potable Water	Reclaimed Water Wastewater	Manufacturer	Model Number	Notes
		Pipe to MJ Fittings connections	Split-Casing (Only for Existing Construction)	<b>✓</b>	<b>~ ~</b>	EBAA Iron	Series 15PF00 (4" - 12")	New Construction: All sizes: 160 psi rating  Contractor shall provide certification letter by manufacturer stating hardware material and coating (if applicable)
				<b>✓</b>	<b>*</b>		Series 15MJ00 (4" - 12")	applicable) Letter shall state project and contractor's name Letter shall be provided with the shop drawing submittal  For buried installations: T-bolts, tie rods, nuts, and washers shall be High Strength, Low Alloy Steel conforming to AWWA C111/ANSI A21.11-17 or ASTM A242.  Side clamping bolts shall be medium carbon steel per SAE J429 Grade 5/ASTM A449
estraint Devices	HDPE AWWA C906			<b>&gt;</b>	<b>~ ~</b>	Sigma Corp.	PV-LOK Series PVM-C (4" - 12)	Side clamping nut shall be medium carbon steel per SAE J995 Grade 2/ASTM A449  Hardware referenced above shall be coated with a blue fluoropolymer coating (Xylan 1424, FluoroKote #1, or AFT-PTFE-Blue).  Alternatively, hardware shall be 316 SS.  For aboveground installations: T-bolts, tie rods, nuts, and washers shall be 316 SS  Side clamping bolts shall be min. 316 SS per ASTM A193 Grade B8M, Class 2
External Thrust Restraint Devices			Wedge- Restraint (New Construction)		<b>~ ~</b>	EBAA Iron	Series 2000PV (HDPE, PVC) (4" - 12")	Side clamping nuts shall be min. 316 SS per ASTM A194 Grade 8M, Class 1  All restrained joints shall be designed for HDPE Pipe conforming to AWWA C906 and Ductile Iron Pipe Size (DIPS) Dimensions  Shall include 316 SS pipe stiffening insert  ABS Spacers shall not be removed from actuating bolts on HDPE Pipe (DIPS)
					<b>~ ~</b>	Star Pipe Products	PVC StarGrip Series 4000 (HDPE, PVC) (4" - 18")	Restraint devices shall have the following factory applied high performance coatings:  Star Pipe Products: Starbond System  Sigma Corp.: CORRSAFE System  EBAA Iron: MEGA-BOND System  Ford Meter Box Co.: Armorguard E-Coat System
					~ ~	Sigma Corp.	ONE-LOK Series D-SLCE (HDPE, PVC) (4" - 12")	Water/Reclaimed: For uncontaminated soils: Shall have EPDM rubber gaskets with the letters "EPDM" embossed or formed into gasket For contaminated soils: Shall have NBR or FKM rubber gasket Refer to Valves and Appurtenances Section 02640 for gasket material details



		Category		Submittal Potable Water Reclaimed Water	Manufacturer	Model Number	Notes
		Pipe to Pipe connections	Split-Casing (Only for Existing Construction)	< <	EBAA Iron	Series 1500TD (DI, PVC) (4" - 12")	New Construction:  2" - 16": 350 psi rating  18" and larger: 250 psi rating  Contractor shall provide letter by manufacturer stating hardware material and coating (if applicable)  Letter shall be provided with shop drawing submittal and state project and contractor's name
				<b>///</b>	Star Pipe Products	Stargrip Series 3100S (3" - 48")	
				< <	Sigma Corp.	ONE-LOK Series SSLDH (4" - 36")	conforming to AWWA C111/ANSI A21.11-17 or ASTM A242.
	Ductile Iron Pipe AWWA C150 & C151		Wedge-	< <	EBAA Iron	Series 1700 (4" - 48")	Side clamping bolts shall be medium carbon steel per SAE J429 Grade 5/ASTM A449 Side clamping nuts shall be medium carbon steel per SAE J995 Grade 2/ASTM A449 Hardware referenced above shall be coated with a blue fluoropolymer coating (Xylan 1424, FluoroKote #1, or AFT-PTFE-Blue).
			Restraint (New Construction)	< < > <	Star Pipe Products	Stargrip Series 3100P (4" - 48")	Alternatively, hardware shall be 316 SS.  For aboveground installations: T-bolts, tie rods, nuts, and washers shall be 316 SS  Side clamping bolts shall be min. 316 SS per ASTM A193 Grade B8M, Class 2  Side clamping nuts shall be min. 316 SS per ASTM A194 Grade 8M, Class 1
Devices				<b>✓</b>	Sigma Corp.	ONE-LOK Series SLDEH (4" - 36")	
External Thrust Restraint Devices		Pipe to MJ	Split-Casing (Only for Existing Construction) Wedge- Restraint (New Construction)	<b>✓</b>	EBAA Iron	EBAA Iron  Series 1100SD (4" - 48")  Sigma Corp.: CORRSAFE Sy	Restraint devices shall have the following factory applied high performance coatings:  Star Pipe Products: Starbond System  Sigma Corp.: CORRSAFE System
Thrust				< <	Star Pipe Products	Split Stargrip Series 3000S (4" - 48")	EBAA Iron: MEGA-BOND System Ford Meter Box Co.: Armorguard E-Coat System
External				<b>✓</b> ✓	Sigma Corp.	ONE-LOK Series SSLDH (4" - 36")	formed into gasket
		<u>Fittings</u> connections		Restraint (New	EBAA Iron	Series 1100 (4" - 48")	For contaminated soils: Shall have NBR or FKM rubber gasket Refer to Valves and Appurtenances Section 02640 for gasket material details
					Star Pipe Products	Stargrip Series 3000 (4" - 48")	MJ Fitting to MJ Fitting Connections in Water/Reclaimed:  Interior Coating: Std. thickness cement lining per AWWA C104 or factory-applied epoxy per AWWA C116
					Sigma Corp.	ONE-LOK Series D- SLDE (4" - 48")	Exterior Coating: Std. 1-mil asphaltic coating per AWWA C110/C153 or a factory-applied epoxy coating per AWWA C116  MJ Fitting to MJ Fitting Connections in Wastewater:
		MJ Fitting t	o MJ Fitting	~ ~	Star Pipe Products	Series 100 (3" - 36")	Preshipment holiday-free factory certification per ASTM G62 shall be provided for the interior and exterior coatings  Interior Coating: Green, factory applied dry film thickness 40-mil Tnemec Series 431 Perma-Shield PL or
			ections	~ ~	Infact Corp.	Foster Adaptor (3" - 36")	Permox CTF coating  Exterior Coating: Std. 1-mil asphaltic coating per AWWA C151 or a factory-applied epoxy coating per AWWA C116



	Category		Submittal Potable Water Reclaimed Water Wastewater	Manufacturer	Model Number	Notes
	Gravity Sewer PVC ASTM D3034	4" - 12"	~	Maxadaptor	Max Series	Shall be reinforced with 316 SS bands and hardware
	Plain End to Plain End Coupling	4" - 12"	~	Fernco Products	XL Coupling Series 5000	Shan be reinforced with 510 33 bands and hardware
ngs		2" - 12"	<b>~</b>	Romac	Macro	Contractor shall provide certification letter by manufacturer stating hardware material and coating (if applicable)  Letter shall state project and contractor's name  Letter shall be provided with the shop drawing submittal  For buried installations: T-bolts, bolts, tie rods, nuts, and washers shall be High Strength, Low Alloy  Steel conforming to AWWA C111/ANSI A21.11-17 or ASTM A242.  Hardware referenced above shall be coated with a blue fluoropolymer coating (Xylan 1424, FluoroKote
Plain End Couplings	Dissimilar Pipe Materials Plain End to Plain End Coupling	2" - 12"	<b>~</b>	Krausz	Hymax 2 Coupling (Series 860)	#1, or AFT-PTFE-Blue).  Alternatively, hardware shall be 316 SS.  For aboveground installations: T-bolts, bolts, tie rods, nuts, and washers shall be 316 SS  Couplings shall have the following factory applied high performance coatings:  Romac: Romacoat System  Krausz: Factory std. min. 14 mil fusion bonded epoxy  EBAA: MEGA-BOND System
		4" - 48"	<b>~</b>	EBAA	Mega-Coupling Series 3800	Preshipment holiday-free factory certification per ASTM G62 shall be provided for the interior and exterior coatings  Water/Reclaimed: Couplings shall be NSF61 certified for potable water For uncontaminated soils: Shall have EPDM rubber gaskets with the letters "EPDM" embossed or formed into gasket For contaminated soils: Shall have NBR or FKM rubber gasket Refer to Valves and Appurtenances Section 02640 for gasket material details



	Category		ubmittal	Reclaimed Water	Manufacturer	Model Number	Notes
			Subi	Reck	Charter Plastics Products	-	Pressure Class 160, PE4710, Ductile Iron Pipe Size (DIPS), DR 11, AWWA C906 Min. Cell Classification per ASTM D3350 shall be 445574
	HDPE AWWA C90	c	•	<b>~</b>	Improved Piping Products	-	Fittings shall be fused per manufacturer's recommendations Shall have 316 SS back-up ring
	Flange and MJ Ad		٧	<b>/</b>	Integrity Fusion Products	-	<u>Water/Reclaimed:</u> <u>For uncontaminated soils:</u> Shall have EPDM rubber gaskets with the letters "EPDM" embossed or formed into gasket
				<b>/</b>	Performance Pipe Products	-	For contaminated soils: Shall have NBR or FKM rubber gasket Refer to Valves and Appurtenances Section 02640 for gasket material details
		4" - 20"	v	<b>/</b>	EBAA Iron	Megaflange Series 2100 (DI, PVC)	PVC Flange Adapter: 4"-36": 235 psi rating
	Pressurized PVC	3" - 36"	v	<b>/ /</b> .	Sigma Corp.	Sigmaflange SFA Series CP	<u>DIP Flange Adapter:</u> 2"-16": 350 psi rating <u>18" and larger:</u> 250 psi rating
apters	AWWA C900-16 Flange Adapter	4" - 20"	v	<b>/ /</b> .	Star Pipe Products	Super Flange Series 7200 (DI, PVC)	Contractor shall provide certification letter by manufacturer stating hardware material and coating (if applicable)  Letter shall state project and contractor's name  Letter shall be provided with the shop drawing submittal
Flange Adapters		3" - 36"	v	<b>/ /</b> .	/	Starflange Series 4200	For buried installations: T-bolts, bolts, tie rods, nuts, and washers shall be High Strength, Low Alloy Steel conforming to AWWA C111/ANSI A21.11-17 or ASTM A242. Hardware referenced above shall be coated with a blue fluoropolymer coating (Xylan 1424, FluoroKote
		2" - 12"		<b>✓</b>	Ford Meter Box Co	o. Series 420	#1, or AFT-PTFE-Blue). Alternatively, hardware shall be 316 SS.  For aboveground installations: T-bolts, bolts, tie rods, nuts, and washers shall be 316 SS
		3" - 20"	·	<b>/</b>	EBAA Iron	Megaflange Series 2100 (DI, PVC)	Flange adapters shall have the following factory applied high performance coatings:  Star Pipe Products: Starbond System  Sigma Corp.: CORRSAFE System
	DIP AWWA C110 Flange Adapters	3 - 20	·	<b>~</b>	Star Pipe Product:	Super Flange Series 7200 (DI, PVC)	EBAA Iron: MEGA-BOND System Ford Meter Box Co.: Armorguard E-Coat System Preshipment holiday-free factory certification per ASTM G62 shall be provided for the interior and exterior coatings
		All sizes except	·	<b>/</b>	Stal Pipe Products	Starflange Series 3200	<u>Water/Reclaimed:</u> Flange adapters shall be NSF61 certified for potable water For uncontaminated soils: Shall have EPDM rubber gaskets with the letters "EPDM" embossed or
		All sizes except	·	<b>/</b>	Sigma Corp.	Sigmaflange SFA Series DP	formed into gasket <u>For contaminated soils:</u> Shall have NBR or FKM rubber gasket  Refer to Valves and Appurtenances Section 02640 for gasket material details



		Category		Submittal Potable Water Reclaimed Water	Manufacturer	Model Number	Notes
				<b>✓</b>	GA Industries	Fig-929	Min. Inlet size shall be 2" Orifice, float, linkage, and hardware shall be 316 SS The seal shall be Buna N elastomer
		Air Release Valves			H-TEC	Model 986-SS	For waterways and canals crossing only Min. Inlet size shall be 2" Body, bolts, nuts, and washers shall be 316 SS The seal shall be Buna N elastomer
		Privatel	y-Owned	~	-	-	Any privately-owned backflow prevention assembly that is approved by the University of Southern California (USC), with the exception of Wilkins 375XL (3/4" and 1"), Watts LF009QT (3/4" and 1"), and Ames LF4000B (3/4" and 1"), will be accepted by Manatee County
			T				County-Owned approved models are also acceptable
				<b>✓</b>		350DA	Double Check Valve Assembly w/ Meter
				~	Wilkins (Zurn)	375DA	Reduced Pressure Zone Assembly w/ Meter
	Backflow Prevention Assembly			<b>✓</b>		375DA-OS&Y	Reduced Pressure Zone Assembly w/ Meter (OS&Y)
S			2-1/2"-12"	~		2000SS	Double Check Valve Assembly
Valves				~	Ames	3000SS	Double Check Valve Assembly w/ Meter
		County-Owned		~	Airies	4000SS	Reduced Pressure Zone Assembly
				~		5000SS	Reduced Pressure Zone Assembly w/ Meter
				<b>✓</b>	Apollo Valves	RPLF - 4A Series	Reduced Pressure Zone Assembly
			1/2"-2"	~	Wilkins (Zurn)	975XL2	Reduced Pressure Zone Assembly
			1/2 -2	~	Matte	Model LF007 Series	Double Check Valve Assembly
				~	Watts	Model 909 Series	Reduced Pressure Zone Assembly
		Ball Valves		<b>✓</b> ✓	FNW	Fig. 200A	For use with ARV
		Ball valves		<b>✓</b> ✓	Apollo Valves	Model 76F	Body, cap, stem, and ball shall be 316 SS/CF8M Min. Cold-Working Pressure shall be 1000 PSI
	Blowoff	On Ground	d Discharge	~	Hydro-Guard	HG-1	Shall only be used with written approval from Manatee County  Design considerations shall minimally include site drainage patterns, cross connection prevention,
	Valves	Pipe Di	ischarge	<b>✓</b>	Trydro Gadra	HG-2	grounding, dichlorination requirements, and discharge permits



		-		,	ALLINO AFD LIVE	000013 E131
	Category		Submittal Potable Water Reclaimed Water Wastewater	Manufacturer	Model Number	Notes
			<b>✓</b> ✓		300 Model B-25028	Saddle, Compression x MIP Thread (3/4" - 2")
		All joints made to CTS size HDPE tubing shall use SS insert stiffeners	<b>✓ ✓</b>		300 Model B-25008	Direct Tap, Compression x AWWA Taper Thread (3/4" - 2")
		E tu	<b>✓ ✓</b>	Mueller	300 Model P-25028	Saddle, Pack Joint x MIP Thread (3/4" - 2")
		4DP fen	<b>✓</b> ✓		300 Model P-25008	Direct Tap, Pack Joint x AWWA Taper Thread (3/4" - 2")
		nts made to CTS size HDPE tı shall use SS insert stiffeners	<b>✓ ✓</b>		FB1000-x-NL	Pack Joint x AWWA Taper Thread (3/4" - 2")
	For Copper	rs s sert	<b>✓ ✓</b>		FB1000-x-G-NL	Grip Joint Compression x AWWA Taper Thread (3/4" - 2")
	Pipe and HDPE Tubing	o C' S in	<b>✓ ✓</b>	Ford Meter Box Co.	FB1000-x-Q-NL	Quick Joint Compression x AWWA Taper Thread (3/4" - 2")
	Tubling	de t	<b>✓ ✓</b>		FB1100-x-NL	Pack Joint x MIP Thread (3/4" - 2")
		mac II us	<b>✓</b> ✓		FB1100-x-G-NL	Grip Joint Compression x MIP Thread (3/4" - 2")
		nts sha	<b>✓ ✓</b>		74101BCAPQ	"Q" McQuik Compression x AWWA Taper Thread (3/4" - 2")
Corporation		jo[	<b>✓ ✓</b>	A.Y. McDonald	74104BCAP-22	Pack Joint x AWWA Taper Thread (3/4" - 2")
Stops		₽	<b>✓ ✓</b>		74104BCAPF	FNPT x AWWA Taper Thread (3/4" - 2")
			<b>✓ ✓</b>		300 Model B-25000	Direct Tap, Flare x AWWA Taper Thread (3/4" - 2")
			<b>✓ ✓</b>	Mueller	300 Model B-25025	Saddle, Flare x MIP Thread (3/4" - 2")
	For Copper	r Pipe Only	<b>✓ ✓</b>	- 111	FB600-x-NL	Flare x AWWA Taper Thread (3/4" - 2")
			<b>✓ ✓</b>	Ford Meter Box Co.	FB700-x-NL	Flare x MIP Thread (3/4" - 2")
			<b>✓ ✓</b>	A.Y. McDonald	74101B	Flare x AWWA Taper Thread (3/4" - 2")
Aalves			<b>✓</b> ✓	Mueller	300 Model P-20045	FIP Thread x AWWA Taper Thread (3/4" -2")
5			<b>✓</b> ✓	Mueller	300 Model B-20046	FIP Thread x MIP Thread (3/4" - 2")
	For Stainless S	teel Pipe Only	<b>✓ ✓</b>	Fauri Martan Davi Ca	FB1600-x-NL	FIP Thread x AWWA Taper Thread (3/4" -2")
			<b>✓ ✓</b>	Ford Meter Box Co.	FB1700-x-NL	FIP Thread x MIP Thread (3/4" - 2")
			<b>✓ ✓</b>	A.Y. McDonald	74101BCAPF	FIP Thread x AWWA Taper Thread (3/4" -2")
		All joints made to CTS size HDPE tubing shall use SS insert stiffeners	<b>✓ ✓</b>	Fauri Martan Davi Ca	B41-xxxW-NL	Pack Joint x FIP Thread (3/4" - 2")
		o C 3 sha ene	<b>✓ ✓</b>	Ford Meter Box Co.	B41-xxxW-G-NL	Grip Joint Compression x FIP Thread (3/4" - 2")
	For Copper	de t bing stiff	<b>✓ ✓</b>		76100W-22	Compression x Compression (3/4" - 2")
	Pipe and HDPE	ma : tul ert	<b>✓ ✓</b>		76100WT	Pack Joint x Pack Joint (3/4" - 2")
	Tubing	nts DPE ins	<b>✓ ✓</b>	A.Y. McDonald	76102WG	Compression x FIP Thread (3/4" - 2")
		l joi le H e SS	<b>✓ ✓</b>		76107T	Compression x MIP Thread (3/4" - 2")
Curb Ctor-		Al siz usa	<b>✓</b> ✓		76107-22	Pack Joint x MIP Thread (3/4" - 2")
Curb Stops			<b>✓</b> ✓		B51-xxxW-NL	Pack Joint x FIP Thread (1/2" - 2")
			<b>✓</b> ✓	Ford Meter Box Co.	B11-xxxW-NL	FIP Thread x FIP Thread (1/2" - 2")
			<b>✓</b> ✓		B81-xxxW-NL	MIP Thread x FIP Thread (1/2" - 2")
	For Stainless S	teel Pipe Only	<b>✓</b> ✓		76107	FIP Thread x MIP Thread (3/4" - 2")
			<b>✓</b> ✓	A.Y. McDonald	76107WP	MIP Thread x MIP Thread (3/4" - 2")
			<b>✓</b> ✓	A.Y. IVICDONAIO	76102W-44	PVC (DIOD) Compression x FIP Thread (3/4" - 2")
			<b>✓ ✓</b>		76101W	FIP Thread x FIP Thread (3/4" - 2")



		Category		Submittal Potable Water	Reclaimed Water Wastewater	Manufacturer	Model Number	Notes
			2" - 54"	<b>✓</b>	· 🗸 🗸	American Flow Control	Series 2500 FL x FL	Shall be resilient seated valves conforming to AWWA C515  Body and bonnet shall be ductile iron  Buried valves shall have external nuts, bolts, and washers be min. 304 SS  Buried valves shall have min. 304 SS stems
	Flange x Flange 4" - 54"	4" - 54"	~	· • •	Kennedy	Model KS-RW/2638 FL x FL	Aboveground valves shall have external nuts, bolts and washers be 316 SS  Aboveground valves shall have 316 SS stems  Stem nut shall be bronze/copper  Wedge shall be ductile iron fully encapsulated in EPDM rubber with the letters "EPDM" embossed or	
			4" - 48"	<b>✓</b>	· • •	Clow	Model 2638 FL x FL	formed into the wedge  Valves shall have factory applied, min. 12 mils DFT fusion bonded epoxy coating on the interior and exterior  Preshipment holiday-free factory certification per ASTM G62 shall be provided for the interior and exterior coatings
			2" - 54"	~	· 🗸 🗸	American Flow Control	Series 2500 FL x FL (OS&Y)	Aboveground valve shall have flanged ends with Outside Stem & Yoke (OS&Y)  Valves 16" and larger shall be equipped with manufacturer-standard heavy duty gear type actuators with 2" square AWWA operating nut or handwheel  Gearbox shall be externally adjustable, totally enclosed to prevent water infiltration, and conform to ISO 9001 standards
Valves	Gate Valves	Flange x Flange (OS & Y)	4" - 54"	<b>✓</b>	· • •	Kennedy	Model KS-RW/2638 FL x FL (OS & Y)	Vertical installation shall use spur-type gear Horizontal installation shall use bevel-type gear  All horizontally-installed gate valves shall require flush line
			4" - 24"	~	· 🗸 🗸	Clow	Model 2638 FL x FL (OS & Y)	Wastewater:  Gate valves shall be allowed for Force Mains larger than 20"  Refer to Plug Valve Section for Force Mains that are 20" and smaller
				<b>✓</b>	· 🗸 🗸	American Flow Control	Series 2500 MJ x MJ	Gate valve sizes 3" and larger shall be allowed at lift stations  Valves shall only be installed vertically  Valves 16" and larger shall come with torque-limiting device with torque trip limits preset at factory:
		Mechanical Joint x Mechanical Joint	4" - 48"	<b>✓</b>	· • •	Kennedy	Model KS-RW/2638 MJ x MJ	<u>Kennedy Valves:</u> 16": 250 lb-ft, 18"-54": 450 lb-ft <u>American Flow Control:</u> 16"-20": 250 lb-ft, 24": 300 lb-ft, 30"-54": 500 lb-ft
				~	· • •	Clow	Model 2638 MJ x MJ	Clow Valves:  16": 250 lb-ft, 18"-54": 450 lb-ft



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	Category		Submittal Potable Water	Reclaimed Wate Wastewater	Manufacturer	Model Number	Notes
				AVK		Series 2780	Shall be nostalgic-style, dry barrel conforming to AWWA C502 and be UL/FM certified  Main valve shall be faced or covered with EPDM elastomer with the letters "EPDM" embossed or formed into the rubber
			✓	<b>✓</b>	Mueller	Super Centurion 250	Shall have one 5-inch Storz connection with two 2-1/2 inch hose nozzles  All external nuts, bolts, and washers shall be min. 304 SS
	Hydrants		~	~	Kennedy	K81D Guardian	Upper and lower stem rod shall be min. 304 SS  Nozzle cap shall be provided with a Buna N rubber O-Ring
			~	~	Clow	Medallion	Shall have min. 8-mils DFT fusion bonded epoxy coating on the interior and exterior  Preshipment holiday-free factory certification per ASTM G62 shall be provided for the interior and  exterior coatings
			~	~	American Flow Control	Darling B-84-B-5	Aboveground parts shall have an external top coat of Sherwin-Williams Acrolon 218 HS or Tnemec  Series 1095 acrylic polyurethane, min. 4 mils DFT
	Insertion Valves	4" - 12"	<b>√</b>	<b>*</b>	TEAM	InsertValve	Shall be resilient seated valves conforming to AWWA C515 All nuts, bolts, washers, and non-rising stem shall be min. 304 SS Wedge shall be ductile iron fully encapsulated in EPDM rubber with the letters "EPDM" embossed or formed into the wedge Valves shall have factory applied, min. 12 mils DFT fusion bonded epoxy coating on the interior and exterior Preshipment holiday-free factory certification per ASTM G62 shall be provided for the interior and exterior coatings
Valves	Tapping Valves		~	· 🗸 🗸	American Flow Control	Series 2500 FL x MJ	Shall be resilient seated valves conforming to AWWA C515 Shall be furnished with an alignment lip All external nuts, bolts, washers, and non-rising stem shall be min. 304 SS Wedge shall be ductile iron fully encapsulated in EPDM rubber with the letters "EPDM" embossed or formed into the wedge Valves shall have factory applied min. 12 mils DFT fusion bonded epoxy coating on the interior and exterior
			Tapping Valves   Kennedy  Model		Model KS-RW/2638 FL x MJ	Preshipment holiday-free factory certification per ASTM G62 shall be provided for the interior and exterior coatings  Valve 16" and larger shall be equipped with manufacturer-standard heavy duty gear type actuators with 2" square AWWA operating nut  Gearbox shall be externally adjustable, totally enclosed to prevent water infiltration, and conform to ISO 9001 standards  Vertical installation shall use spur-type gear  Horizontal installation shall use bevel-type gear	
				· 🗸	Clow	Series 2638 FL x MJ	Wastewater:  Valves shall only be installed vertically  Tapping valves 16" and larger shall come with torque-limiting device with torque trip limits preset at  factory:  Refer to Gate Valve section for trip limits



		Category		Submittal Potable Water	Reclaimed Water	Manufacturer	Model Number	Notes
			2" - 48"	~	· •	Valmatic	Series 500ABF	All sizes shall have 250 psi rating Check valve shall be lead free, ductile iron construction conforming to NSF 61 Shall be equipped with min. 17-4 SS seat position indicator and min. 304 SS backflow actuator
		Flapper Disk	2" - 24"	~	<b>/</b>	Pratt	RD Series	Disk shall be fully encapsulated in EPDM rubber with the letters "EPDM" embossed or formed into the disk  All external bolts, nuts, and washers shall be min. 304 SS  Valve shall have factory-applied, min. 8 mils DFT fusion bonded epoxy coating on the interior and
			3" - 16"	~	<b>/ /</b>	American Cast Iron Pipe Company	Series 2100	exterior Preshipment holiday-free factory certification per ASTM G62 shall be provided for the interior and exterior coatings
					~	AVK	Series 41	
	Check Valves				American Flow Control		Series 52	<b>2" - 12":</b> 175 psi <b>14" - 30":</b> 150 psi
Valves							106 LW	Check valve shall be flanged with ductile iron/cast iron body and bronze mounted single disk conforming to AWWA C508 Shall have bronze seat and body rings
>		Lever & Weight			~	Kennedy	1106 LW	Hinge pins shall be extended bronze or 316 SS  All external bolts, nuts, and washers shall be 316 SS  Valves shall have factory applied, min. 12 mils DFT fusion bonded epoxy coating on the interior and
					<u> </u>		Series 8001	exterior  Preshipment holiday-free factory certification per ASTM G62 shall be provided for the interior and exterior coatings
					~	Mueller	No. A-2600-6-01	
				~	<b>/</b>	Cla-Val Company	8" Model 52-01	Procesure sustaining and shock valve shall be nilet enerated diaphragm actuated valve with seet iron
	Combination I	Pressure Reducing and Pressure Sustaining		~	<b>/</b>	Singer	8" Model A106-RPS	Pressure sustaining and check valve shall be pilot operated diaphragm actuated valve with cast iron body, bronze trim, and 125-lb flanges  Pilot system shall consist of two direct acting, adjustable, spring loaded diaphragm valves  Pilot control valves shall be cast brass with min. 304 SS trim
				~	<b>/</b>	Watts	8" Model LFF116-52	



	Category		Submittal	Reclaimed Water	Manufacturer	Model Number	Notes
		2"			Pratt	Series 611A/613A	Plug valves shall be 100% circular port, non-lubricated, eccentric type Shall be installed with the shaft on the horizontal axis so that the seat rests on the top portion of body Shall shut off bubble tight bidirectionally when pressure tested at 175 PSI for 3"-12" and 150 PSI for 14" and larger Valve body, bonnet, and gland shall be ASTM A-126 cast iron or ASTM A-526 Grade 65-45-12 ductile
		3" - 12"			riau	Series 600FP/601FP	iron per AWWA C-517  Plug shall be ASTM A-526 Grade 65-45-12 ductile iron per AWWA C-517  Plug shall be fully vulcanized with nitrile (Buna N) rubber with a min. peel strength of 75 PSI per ASTM D429, method B  Top and bottom bearings shall be 316 SS
	2"	Milliken	Series 611A/613A	All external nuts, bolts, and washers shall be min. 304 SS  Valve be equipped with manufacturer-standard worm gear type actuators with 2" square AWWA  operating nut  Gearbox shall be externally adjustable, totally enclosed to prevent water infiltration, and conform to  ISO 9001 standards  Gearbox bearings shall be oil impregnated bronze or hardened steel			
Valves	Plug Valves	3" - 12"		,		Series 600F/601F	Gearbox worm gear shall be hardened steel or ductile iron ASTM A536 Class 65-45-12 Gearbox shaft shall be hardened steel  2": Valve seat shall have an overlay of min. 16 mils DFT high solids epoxy Shall only be allowed at grinder pump stations  3" and larger: Valve seat shall have a welded-in overlay of at least 95% pure nickel
>		2"		ı,	GA Industries	Figure 517-T	Refer to Gate Valve Section for applications larger than 20"  Valves shall come with torque-limiting device with torque trip limits preset at factory:  3"-6": 150 ft-lb  8"-20": 180 ft-lb
		3"-20"		•		Figure 517 Eco-Centric	All valves shall have internal and external min. 16 mils DFT high solids epoxy coating  Preshipment holiday-free factory certification per ASTM G62 shall be provided for the interior and exterior coatings
	Torque Limiting Device	Trip Torque Limit: 25-250 lb ft Trip Torque Limit: 251-500			Aunspach Controls	Model D86-250 Model D86-500	Torque limits shall be preset at factory (See specific valve section for torque limits)  Permanently mount overtorque protector on the valve operating nut  All hardware shall be min. 304 SSS  Shall have min. 8 mils DFT fusion bonded epoxy on the interior and exterior  Torque set point shall be engraved on the torque limiting device
	Ib-ft Valve Extension Stem		,		Mueller Co.  CS3 Waterworks  GPM Fab	-	Extension stems and hardware shall be min. 304 SS



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	Category			Potable Water Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
		4" - 30"	,	<b>/</b>	✓	JCM Industries	Model 6452/6459 (HDPE)	
	HDPE	4" - 24"			✓	Ford Meter Box Co.	FTSSP-xxx-x-V	Sleeve and straps shall be 316 SS T-bolts, bolts, tie rods, nuts, and washers shall be 316 SS
		4" - 12"			✓		STS423-H	Shall have min. 1/4" thick red rubber full face gasket Shall have 3/4" 316 SS test plug
Sleeves		6" - 48"			✓	Romac	STS420 (316 SS)	Water/Reclaimed: Must hold 180 PSI for one hour
oing Sle		6" - 12"	,	<b>/ /</b>			STS420 (316 SS)	Tapping sleeve shall be NSF61 certified for potable water  For uncontaminated soils: Shall have EPDM rubber gaskets with the letters "EPDM" embossed or
Tapping	PVC, Ductile Iron, Steel, AC				✓	Ford Meter Box Co.	Series FTSS-xxxx-x-V	formed into gasket <u>For contaminated soils:</u> Shall have NBR or FKM rubber gasket
	. 13, 222	4" - 24"			✓	Cascade Waterworks	Series CST-EX (316 SS)	Refer to Valves and Appurtenances Section 02640 for gasket material details
					✓	PowerSeal	Series 3490 (316 SS)	<u>Wastewater:</u> Must hold 150 PSI for one hour
		4" - 30"	,	<b>✓</b>	✓	JCM Industries	Model 6452/6459	



	Category		Submittal	Reclaimed Water Wastewater	Manufacturer	Model Number	Notes
		4" - 12"	,	<b>/ /</b>	Romac	STS423T-H	
		2" - 12"		<b>/ /</b>		Series FS313-xxx-TAP- Q	
		10" - 18"		<b>/ /</b>		Series FSP323-xxx-TAP-	
	HDPE	20" - 34"	v	<b>/ /</b>		Series FSP333-xxx-TAP- Q	
	HUPE	2" - 3"	,	<b>/</b>	Ford Meter Box Co.	FS313W-xxx-TAP	
		2" - 12"	v	<b>/</b>		Series FS313-xxx-TAP	
		10" - 18"	•	<b>/</b>		Series FSP323-xxx-TAP	<u>Water/Reclaimed:</u> Must hold 180 PSI for one hour
		20" - 34"		<b>/</b>		Series FSP333-xxx-TAP	Saddle body shall be made of red brass, alloy 85-5-5-5 or min. 304 SS Saddle strap shall be made of silicon bronze or min. 304 SS
adles		4" - 16"	v	<b>/</b>	Romac	202BS (Double Bolt)	T-bolts, bolts, tie rods, nuts, and washers shall be red brass, alloy 85-5-5-5 or min. 304 SS  Service saddle shall be NSF61 certified for potable water
Service Saddles		6"- 12"				Model STS420T	For uncontaminated soils: Shall have EPDM rubber gaskets with the letters "EPDM" embossed or formed into gasket  For contaminated soils: Shall have NBR or FKM rubber gasket
Servi		6" - 42"		~		Model STS420T (316 SS)	Refer to Valves and Appurtenances Section 02640 for gasket material details
		2" - 24"	•	<b>/ /</b>	JCM Industries	Model 6438	<u>Wastewater:</u> Must hold 150 PSI for one hour
		3" - 36"	v	<b>~</b>	JCIVI IIIUUSEITES	Model 502	Saddle body and extra wide strap shall be 316 SS T-bolts, bolts, tie rods, nuts, and washers shall be 316 SS
	PVC, Ductile Iron, Steel, AC	2" - 12"	•	<b>/ /</b>	,	FS313-xxx-TAP-Q	
		4" - 18"	•	<b>/ /</b>	,	FS323-xxx-TAP-Q	
		20" - 30"	v	<b>/ /</b>	Ford Meter Box Co.	FS333-xxx-TAP-Q	
		2" - 12"	v	<b>/</b>	Ford Meter Box Co.	FS313-xxx-TAP	
		4" - 18"	v	<b>/</b>		FS323-xxx-TAP	
		20" - 30"	v	<b>/</b>		FS333-xxx-TAP	



	Category		Submittal	Reclaimed Water Wastewater		Model Number	Notes
			,	<b>/ /</b>	BWM Company	Model BWM-SS-8	
			,	<b>/ /</b>	Switt company	Model BWM-SS-12	Metallic Casing Spacers:
		Metallic	,	<b>/ /</b>	Advanced Products	Model SSI8	Bolts, nuts, and washers shall be 316 SS Shell/band shall be min. 14 gauge 304 SS Risers shall be min. 10 gauge 304 SS
	Casing Spacers		,	<b>/ /</b>	& Systems, Inc.	Model SSI12	Each shell section shall have a hardness of Durometer "A" 85-90 and be lined with a min. thickness of 0.090" of ribbed PVC extrusion, EPDM, glass reinforced polymer, or ultra high molecular weight
			,	<b>/ /</b>	Cascade	Series CCS 8"	polyethylene.
			Wate	Waterworks	Series CCS 12"		
evices		Non-Metallic		RACI Products	-	Non-Metallic Casing Spacers:  Shall be constructed of non-metallic virgin polypropylene or HDPE	
Jack and Bore Devices			,	<b>/ /</b>	GPT Industries	Ranger II	Shall be sized/spaced per manufacturer's recommendations
ack and			,	<b>/ /</b>	BWM Company	Model BWM-PO	
			,	<b>* * *</b>		Model BWM-WR	
			,	<b>/ /</b>		Model AC	Contractor shall provide certification letter by manufacturer stating hardware material and coating  Letter shall state project and contractor's name  Letter shall be provided with the shop drawing submittal
	End Seals		,	<b>/ /</b>	Advanced Products & Systems, Inc.	Model AM	For buried installations: T-bolts, bolts, tie rods, nuts, and washers shall be High Strength, Low Alloy
			,	<b>/ /</b>	& Systems, IIIC.	Model AZ	Steel conforming to AWWA C111/ANSI A21.11-17 or ASTM A242.  Hardware referenced above shall be coated with a blue fluoropolymer coating (Xylan 1424, FluoroKote
				<b>/ /</b>		Model AW	#1, or AFT-PTFE-Blue). Alternatively, hardware shall be 316 SS.
			,	<b>/ /</b>	Cascade Waterworks	Model CCES	
			,	<b>/ /</b>	GPT Industries Products	-	



	Category		Submittal	Potable Water Reclaimed Water Wastewater	Manufacturer	Model Number	Notes
	Tracer Wire			< < <	Southwire	Copper Clad Steel Wire	To be used for <u>open cut installations</u> Solid #10 gauge, high strength, copper clad steel wire (684 PSI break load)
				< < <	Copperhead Industries	1030-HS	Min. 30-mils polyethylene insulation Color coded blue for water, Pantone Purple 522 C for reclaimed water, or green for sanitary sewer
	Tracer wire	=		< < <	Southwire	Copper Clad Steel Wire	To be used for <u>horizontal directional drilling installations</u> Solid #10 gauge, extra high strength, copper clad steel wire (2032 PSI break load)
				< < <	Copperhead Industries	1045-EHS	Min. 45-mils polyethylene insulation Color coded blue for water, Pantone Purple 522 C for reclaimed water, or green for sanitary sewer
	Tuesda Milias Comm			<b>✓</b> ✓		King 6 Blue	
	Tracer Wire Connection			< < <	Dryconn	Direct Bury Lug Aqua	
ators	Tracer Wire Boxes	Non-traffic rated		< < <	Copperhead Industries	Model LD14*TP	Shaft size shall be min. 2-1/2" I.D. Dia and 15" length
ion/Loc				< < <	Bingham & Taylor	Model P202CNG	ABS plastic rim with CI lid
Asset Protection/Locators		Traffic-rated		< < <	Copperhead Industries	Model RB14*TP	Tracer wire box shall be encased in a 6" concrete square, 6" in depth Shaft size shall be min. 2-1/2" I.D. Dia and 14-1/2" length
Asset				< < <	Bingham & Taylor	Model P2B202CNGHVY15SPB	CI rim and lid Shall have H-20 Load Rating
		Grounding Anode		< < <	Copperhead Industries	Model ANO-1005	Min. 1 lb magnesium anode shall be installed at all pipe dead ends per Section 02800
	Path Marking Tape	Path Marking Tape Electronic		<b>~ ~ ~</b>	ЗМ	Series 7600XR	All underground pipe shall have electronically detectable path marking tape made of polyethylene, minimum 6" wide and 6 mm thick  The tape shall have embedded detectable markers spaced every 8 feet along the warning tape The tape shall be color coded blue for water, Pantone Purple 522C for reclaimed water, or green for sanitary sewer  Shall be marked "CAUTION LINE BURIED BELOW"
	Polyethylene Encasem	ent Tubing		< < <	T. Christy's Enterprises	-	Shall be min. 8 mil thick, low density polyethylene tubing conforming to AWWA C105 Shall be color coded blue for water, purple (Pantone 522 C) for reclaimed water, and green for sewer
	Polyethylene Encasement Tubing			ent Tubing		-	Refer to Ductile Iron Pipe and Fittings Section 02615 for details



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	Category	Submittal Potable Water	Reclaimed Water Wastewater	Manufacturer	Model Number	Notes
		<b>✓</b>	<b>√</b>	Pro Select	Series PSVB 461- 664	
		<b>✓</b>	<b>/</b>	Tyler Union	Series 6500/6850/6860	
		~	· /	East Jordan Company Products	Series 8550	Assembly shall be cast iron, screw type boxes & lids Alternatively, HDPE boxes shall be two-piece adjustable, min. 1/4-inch thick wall, w/ cast iron lid Bottom Barrel shall be 5-1/4 inches inside diameter, with a flanged bottom
		~	<b>✓</b>		Series VB261 - VB268	Lids shall have color coded tops with the lettering "WATER" or "SEWER"
soxes	Valve Boxes and Lid Assembly	~	<b>✓</b>	Pipe Company Products	Series VB630	Roadways:  Shall use heavy duty, 24 lbs cast iron drop-type lid
Valve Boxes		~	· /		Series VB-0001/VB- 0002	Reclaimed Water:
>		<b>✓</b>	· /	Star Pipe Products	Series VB-0005/VB- 0006	Shall have square 9" x 9" lid labeled "Reclaimed Water" Shall be colored Pantone 522C
			<b>✓</b>		Series VB-0023	
		<b>✓</b>	<b>✓</b>	American Flow Control	Trench Adapter	
	Box Alignment Rings	<b>✓</b>	<b>/</b>	Boxlok Products	Model 3 & 4	Contractor to contact manufacturer to verify alignment ring model number will properly fit valve make and model
	Air Release Valve Enclosure		<b>/</b> /	Allied Moulded Products	-	All enclosures shall comply with Manatee County standard detail for shape and size 22" square by 24" tall <u>fiberglass</u> enclosure with a hasp for a padlock Shall have polyester infused aggregate protective coating color coded per application
		~	SIP Industries	6423-WNL	Non-locking, colored black for water	
	Meter Boxes	Motor Povos		6423-WL	Locking, colored black for water	
	WELEI DOVES		✓	SIF IIIuustiies	6423-RWNL	Non-locking, Pantone 522C for reclaimed
			✓		6423-RWL	Locking, Pantone 522C for reclaimed
			✓ ✓	Ford Meter Box Co.	VB 42-7W (5/8" X 3/4") VB 43-7W	
Meter Resetters		~	✓		(3/4") VB 44-7W (1")	Shall meet AWWA C800  Meter resetters shall have padlock wing on angle ball valve
			A.Y. McDonald		718-207WX (5/8" X 3/4")	Riser Height shall be 7 inch
				Mueller Co.	B-24118	
	Water Sample Stations	~		Safety Guard	Model B.O.S.S.	Bacteriological sample station with built in flush system Shall be installed with UV-protected enclosure



	Category	Submittal	Reclaimed Water	Manufacturer	Model Number	Notes	
	Polymer Concrete M		·	US Composite Pipe	-	Polymer concrete manholes shall be installed where:  • The manhole has a force main discharging into it, plus the 2 subsequent downstream manholes  • The manhole discharges directly to a lift station, plus the 2 subsequent upstream manholes  • The manhole has turbulent opposing flows as defined in the Manatee County Utility Standards (US-3)	
	Polymer Concrete Manholes			Armorock		-	Refer to Polymer Concrete Manholes Specifications Section 02625 for details Shall be furnished with a heavy duty composite frame & lid Frame & lid shall have min. (3) 316 SS locking bolts Refer to Frame & Lids section for approved manufacturers
les	Precast Concrete Manholes	lanholes			-	-	Precast manholes shall be installed for all applications except where a polymer concrete manhole is required as identified in the Polymer Concrete Manholes section  Refer to Precast Concrete Structures Specifications Section 03410 for details  Only premade O-ring gaskets shall be allowed for joint connection Ramnek shall not be an acceptable method of joint connection
Manholes	Flexible Pipe Connectors	Cast-In Boot		· · ·	A-Lok Products	Z-Lok X-Cel Premium	Must meet ASTM C923  Contractor shall grout the annular space between the pipe and wall penetration per manufacturer's
		(New Construction Only)		~	Trelleborg	Series 706	recommendations with the following:  Polymer Concrete Manholes: Sauereisen 165/Sikadur 42 Epoxy/ArmorRock Grout
				· ·	Press-Seal Corp.	Econoseal  Cast-A-Seal Series	<u>Precast Concrete Manholes:</u> Avanti Multi-Grout AV-202/AV-118 <u>Cast-In Boot:</u> If applicable, external take down clamp and its hardware shall be 316 SS
		Jack-In Boot (Existing Construction Only)		~	Trelleborg	Kor-N-Seal Series 106/206/406	<u>Jack-In Boot:</u> External take down clamp and its hardware shall be 316 SS
				~	Press-Seal Corp.	PSX Direct Drive	Internal expansion band and its hardware shall be min. 304 SS
	Rainwater Inserts				Hamilton Kent  Rowland	Tylox MIB Series InflowShield	Min. 18 gauge 304 SS insert



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		Category		Submittal Potable Water Reclaimed Water Wastewater	Manufacturer	Model Number	Notes
		Sta	ndard	<b>✓</b>	U.S. Foundry	USF 170-CE-1	Must have "MANATEE COUNTY", "SANITARY SEWER", AND "YEAR" CASTED
		Pim Floyation	below Floodplain	~	U.S. Foundry	USF 170-CE-BWT	Shall be used for manholes with lids that are located at less than the flood plain elevations as specified in Utilities Standard Manual 1.12.13
		Kiiii Lievatioii	below Floodplain	~	Pamrex	Pamtight	Shall have gasketed seals Shall have min. (3) 316 SS locking bolts
		ARV Manholes	with < 44" From	<b>✓ ✓</b>	Pamrex	Pamrex 32"	Shall be used for ARV hinged manholes with less than 44" from top of pipe to cover
	Frame & Lids	Top of Pi	pe to Cover	< < <	U.S. Foundry	USF 324-UT-LOC	In roadways, the lid shall open in the direction opposite of incoming traffic
					Composite Access Products	CAP ONE	Manholes shall use a heavy duty composite frame and lid where:  • The manhole has a force main discharging into it, plus the 2 subsequent downstream manholes
		Heavy Duty Composite -		<b>✓</b>	Aquatechnology Group	ATG-2400	<ul> <li>The manhole discharges directly to a lift station, plus the 2 subsequent upstream manholes</li> <li>The manhole has turbulent opposing flows as defined in the Manatee County Utility Standards (US-3)</li> <li>Shall have min. (3) 316 SS locking bolts</li> </ul>
5		Drop Bowl		~	Reliner/Duran Products	-	If required, shall be installed per Manatee County Standard Details
ole			Heat Shrink-	<b>✓</b>	GPT Industries	Riser-Wrap	To be used on Armorock or US Composite Pipe polymer concrete manholes:
Manholes	External J	Wrap External Joint Wrap			CCI Pipeline Systems	WrapidSeal	A min. of eighteen (18) inches wide heat shrinkable joint wrap shall be centered over all new manhole joints including chimney to manhole frame section
		Non-Shrink Wrap		~	Henry	Rubr-Nek RU116	To be used on all precast concrete or US Composite Pipe polymer concrete manholes:  A min. of twelve (12) inches wide elastomeric plastic joint wrap shall be centered over all new and existing manhole joints including chimney to manhole frame section
				<b>✓</b>	Armorock	ArmorRock Grout	Non-shrink, epoxy polymer grout shall be used for grouting applications in polymer concrete manhol including wall penetrations and adjusting benches
		Epoxy Grout		<b>✓</b>	Sauereisen	No. 165	
				<b>✓</b>	Sikadur	No. 42	, ,
	Grout				Avanti	Multi-Grout AV- 202/AV-118	Shall be used for grouting applications in precast concrete manholes including wall penetrations and adjusting benches
				<b>/</b>	ConSeal	CS102	Butyl Rubber Sealant shall be applied to the interior of Armorock polymer concrete manhole joints per manufacturer's recommendations
	In	ternal Joint Sea	lants	<b>/</b>	Adeka	Ultra Seal P-201 Hydrophillic Urethane Paste	A min. of 1/2-inch x 3/4-inch bead of urethane paste shall be applied to the interior of regular precast concrete manhole joints just before manhole section assembly
		Protective Line	1	~	Raven Lining Systems	Raven 405	Liners shall only be used with written approval from Manatee County to rehabilitate existing manhole concrete surfaces
		(Rehabilitation	ነ)	<b>✓</b>	GML Coatings	Green Monster	Liners shall be installed per manufacturer's recommendations



		Category		Submittal Potable Water Reclaimed Water	Manufacturer	Model Number	Notes
		Site L	ighting		Regent	Model EQ300M1	Min. 6000 lumens LED
				,	MDI Products	-	Float switch
	Electrical	Level Switche	es and Sensors	,	Connery  Manufacturing	-	Float switch
					Dylix	Model GXS3-PP300- A49-B49-50-C01-D49	Pressure transmitter mounted inside a stilling well acting as the primary level sensor For pump stations that re-pump sewage flows from other pump stations
		Flow	Meters	,	McCrometer	Ultra Mag Model UM06/UM08	Shall be used for lift stations that re-pump sewage flows (directly or indirectly) from other lift stations
					ABS	-	
		Submersible Pumps	Satellite		Barnes	-	
			Satemite	~	Crane	Sithe Series	Refer to Lift Station Section 13100 for details
Lift Stations					Hydromatic	-	Pumps shall have oil-filled cooling
Lift Sta			Master -	,	Hydromatic		
	Mechanical			,	Flygt	-	
	Wechanical	Diesel Backup	Pumps		Godwin Pumps	-	Refer to Diesel Backup Pump Section 11215 for details
			Cooling System		Prestone Products	-	
			Fluid		Zerex Products	-	
		Pumps			Carboline Bitumastic 300M Pump/Engine enclosures shall have	Pump/Engine enclosures shall have a coal tar epoxy coating, min. 16 mils DFT, for all metal surfaces	
			Protective Coating		Tnemec	46H-413	coming in contact with concrete or grout
					Sherwin Williams	SherGlass FF	Fuel tank/skid base shall have haze grey, two coats of 12-15 mils on top of a stripe coat over all welds, crevices, edges and sharp angles



		Category	Submittal Potable Water	Reclaimed Water Wastewater	Manufacturer	Model Number	Notes
		Lift Station Wetwell		<b>✓</b>	US Composite Pipe	-	All lift station wetwells shall be made of polymer concrete per Manatee County Specifications Section
		Lift Station Wetwen		<b>✓</b>	Armorock	-	13100
		Drop Bowl		<b>✓</b>	Reliner/Duran Products	-	If required, shall be installed per Manatee County Standard Details
				<b>✓</b>	GPT Industries	Link-Seal Model S-316	
	Structural	Wall Penetration Seals		<b>✓</b>	CCI Pipeline Systems	Wrap-IT Link WL-SS Series	All hardware to be 316 SS
us				<b>✓</b>	Proco Products	PenSeal ES Series (Standard)	
Lift Stations		Horizontal Support Channels		<b>✓</b>	Unistrut Products	-	Min. 1-5/8", 12 gage solid min. 304 SS channels, attached with 3/8" min. 304 SS all thread rod with min. 304 SS flat washers and nuts
<b>5</b>		Horizontal Support Chaines		<b>✓</b>	BLine Products	-	Refer to Manatee County standard details
		Pump Mounting Systems		<b>✓</b>	Barney's Pumps	-	All systems shall be of the front loading slide rail type BPIU All rail and mounting hardware shall be 316 SS
		Lift Station Towers		<b>✓</b>	Rohn	Series RG-45	For heights above > 20'
				1	U.S. Foundry Products	-	Aluminum cover shall have minimum load rating of 300 psf and equipped with 316 SS hinges, hasp, and a device to lock the doors in an open position when the lid is raised
		Wetwell Entrance Hatches		<b>✓</b>	Bilco Products	-	Shall have 2 coats of bitumastic epoxy, 16 mils DFT  For Duplex Stations:
				<b>✓</b>	Halliday Products	-	4" Base Elbow Wetwell: hatch shall be minimum 36" x 48" 6" Base Elbow Wetwell (8' Dia. Wetwell): hatch shall be minimum 42" x 60"



	Category				Manufacturer	Model Number	Notes
				<b>/</b>	GU Florida	FRP GU Liner	Liners shall only be used with written approval from Manatee County Liners shall be installed per manufacturer's recommendations  Sealant, adhesive, and bonding agent products shall be compatible with liner material
		Protective Insert Liners		~	AGRU	HDPE Sure Grip Liner	FRP liners shall be fabricated with premium grade isophthalic polyester resin, fiberglass chopped strand, woven roving and continuous reinforcements  Sand filler shall not be permitted in the FRP laminate
	Surface	Protective Liners (Rehabilitation)		<b>✓</b>	Raven Lining Systems	Raven 405	
				<b>-</b>	GML Coatings	Green Monster	Liners shall only be used with written approval from Manatee County to rehabilitate existing lift station concrete surfaces
				~	CCI Spectrum	SpectraShield	Liners shall be installed per manufacturer's recommendations
Lift Stations				<b>✓</b>	Sauereisen Products	210T & 210GL (MC Light Brown Formula)	
Lift St	Protection	Epoxy Grout		<b>✓</b>	Armorock	ArmorRock Grout	
				<b>/</b>	Sauereisen	No. 165	Non-shrink, epoxy polymer grout shall be used for grouting applications in polymer concrete lift stations including wall penetrations and adjusting benches
				<b>~</b>	Sikadur	No. 42	
		Grout Applications		<b>~</b>	Avanti	Multi-Grout AV- 202/AV-118	Shall be used for grouting applications in precast concrete lift stations including wall penetrations and adjusting benches
			Valve Vault Interior	<b>✓</b>	Tnemec	Series 69 Hi-Build Epoxy Coating	Interior surfaces of existing vaults shall be coated with two (2) coats of minimum thickness of 8 mils
		Coating	Exposed Concrete	<b>-</b>	FLR Paints, Inc.	H&C Silicone Acrylic Concrete Stain, Patio Green	Exterior surfaces of the vault and wetwell top exposed above grade shall have minimum two (2) coats of minimum 8 mils.
			Exposed Valve Assembly	<b>✓</b>	Rustoleum	Series 7538/Pro Series 7738	All aboveground valves, piping and appurtenances shall be painted Hunter Green