

<p><b>Submit Bid to:</b></p> <p><b>CITY OF DELTONA</b></p> <p>2345 Providence Blvd. Deltona, Florida 32725 Attn: <b>Purchasing</b></p> <p><b>CLEARLY MARK SEALED ENVELOPE WITH BID NAME AND NUMBER</b></p>	<p><b>INVITATION TO BID# 22037 FOR:  METER LIDS</b></p>
<p><u>Contact:</u></p> <p>Mary E. Perez Purchasing Agent Phone: (386) 878-8580 Fax: (386) 878-8571 EMAIL QUESTIONS TO: <b>E-Mail Address: meperez@deltonafl.gov</b></p>	<p>BIDDER NAME: _____ <u>Consolidated Pipe and Supply Company</u> _____</p>
<p><b><u>BID DUE DATE &amp; TIME:</u></b> <b>THURSDAY, June 2, 2022 AT 2:00 AT CITY HALL, 1ST FLOOR CONFERENCE ROOM LOCATED AT 2345 PROVIDENCE BOULEVARD, DELTONA, FLORIDA</b></p>	<p><b><u>MAILING ADDRESS:</u></b> _____ <u>3010 Eunice Ave. Orlando, FL 32808</u> _____ _____</p>
<p><u>Location of Public Opening:</u> City of Deltona, 1ST Floor Conference Room 2345 Providence Blvd., Deltona, FL 32725</p>	<p>Phone#: <u>407-293-2001</u>  Fax#: <u>407-293-6522</u></p>

**GENERAL CONDITIONS, INSTRUCTIONS AND INFORMATION FOR  
BIDDERS**

These documents constitute the complete set of terms and conditions, specification requirements, and bid forms. All bid sheets and attachments must be executed and submitted in a sealed envelope. The face of the envelope shall contain Bidder's name, return address, the date and time of bid opening, the bid number and title. Bids not submitted on the enclosed Bid Form shall be rejected. Bidders shall submit three (3) complete sets (one [1] original and two [2] copies) of their bid, complete with all supporting documentation. SUBMITTAL OF A BID IN RESPONSE TO THIS INVITATION TO BID CONSTITUTES AN OFFER BY THE BIDDER. Bids which do not comply with these requirements may be rejected at the option of the City.

**CONTACT:** All prospective bidders are hereby instructed not to contact any member of the City of Deltona Commission,  
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City Manager, or City of Deltona Staff members other than the noted contact person OR another member of the City's

Purchasing Division regarding this Invitation to Bid or their bid proposal at any time during the bid process. Any such contact shall be cause for rejection of your bid proposal. The Bid process is not over until an award is made.

**DELAYS:** The City, at its sole discretion, may delay the scheduled due dates indicated above if it is to the advantage of the City to do so. The City will notify bidders of all changes in scheduled due dates by written addendum.

**EXECUTION OF BID:** Bid must contain a manual signature, in ink, of an authorized representative, who has the legal ability to bind the Bidder in contractual obligations in the space provided on the Bid Response Form. Failure to properly sign the Bid shall invalidate same, and it shall not be considered for award. Bid must be typed or legibly printed in ink. Use of erasable ink is not permitted. All corrections made by Bidder to any part of the bid document must be initialed in ink. The original bid conditions and specifications cannot be changed or altered in any way. Altered bids will not be considered. Clarification of bids submitted shall be in letter form, signed by bidders and attached to the bid.

**BIDDER INFORMATION:** Bidder shall complete the "Corporate Authority", "Joint Venture", "Sole Proprietorship", or "Partnership" portion of the Bidder Information Sheet, whichever part applies, and include with their bid submittal.

**JOINT VENTURES:** Bids submitted by firms under "joint venture" arrangements or other multi-party agreements must submit a power of attorney delegating authority to one principal with authority to negotiate and execute any/all contract documents resulting from negotiations/award of this Invitation to Bid.

**NO BID:** If not submitting a bid, respond by returning only the Statement of No Bid, and give the reason in the space provided. Failure to respond three (3) times in succession without justification may be cause for removal of the Bidders name from the mailing list.

**BID OPENING:** Shall be public, at the above address, on the date and at the time specified above. The bid time shall be scrupulously observed. Under no circumstances shall bids delivered after the time specified be considered; such bids will be returned unopened. The City will not be responsible for late deliveries or delayed mail. The time/date stamp clock located in the Finance Department serve as the official authority to determine lateness of any bid. It is the Bidders sole responsibility to assure that his/her bid is complete and delivered at the proper time and place of the bid opening. Bids which for any reason are not so delivered will not be considered. Offers by facsimile, telegram or telephone are not acceptable. A bid may **NOT** be altered by the Bidder after opening of the bids. Bid tabulations will be furnished upon

written request which includes a self-addressed, stamped envelope.

Persons with disabilities needing assistance to participate in the Public Bid Opening should contact the City Clerk at least 48 hours in advance of the meeting at 386-561-2100.

**TAXES:** The City is exempt from Federal Excise and State Sales Taxes on direct purchases of tangible personal property. The City's exemption numbers are on the face of the purchase order. If requested, the Purchasing Manager will provide an exemption certificate to the awarded Bidder. Vendors/contractors doing business with the City shall not be exempted from paying sales tax to their suppliers for materials to fulfill contractual obligations with the City nor shall any Vendor/Contractor be authorized to use the City's Tax Exemption Number in securing such materials.

#### **CERTIFICATES**

The City reserves the right to require proof that the bidder is an established business and is abiding by the Ordinances, Regulations, and Laws of their Community and the State of Florida such as but not limited to: Occupational Licenses, Business Licenses, Florida Sales Tax Registration, Federal Employee Identification Number.

**DISCOUNTS:** Cash discounts for prompt payment shall not be considered in determining the lowest net cost for bid evaluation purposes.

**MISTAKES:** Bidders are expected to examine the terms and conditions, specifications, delivery schedule, bid prices, extensions and all instructions pertaining to supplies and services. **FAILURE TO DO SO WILL BE AT BIDDER'S RISK.** In the event of extension error(s), the unit price will prevail and the Bidder's total offer will be corrected accordingly. Written amounts shall take precedence over numerical amounts. In the event of addition errors(s), the unit price, and extension thereof, will prevail and the Bidder's total offer will be corrected accordingly. Bids having erasures or corrections must be initialed in ink by the Bidder.

**AWARD TERM** This bid is for an initial order of the items listed on the bid form and shall remain open for any additional water lids that may be needed for a period of one year.

**PRICE REDETERMINATION** The Contractor may petition the Purchasing Manager for price redetermination within forty-five (45) days of the expiration of each term of the contract. Any price redetermination will include all items awarded. If the City and the Contractor cannot agree on any price redetermination, then the contract will expire. *(See other conditions under Special Terms and Conditions)*

**UNUSUAL CIRCUMSTANCES:** If during a contract term where costs to the City are to remain firm or adjustments are

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restricted by a percentage or CPI cap, unusual circumstances that could not have been foreseen by either party to the contract occur, and those circumstances significantly affect the Seller's cost in providing the required items or services, then the Seller may request adjustments to the costs to the City to reflect the changed circumstances. The circumstances must be beyond the control of the Seller, and the requested adjustments must be fully documented. The City may, after examination, refuse to accept the adjusted costs if they are not properly documented, increases are considered to be excessive, or decreases are considered to be insufficient. In the event the City does not wish to accept the adjusted costs and the matter cannot be resolved to the satisfaction of the City, the City will reserve the following options:

1. The contract can be canceled by the City upon giving thirty (30) days written notice to the Seller with no penalty to the City or Seller. The Seller shall fill all City requirements submitted to the Seller until the termination date contained in the notice.
2. The City requires the Seller to continue to provide the items and services at the firm fixed (non-adjusted) cost until the termination of the contract term then in effect.
3. If the City, in its interest and in its sole opinion, determines that the Seller in a capricious manner attempted to use this section of the contract to relieve themselves of a legitimate obligation under the contract, and no unusual circumstances had occurred, the City reserves the right to take any and all action under law or equity. Such action shall include, but not be limited to, declaring the Seller in default and disqualifying him for receiving any business from the City for a state period of time.
4. If the City does agree to adjusted costs, these adjusted costs shall not be invoiced to the City until the Seller receives notice in writing signed by a person authorized to bind the City in such matters.

**INVOICING AND PAYMENT:** Payment for any and all invoice(s) that may arise as a result of a contract or purchase order issued pursuant to this bid specification shall minimally meet the following conditions to be considered as a valid payment request:

- a. A timely submission of a properly certified invoice(s), in strict accordance with the price(s) and delivery elements as stipulated in the contract or purchase order document, and be submitted to the Finance Department at the address as stipulated on the Purchase Order.
- b. All invoices submitted shall consist of an original and one (1) copy; clearly reference the subject contract or purchase order number; provide a sufficient salient description to identify goods or service for which payment

is requested; contain date of delivery; original or legible copy of signed delivery receipt including both manual signature and printed name of a designated City employee or authorized Agent; be clearly marked as "partial", "complete" or "final" invoice. The City will accept partial deliveries.

- c. The invoice shall contain the Bidder's Federal Employer Identification Number (F.E.I.N.).
- d. The City's terms are "Net 30 Days" after acceptance of goods or services and receipt of an acceptable invoice as described herein. Any discounts must be offered on the Bid Response Form.

**GENERAL:** The City of Deltona, having limited storage facilities, requires the service of private firms to provide materials, supplies and/or services on an as needed basis, as indicated herein, to support the City's needs.

**ADDITIONAL TERMS AND CONDITIONS:** Unless expressly accepted by the City, the following conditions shall apply: No additional terms and conditions included with the bid response shall be considered. Any and all such additional terms and conditions shall have no force and effect, and are inapplicable to this bid if submitted either purposely through intent or design, or inadvertently appearing separately in transmittal letters, specifications, literature, price lists or warranties. It is understood and agreed that the general and/or any special conditions in these Bid Documents are the only conditions applicable to this bid and the Bidder's authorized signature on the Bid Response Form attests to this. Exceptions to the terms and conditions will not be accepted.

**INTERPRETATIONS:** All Bidders shall carefully examine the Bid Documents. Any ambiguities or inconsistencies shall be brought to the attention of the City in writing prior to the opening of Bids; failure to do so, on the part of the Bidder, will constitute an acceptance by the Bidder of any subsequent decision. Any questions concerning the intent, meaning and interpretations of the Bid Documents shall be requested in writing (facsimile transmission acceptable (386) 789-7230, and received by the City at least seven (7) calendar days prior to the Bid Opening. Inquiries shall be addressed to the attention of the Contact person as indicated on Page 1. No person is authorized to give oral interpretations of, or make oral changes to, the bid. Therefore, oral statements given before the bid opening will not be binding. Any interpretation of, or changes to, the bid will be made in the form of a written Addendum to the bid and will be furnished to all Bidders through DemandStar. Receipt of all addenda shall be acknowledged by the Bidders by signing and enclosing said addenda or addendum acknowledgement with their bid.

**ADDENDUM:** The City will record its responses to inquiries, any supplemental instructions, and/or necessary revisions to Bid Documents, in the form of a written addendum. Should

revisions to the Bid Documents become necessary, the City will post a written addendum to the DemandStar website which will go out to all Bidders who received a bid package through DemandStar. All addendums are posted to the DemandStar website and current planholders are notified that an addendum has been issued. Bidders who obtain Bid Documents from other sources must officially register with the City's Purchasing Manager in order to be placed on the DemandStar website as a bid holder in order to receive any forthcoming addenda or other official communications. Failure to register as a prospective Bidder may cause your bid to be rejected as non-responsive if you have failed to submit a bid without an addendum acknowledgment for the most current addendum. It is the vendor's responsibility to check the DemandStar website at [www.demandstar.com](http://www.demandstar.com) in order to be sure latest addendum and any prior addendum have been received.

**PROTESTS:** Any Bidder who disputes the bid selection or contract award recommendation shall file such protest according to the bid protest procedures. These procedures are available upon request from the City.

**CONFLICT OF INTEREST:** All Bidders must disclose with their bid the name of any officer, director, or Agent who is also an employee of the City. All Bidders must disclose the name of any City employee who owns, directly or indirectly, an interest of five percent (5%) or more in the Bidder's firm or any of its branches.

**LEGAL REQUIREMENTS:** Bidders are required to comply with all provisions of Federal, State, City and local laws and ordinances, rules and regulations that are applicable to the items being bid. Lack of knowledge by the Bidder shall in no way be a cause for relief from responsibility, or constitute a cognizable defense against the legal effect thereof.

**DRUG-FREE WORKPLACE:** Preference shall be given to business with Drug-Free Work Place (DFW) programs. Whenever two or more bids which are equal with respect to price, quality, and service are received by the City for the procurement of commodities or contractual services, a bid received from a business that completes the attached DFW form certifying that it is a DFW shall be given preference in the award process.

**POSTING OF BID AWARD:** Recommendation for award will be posted for review by interested parties on DemandStar. Failure to file a protest to Purchasing within the time prescribed in the CITY's Purchasing Manual, shall constitute a waiver of proceedings.

**AWARD:** As the best interest of the City may require, the right is reserved to make award(s) by individual item, group of items, "All or None", or a combination thereof; with one or more suppliers; to reject any or all bids, or waive any minor

irregularity or technicality in bids received, award or eliminate a portion of the bid, and may, at its sole discretion, request a re-bid, or abandon the project in its entirety. Bidders are cautioned to make no assumption until the City has entered into a contract or issued a purchase order.

**EEO STATEMENT:** The City is committed to assuring equal opportunity in the award of contracts, and, therefore complies with all laws prohibiting discrimination on the basis of race, color, religion, national origin, age or sex.

**CONTRACTUAL AGREEMENT:** The contents of this Bid and all provisions of the successful bid proposal deemed pertinent by the City may be incorporated into a contract and become legally binding. A separate contract document, other than the purchase order, may or may not be issued. Any and all legal action necessary to enforce a contract or purchase order will be interpreted according to the laws of Florida. The venue shall be County of Volusia, Florida.

**GOVERNMENTAL RESTRICTIONS:** In the event that any governmental restrictions are imposed which would necessitate alteration of the material quality, workmanship or performance of the items offered on this bid prior to their delivery, it shall be the responsibility of the Bidder to notify Purchasing at once, indicating in his/her letter the specific regulation which required an alteration, including any price adjustments occasioned thereby. The City reserves the right to accept such alteration or to cancel the contract or purchase order at no further expense to the City.

**PERMITS/LICENSES/FEES:** Any permits, licenses, or fees required will be the responsibility of the Contractor, no separate or additional payment will be made.

Adherence to all applicable code regulations (Federal, State, City, City) are the responsibility of the Contractor.

**INDEMNIFICATION:** The Bidder, without exemption, shall indemnify and save harmless, the City, its employees and/or any of its Commissioners from liability of any nature or kind, including cost and expenses for or on account of any copyrighted, patented, or unpatented invention, process, or item manufactured by the Bidder. Further, if such a claim is made, or is pending, the Bidder may, at its option and expense, procure for the City the right to use, replace or modify the item to render it non-infringing. If none of the alternatives are reasonably available, the City agrees to return the article on request to the Bidder and receive reimbursement. If the Bidder used any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood, without exception, that the bid prices shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in the work.

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**ADVERTISING:** In submitting a bid, Bidder agrees not to use the results therefrom as a part of any commercial advertising, without the express written approval, by the appropriate level of authority within the City.

**ASSIGNMENT:** Any purchase order or contract issued pursuant to this Invitation to Bid and the monies which may become due hereunder are not assignable except with the prior written approval of the City, through the Finance Department.

**COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH:** Bidder certifies that all material, equipment, etc., contained in his/her bid meets all applicable O.S.H.A. requirements. Bidder further certifies that, if he/she is the successful Bidder, and the material, equipment, etc., delivered is subsequently found to be defective in any applicable O.S.H.A. requirement in effect on the date of delivery, all costs necessary to comply with the requirements shall be borne by the Bidder.

**RESPONSIBILITY:** A Bidder must have at the time of bid opening, a company in operation, (if applicable) or be a fully authorized Agent or representative of the product bid, and capable of producing or providing the items bid, and follow-up parts and service, including any warranty services as applicable, and so provide such certification upon request.

**FACILITIES:** The City reserves the right to inspect the Bidder's facilities at any reasonable time, during normal working hours, to determine that Bidder has a bona fide place of business, and is a responsible Bidder.

**DISQUALIFICATION OF BIDDER:** More than one bid from an individual, firm, partnership, corporation, or association under the same or different names will not be considered. Reasonable grounds for believing that a Bidder is involved in more than one bid submittal will be cause for rejection of all bids in which such Bidders are believed to be involved. Any or all bids will be rejected if there is reason to believe that collusion exists between Bidders. Bids in which the prices obviously are unbalanced will be subject to rejection.

**ADJUSTMENTS / CHANGES: / DEVIATIONS:** No adjustments, changes or deviations shall be accepted on any item unless conditions or specifications of a bid expressly so provide. Any other adjustments, changes or deviations shall require prior written approval, and shall be binding **ONLY** if issued by the City's Finance Department. The Bidder shall bear sole responsibility for any and all costs of claims arising from any adjustments, changes or deviations not properly executed as required herein.

**PUBLIC RECORDS:** Upon award recommendation or thirty (30) days after opening, whichever is earlier, bids become "public records" and shall be subject to public disclosure

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consistent with Chapter 119 Florida Statutes. Bidders must invoke the exemptions to disclosure provided by law in the response to the Bid, and must identify the data or other materials to be protected, and must state the reasons why such exclusion from public disclosure is necessary.

Bids may be reviewed at City Hall, 2345 Providence Blvd., Deltona, FL 32725.

**BID PREPARATION COSTS:** Neither the CITY nor its representatives shall be liable for any expenses incurred in connection with preparation of a response to this Invitation to Bid. Bidders should prepare their bids simply and economically, providing all information and prices as required.

**ACCEPTANCE / REJECTION:** The City of Deltona reserves the right to accept or reject any or all bids and to make the award to that Bidder, who in the opinion of the City will be in the best interest of and/or the most advantageous to the City. The City of Deltona also reserves the right to reject the bid of any vendor who has previously failed in the proper performance of an award or to deliver on time contracts of a similar nature or who, in the City's opinion, is not in a position to perform properly under this award. The City of Deltona reserves the right to inspect all facilities of bidders in order to make a determination as to the foregoing. The City of Deltona reserves the right to waive any irregularities, informalities, and technicalities in offers received, and may, at its discretion, request a re-bid, or abandon the project/procurement in its entirety.

**ANY AND ALL SPECIAL TERMS AND CONDITIONS, TECHNICAL REQUIREMENTS, SCOPE OF WORK OR SPECIFICATIONS ATTACHED HERETO WHICH VARY FROM THESE GENERAL CONDITIONS SHALL HAVE PRECEDENCE.**

## **Scope of Work**

The City of Deltona is requesting bids for meter lids as listed below. The specification sheets can be found at the end this document. The city has already purchased the meters.

### **METER LIDS ONLY.**

- DFW Water Lids (DFW1500.1T2 DEEP.LID) – Qty 5,000
- DFW Reclaim Lids (DFW1500.1T2 DEEP.LID) – Qty 1,000
- Glass Master Water Lids (S1517N) – Qty 1,000

## **INSURANCE REQUIREMENTS**

### **WORKERS' COMPENSATION**

Coverage is to apply for all employees for statutory limits in compliance with the applicable state and federal laws. The policy must include Employers' Liability with a limit of \$1,000,000 each accident, \$200,000 each employee, \$500,000 policy limit for disease.

### **COMMERCIAL GENERAL LIABILITY – OCCURRENCE FORM REQUIRED**

Contractor shall maintain commercial general liability (CGL) insurance with a limit of not less than \$1,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall apply separately to this location/project in the amount of \$1,000,000. Products and completed operations aggregate shall be \$1,000,000. CGL insurance shall be written on an occurrence form and shall include bodily injury and property damage liability for premises, operations, independent contractors, products and completed operations, contractual liability, broad form property damage and property damage resulting from explosion, collapse or underground (x, c, u) exposures, personal injury and advertising injury. Fire damage liability shall be included at \$250,000.

### **COMMERCIAL AUTOMOBILE LIABILITY INSURANCE**

Contractor shall maintain automobile liability insurance with a limit of not less than \$1,000,000 each accident for bodily injury and property damage liability. Such insurance shall cover liability arising out of any auto (including owned, hired and non-owned autos). The policy shall be endorsed to provide contractual liability coverage.

### **EVIDENCE OF INSURANCE**

The Contractor shall furnish the City of Deltona with Certificates of Insurance. The Certificates are to be signed by a person authorized by that insurer to bind coverage on its behalf. The City of Deltona is to be specifically included as an additional insured on all policies except Workers' Compensation. In the event the insurance coverage expires prior to the completion of the project, a renewal certificate shall be issued 30-days prior to said expiration date. The policy shall provide a 30-day notification clause in the event of cancellation or modification to the policy. All certificates of insurance must be on file with and approved by the City of Deltona before the commencement of any work activities. Contractor shall have all applicable licenses and insurance required to perform this work.

The terms of the AGREEMENT shall be for a period of one (1) year from date of AGREEMENT. This AGREEMENT may, by mutual assent of all parties, be extended for three (3) additional one year periods; not to exceed 48 months in total. At the end of the first 12 month period, the contractor will be solicited for an extension with all terms, conditions and pricing remaining. If the contractor requests any changes in same, said changes may require City Manager approval or rejection. At such time, staff may be requested to either re-issue a new BID or accept the changes as requested if they are within reason and market value.

The City of Deltona reserves the right to cancel any agreement, or any part thereof without obligation if completion is not made within the time specified. Any work performed after cancellation of order(s) will at the contractor's expense.

Please be advised that the City of Deltona will not prepay for work. Invoices may be submitted upon completion and acceptance of deliverables and will be paid upon submission of a complete invoice to the Department of Finance and Internal Services, 2345 Providence Blvd., Deltona, FL 32725.

Irrevocable Offer: Bidder warrants by virtue of bidding that the prices bid shall remain firm and be considered an irrevocable offer for a period of sixty (60) days, during which time one or more of the bids received may be accepted by the City of Deltona.

**EXTRA WORK:**

The City, without invalidating this **AGREEMENT**, may order changes in the operation within the general scope of this **AGREEMENT** consisting of additions, deletions, or other revisions, price and time may be adjusted accordingly. All such changes in the **AGREEMENT** may be authorized by a written Change Order to the **AGREEMENT** and may be executed under the applicable conditions of the **AGREEMENT**. If the contractor plans to make a claim for an increase in the price or any changes in Product, machinery, or service, he/she must submit said change request in writing. This may be forwarded to the City Manager, if necessary, for approval or rejection.

**Cancel Agreement:**

The City has the right to cancel this **AGREEMENT** for convenience in accordance with, but not limited to, the terms of default as specified herein. In any of the following events the City at any time hereafter shall have the right to immediately terminate the **AGREEMENT**.

In the event the contractor fails to keep and perform or shall violate any of the terms, covenants and conditions of the **AGREEMENT** on its part to be kept and performed, and the contractor shall not have cured or corrected such failure or violation within 10 days after written notice thereof shall have been given to the contractor; or immediately should the violation affect the health, safety and welfare of the contractor's employees, City employees or the public.

In the event the contractor shall, after 3-separate occasions during the term of this **AGREEMENT**, fail to keep and perform or shall violate any of the terms, covenants and conditions of this **AGREEMENT**, then the City has the right to terminate this **AGREEMENT** with no penalties to the City.

If the contractor shall make an assignment for the benefit of creditors, or shall file a petition in bankruptcy or shall be adjudged a bankrupt, or the interest of the contractor under this **AGREEMENT** shall be levied upon and sold upon execution or shall be operation of law become vested in another person, firm or corporation because of the insolvency of the contractor; or in the event that a receiver or trustee shall be appointed for the contractor or the interest of the contractor under this **AGREEMENT**.

In the event the contractor shall cease to operate the business awarded herein, or shall vacate or abandon said premises or not service and maintain lawn service, or if contractor allows his licenses or permits to expire without renewing as required, contract will be declared null and void.

**Remedies:**

The City may, if it so elects, pursue any other remedies provided by law for the breach of this **AGREEMENT** or any of its terms, covenants, conditions, or stipulations. No right or remedy herein conferred upon or reserved to the City or the contractor is intended to be exclusive of any other right or remedy, and each and every right and remedy given hereunder, or now or hereafter existing at law or at equity or by statute. The contractor is responsible for all damage or loss by fire, theft, vandalism or otherwise to their equipment, including their contents, materials, tools, equipment, and consumables, left on City property by the contractor, his/her employees, agents, subcontractors.



**Compliance with Laws, Regulations, Codes, Etc.:**

The contractor is required to comply with all present and future valid laws, ordinances, codes and regulations of the Federal Government, State of Florida, County of Volusia, City of Deltona and agencies thereof relating to the premises including, but not limited to, those applicable to health and sanitary conditions and safety and fire prevention. Any permits necessary will be the responsibility of the contractor to obtain from the proper agency, paying the fees directly to that agency.

**Federal and State Taxes:**

The City is exempt from payment of Florida State Sales and User Taxes. The City will sign an exemption certificate submitted by the contractor. The contractor shall not be exempted from paying sales tax to its suppliers for materials used to fulfill contractual obligations with the City, nor is the contractor authorized to use the City's Tax Exempt Number in securing such materials, or product.

The contractor shall be responsible for their portion of payment for its own employees FICA and Social Security benefits with respect to the resulting **AGREEMENT**.

**Severability:**

If any term or provision of the resulting **AGREEMENT**, or the application thereof to any person or circumstances shall, to any extent, be held invalid or unenforceable, to remainder of the **AGREEMENT** or the application of such terms or provisions, to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected, and every other term and provision of the **AGREEMENT** shall be deemed valid and enforceable to the extent permitted by law.

**CERTIFICATION OF INDEPENDENT PRICE DETERMINATION**

By submission of this bid, the Bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that in connection with this procurement:

1. The prices in this bid have been arrived at independently, without consultation, collusion, communication, or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor.
2. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly to any other Bidder or to any competitor; and,
3. No attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.
4. Bidder agrees that supplies/services furnished regarding this offer, if awarded, shall be covered by the most favorable commercial warranties the Bidder gives to any customer for such supplies services and that rights and remedies provided herein are in addition to and do not limit any rights offered to the City by any other provision of the bid award.

## **PURCHASING AGREEMENTS WITH OTHER GOVERNMENT AGENCIES**

All Bidders submitting a response to this Invitation to Bid agree that such response also constitutes a bid to all governmental agencies, under the same conditions, for the same contract price, and for the same effective period as this bid, should the Bidder feel it is in their best interest to do so.

Each governmental agency desiring to accept these bids, and makes an award thereof, shall do so independently of any other governmental agency. Each agency shall be responsible for its own purchases and each shall be liable only for materials and/or services ordered and received by it, and no agency assumes any liability by virtue of this bid. This agreement in no way restricts or interferes with the right of any governmental agency to rebid any or all items.

## **REFERENCES**

Bidder must submit with the bid, three (3) references (form attached) for projects of similar scope to include: Point of contact and telephone number. Failure to provide this information with the bid may result in bid being declared non-responsive.

### **Submittals:**

All submittals are **REQUIRED** and must be submitted with the bid package at the time of the bid opening to be considered a responsive bidder.

Bidders shall submit a detailed statement of explanation for each item where the quoted product deviates from the Scope of Services requested in this bid. Failure to comply may be cause for rejection

- Questions regarding this bid are to be addressed in writing to:

Mary E. Perez  
Purchasing Agent  
2345 Providence Blvd.  
Deltona, FL 32725  
E-Mail Address: [meperez@deltonafl.gov](mailto:meperez@deltonafl.gov)  
Or Fax: (386) 878-8571

**TIE ON UNIT PRICE OR BID:** Should there be a tie on either the unit price (if awarded on a per item basis) the deadlock will be decided upon using the following order:

- a. Companies who certify they are a drug-free workplace.
- b. Companies located in Volusia County, Florida.
- c. Companies located in Florida.
- d. All else being equal, both companies will be asked to submit a final bid in a sealed envelope.

The City of Deltona further reserves the right to be the final judge of what is considered equal and hold the bid open for a 90-day period if award is not made on the date specified.

**Bid Evaluation and Award:** The City of Deltona, at its sole discretion reserves the right to waive all technicalities or irregularities to reject any and all bids and/or accept the bid which is in the best interest of the City.

**Bid #22037 – METER LIDS**

The Award, if made, may be based upon considerations including but not limited to: Quantity offered, quality of product, and/or qualifications of the bidder. Good references from prior customers with similar budgets to that of the City or any other quality that may be deemed desirable and beneficial to the City.

**CONTACT: All prospective proposers are hereby instructed not to contact any member of the City of Deltona Commission, City Manager, or City of Deltona Staff members other than the noted contact person OR a member of the Purchasing staff regarding this Request for Proposals or their response at any time during the BID process. Any such contact shall be cause for rejection of your submittal.**

**BID RESPONSE FORM**  
**BID NO. 22037**  
**METER LIDS**

In accordance with the foregoing terms, conditions and specifications, the undersigned bidder, having visited the site of the work and having become familiarized with the conditions affecting the cost of the work and with all requirements of the proposed Contract Documents, and duly issued Addenda to said documents, as acknowledged herein, proposes to furnish and perform all things required in labor, material, necessary tools, expendable equipment, and all services necessary to perform and complete in a workmanlike manner all work required by said documents and Addenda. This bid is for an initial order of the items listed on the bid form and shall remain open for any additional water lids that may be needed for a period of one year. Submit pricing below:

QTY	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
5000	EA	DFW Water Lids (DFW1500.1T2 DEEP.LID)	\$59.20	\$296,000.00
1000	EA	DFW Reclaim Lids (DFW1500.1T2 DEEP.LID)	\$62.90	\$62,900.00
1000	EA	Glass Master Water Lids (S1517N)	\$55.00	\$55,000.00
***Quoting Nicor Alternates, Submittals will be provided*** GRAND TOTAL				\$ 413,900.00

BID SUBMITTED BY: Alexander Ashton

COMPANY NAME: Consolidated Pipe and Supply Company

DATE: 05/31/2022

*This Form Must Be Completed and Returned with your Submittal.*

**Bid #22037 – METER LIDS**

## HOLD HARMLESS AND INDEMNITY AGREEMENT

Consolidated Pipe and Supply Company, agrees through the signing of this document by an authorized party or agent that it shall defend, indemnify and hold harmless the City of Deltona, and its agents, employees, and public officials from and against all suits, losses, claims, demands, judgments of every name and description arising out of or incidental to the performance of this contract or work performed thereunder, whether or not due to or caused by the negligence of the City of Deltona, its agents, employees, and public officials excluding only the sole negligence of the City of Deltona, its agents, employees, and Public Officials.

This provision shall also pertain to any claims brought against the City of Deltona, its agents, employees, and public officials by an employee of the named Contractor, any Sub-contractor, or anyone directly or indirectly employed by any of them.

The Contractor's obligation to indemnify the City of Deltona, its agents, employees and public officials under this provision shall be limited to \$1,000,000 per occurrence which the parties agree bears a reasonable commercial relationship to the contract.

The Contractor agrees to accept, and acknowledges as adequate remunerations, the consideration of \$10, which is part of the agreed bid price, the promises contained herein, and other good and valuable consideration, the receipt of which is hereby acknowledged, for agreement to enter into this Hold Harmless and Indemnity Agreement.

Alexander Ashton  
CONTRACTOR

05/31/2022  
DATE

*This Form Must Be Completed and Returned with your Submittal.*

**Bid #22037 – METER LIDS**

**CITY OF DELTONA**  
**BIDDER INFORMATION FORM**

The information below is required to complete your bid packet. Type or print only.

Company Name: Consolidated Pipe and Supply Company

Address: 3010 Eunice Avenue

City: Orlando

State: Florida

Zip Code: 32808

Phone Number: 407-293-2001

Fax Number: 407-293-6522

Project Contact: Alexander Ashton

e-mail address: Alex.Ashton@cspipe.com

**Remittance (Payment) Mailing Information**

Address: 3010 Eunice Avenue

City: Orlando State: Florida Zip Code: 32808

Phone Number: 407-293-2001

Fax Number: 407-293-6522

Project Contact: Alexander Ashton

e-mail address: Alex.Ashton@cspipe.com

Federal Tax ID No.: 63-0418384

Tax ID Type: ☒ Federal Tax ID ☐ Social Security Number

*This Form Must Be Completed and Returned with your Submittal.*

**Bid #22037 – METER LIDS**

## References

CUSTOMER NAME	CONTACT PERSON	TELEPHONE AND FAX NUMBER	SCOPE OF SERVICES PROVIDED/JOB NAME
Jaret Construction	Nelson	( 407 ) 810-8133 (     )	Provided pipe, valves, & fittings for 50+ jobs over the last 5 years.
Florida Public Utilities	Jim	( 863 ) 291-5678 (     )	Provided gas materials consistently for 10 years
Cathcart Construction	Chris	( 407 ) 629-2900 (     )	Provided pipe, valves, & fittings for 10 years

Does Bidder have any similar work in progress at time of Bid Opening?    Yes    ☒    No    ☐

If "Yes", explain:

We have 20+ PVC & HDPE jobs going currently. They all involve Gate Valves, Hydrants, & MJ Fittings

*References who are located in foreign countries are not acceptable.*

*This Form Must Be Completed and Returned with your Submittal.*

## DRUG-FREE WORK PLACE FORM

The undersigned Bidder in accordance with Florida Statute 287.087, hereby certifies that

Consolidated Pipe and Supply Company does:

*(Name of Business)*

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are proposed a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

X

*Alexander Ashton*

Bidder's Signature

05/31/2022

Date

***This Form Must Be Completed and Returned with your Submittal, if applicable***

**Bid #22037 – METER LIDS**



## Statement of No Bid

Bid No. 22037

### METER LIDS

If your company does not intend to bid on this Procurement, please complete and return this form prior to the date shown for receipt of bids to: CITY OF DELTONA, Purchasing Manager, 2345 Providence Blvd., Deltona, FL 32725.

We, the undersigned, have declined to bid on the above referenced Invitation to Bid for the following reason(s):

- ☐ Specifications are too "restrictive." (please explain below)
- ☐ Unable to meet specifications
- ☐ Specifications were unclear. (please explain below)
- ☐ Insufficient time to respond
- ☐ We do not offer this type of product or equivalent
- ☐ Our production schedule would not permit us to perform
- ☐ Unable to meet bond requirements
- ☐ Other (please explain below)

#### REMARKS:

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<hr/>		<hr/>	
Company Name		Telephone	
<hr/>		<hr/>	
Signature		Fax	
<hr/>		<hr/>	
Title		Typed or Printed Name	
<hr/>		<hr/>	
Address	City	State	Zip
<hr/>	<hr/>	<hr/>	<hr/>

Bid #22037 - METER LIDS

## E-VERIFY FORM

Project Name:	Bid No. 22037
Project No.:	Meter Lids

### Definitions:

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

- a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and
- b) All persons (including subvendors/subconsultants/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Coconut Creek; and
- c) Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. Any challenge to termination under this provision must be filed in the Circuit Court no later than 20 calendar days after the date of termination. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination.

### COMPANY CONTACT INFORMATION:

Company Name: Consolidated Pipe and Supply Company

Authorized Signature: *Alexander Ashton*

Print Name: Alexander Ashton

Title: Utility Salesman

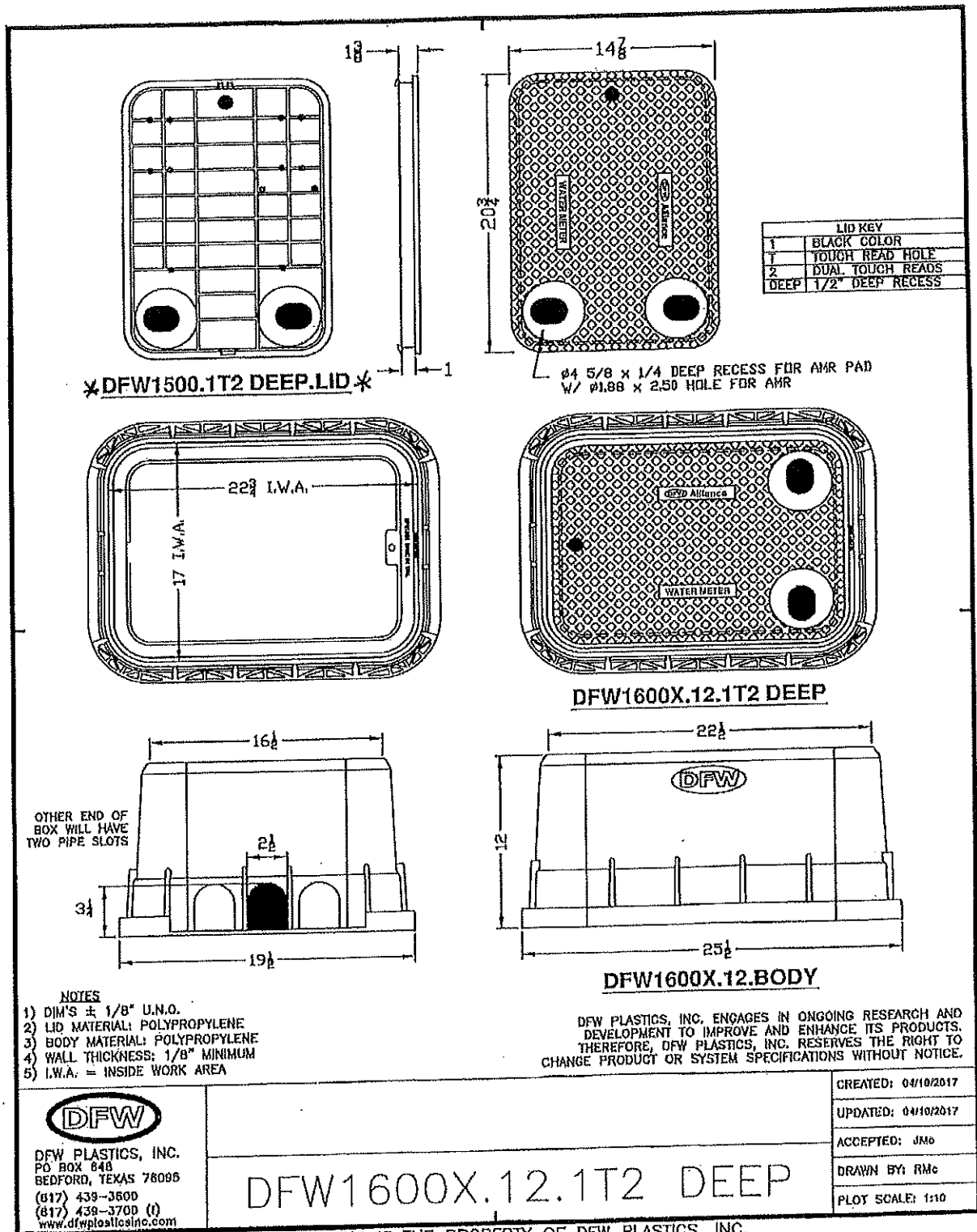
Date: 05/31/2022

Phone: 407-293-2001

Email: Alex.Ashton@cpspipe.com

Website: www.cpspipe.com

**Bid #22037 – METER LIDS**



# SPECIFICATIONS / DATA

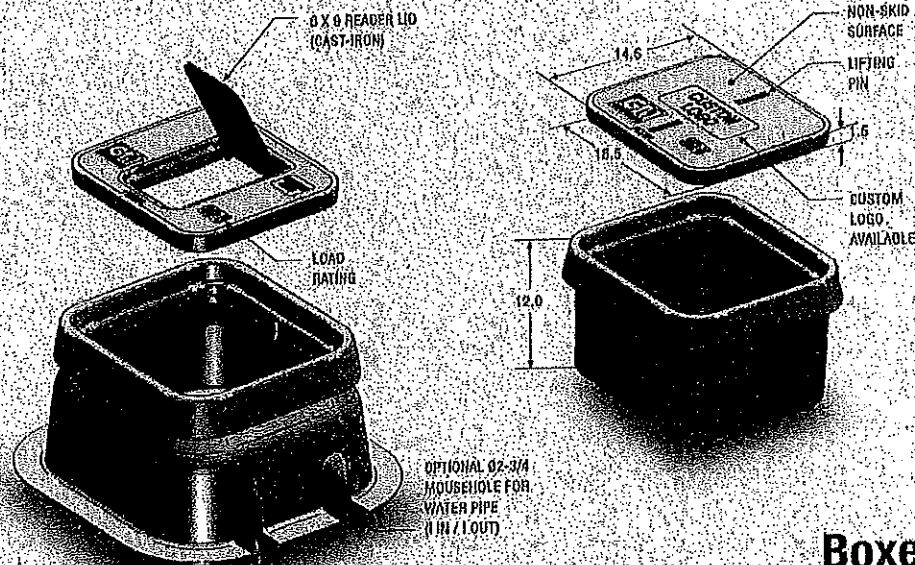
2020

15" X 17" ASSEMBLY



## Lids

Style	Bolt-Down	Part Number	Load Ratings	Weight
Solid	N	S1517P	TIER 8, 15, 22	26
Reader Lid, Hinged 6x9	N	S1517R	TIER 8, 15	23
Reader Lid, Drop-In 6x9	N	S1517C	TIER 8, 15	22
Neptune AMR, R450 6" Dia	N	S1517N	TIER 8, 15, 22	24
Sensus AMR, 4" Dia	N	S1517S	TIER 8, 15, 22	25
Sensus AMR, 4" Dia (Qty 2)	N, H, P	S1517D	TIER 8, 15, 22	26
Sensus AMR and 6x9 Reader	N	S1517B	TIER 8	22



## Boxes

Part Number	Height	Style	Bottom	Bolt-Down	Load Ratings	Weight
S151712S	12	Straight	S, O, 3	N, B	TIER 8, 15, 22	26
S151712F	12	Flared	O, 3	N, B	TIER 8, 15	28
J151712S	12	Straight, Jumbo	S, O, 3	N, B	TIER 8, 15	32

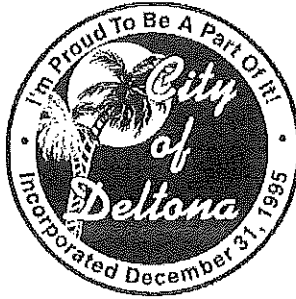
**LIDS DESIGNATIONS**  
 Bolt-Down: N - Not Bolted, H - Hex Head Bolts,  
 P - Penta Head Bolts

**BOXES DESIGNATIONS**  
 Bottoms: S - Solid, O - Open, 2 - Two Mouseholes, 3 - Three Mouseholes  
 Bolt-Down: B - Bolted, N - Not Bolted

GLASHMASTERS | 8873 Western Way, Jacksonville, FL 32256 | PH 904 400-7100 | FAX 904 368-1702 | [www.GlashMasters.com](http://www.GlashMasters.com)

12

15" x 17"



**ADDENDA #1 TO BID#22037**

**Meter Lids**

**May 13, 2022**

This addenda is being issued to **remove** verbiage on page #7 of the bid document:

The terms of the AGREEMENT shall be for a period of one (1) year from date of AGREEMENT. This AGREEMENT may, by mutual assent of all parties, be extended for three (3) additional one year periods; not to exceed 48 months in total. At the end of the first 12 month period, the contractor will be solicited for an extension with all terms, conditions and pricing remaining. If the contractor requests any changes in same, said changes may require City Manager approval or rejection. At such time, staff may be requested to either re-issue a new BID or accept the changes as requested if they are within reason and market value.

***This Form Must Be Completed and Returned with your Submittal.***

***I hereby confirm that I am authorized to submit this bid on behalf of***

Consolidated Pipe and Supply Company

**Company Name**

Alexander Ashton

**Representative**

05/31/2022

**Date**

<p><b>Submit Bid to:</b></p> <p><b>CITY OF DELTONA</b></p> <p>2345 Providence Blvd. Deltona, Florida 32725 <b>Attn: Purchasing</b></p> <p><b>CLEARLY MARK SEALED ENVELOPE WITH BID NAME AND NUMBER</b></p>	<p><b>INVITATION TO BID# 22037 FOR:  METER LIDS</b></p>
<p><u>Contact:</u></p> <p>Mary E. Perez Purchasing Agent Phone: (386) 878-8580 Fax: (386) 878-8571</p> <p>EMAIL QUESTIONS TO: <b>E-Mail Address: meperez@deltonafl.gov</b></p>	<p><b>BIDDER NAME:</b> _____ <u>Consolidated Pipe and Supply Company</u> _____</p>
<p><b><u>BID DUE DATE &amp; TIME:</u></b> <b>THURSDAY, June 2, 2022 AT 2:00 AT CITY HALL, 1ST FLOOR CONFERENCE ROOM LOCATED AT 2345 PROVIDENCE BOULEVARD, DELTONA, FLORIDA</b></p>	<p><b><u>MAILING ADDRESS:</u></b> _____ <u>3010 Eunice Ave. Orlando, FL 32808</u> _____ _____</p>
<p><u>Location of Public Opening:</u> City of Deltona, 1ST Floor Conference Room 2345 Providence Blvd., Deltona, FL 32725</p>	<p>Phone#: <u>407-293-2001</u> Fax#: <u>407-293-6522</u></p>

**GENERAL CONDITIONS, INSTRUCTIONS AND INFORMATION FOR  
BIDDERS**

These documents constitute the complete set of terms and conditions, specification requirements, and bid forms. All bid sheets and attachments must be executed and submitted in a sealed envelope. The face of the envelope shall contain Bidder's name, return address, the date and time of bid opening, the bid number and title. Bids not submitted on the enclosed Bid Form shall be rejected. Bidders shall submit three (3) complete sets (one [1] original and two [2] copies) of their bid, complete with all supporting documentation. SUBMITTAL OF A BID IN RESPONSE TO THIS INVITATION TO BID CONSTITUTES AN OFFER BY THE BIDDER. Bids which do not comply with these requirements may be rejected at the option of the City.

**CONTACT:** All prospective bidders are hereby instructed not to contact any member of the City of Deltona Commission,  
**Bid #22037 -- METER LIDS**

City Manager, or City of Deltona Staff members other than the noted contact person OR another member of the City's

Purchasing Division regarding this Invitation to Bid or their bid proposal at any time during the bid process. Any such contact shall be cause for rejection of your bid proposal. The Bid process is not over until an award is made.

**DELAYS:** The City, at its sole discretion, may delay the scheduled due dates indicated above if it is to the advantage of the City to do so. The City will notify bidders of all changes in scheduled due dates by written addendum.

**EXECUTION OF BID:** Bid must contain a manual signature, in ink, of an authorized representative, who has the legal ability to bind the Bidder in contractual obligations in the space provided on the Bid Response Form. Failure to properly sign the Bid shall invalidate same, and it shall not be considered for award. Bid must be typed or legibly printed in ink. Use of erasable ink is not permitted. All corrections made by Bidder to any part of the bid document must be initialed in ink. The original bid conditions and specifications cannot be changed or altered in any way. Altered bids will not be considered. Clarification of bids submitted shall be in letter form, signed by bidders and attached to the bid.

**BIDDER INFORMATION:** Bidder shall complete the "Corporate Authority", "Joint Venture", "Sole Proprietorship", or "Partnership" portion of the Bidder Information Sheet, whichever part applies, and include with their bid submittal.

**JOINT VENTURES:** Bids submitted by firms under "joint venture" arrangements or other multi-party agreements must submit a power of attorney delegating authority to one principal with authority to negotiate and execute any/all contract documents resulting from negotiations/award of this Invitation to Bid.

**NO BID:** If not submitting a bid, respond by returning only the Statement of No Bid, and give the reason in the space provided. Failure to respond three (3) times in succession without justification may be cause for removal of the Bidders name from the mailing list.

**BID OPENING:** Shall be public, at the above address, on the date and at the time specified above. The bid time shall be scrupulously observed. Under no circumstances shall bids delivered after the time specified be considered; such bids will be returned unopened. The City will not be responsible for late deliveries or delayed mail. The time/date stamp clock located in the Finance Department serve as the official authority to determine lateness of any bid. It is the Bidders sole responsibility to assure that his/her bid is complete and delivered at the proper time and place of the bid opening. Bids which for any reason are not so delivered will not be considered. Offers by facsimile, telegram or telephone are not acceptable. A bid may **NOT** be altered by the Bidder after opening of the bids. Bid tabulations will be furnished upon

written request which includes a self-addressed, stamped envelope.

Persons with disabilities needing assistance to participate in the Public Bid Opening should contact the City Clerk at least 48 hours in advance of the meeting at 386-561-2100.

**TAXES:** The City is exempt from Federal Excise and State Sales Taxes on direct purchases of tangible personal property. The City's exemption numbers are on the face of the purchase order. If requested, the Purchasing Manager will provide an exemption certificate to the awarded Bidder. Vendors/contractors doing business with the City shall not be exempted from paying sales tax to their suppliers for materials to fulfill contractual obligations with the City nor shall any Vendor/Contractor be authorized to use the City's Tax Exemption Number in securing such materials.

#### **CERTIFICATES**

The City reserves the right to require proof that the bidder is an established business and is abiding by the Ordinances, Regulations, and Laws of their Community and the State of Florida such as but not limited to: Occupational Licenses, Business Licenses, Florida Sales Tax Registration, Federal Employee Identification Number.

**DISCOUNTS:** Cash discounts for prompt payment shall not be considered in determining the lowest net cost for bid evaluation purposes.

**MISTAKES:** Bidders are expected to examine the terms and conditions, specifications, delivery schedule, bid prices, extensions and all instructions pertaining to supplies and services. **FAILURE TO DO SO WILL BE AT BIDDER'S RISK.** In the event of extension error(s), the unit price will prevail and the Bidder's total offer will be corrected accordingly. Written amounts shall take precedence over numerical amounts. In the event of addition errors(s), the unit price, and extension thereof, will prevail and the Bidder's total offer will be corrected accordingly. Bids having erasures or corrections must be initialed in ink by the Bidder.

**AWARD TERM** This bid is for an initial order of the items listed on the bid form and shall remain open for any additional water lids that may be needed for a period of one year.

**PRICE REDETERMINATION** The Contractor may petition the Purchasing Manager for price redetermination within forty-five (45) days of the expiration of each term of the contract. Any price redetermination will include all items awarded. If the City and the Contractor cannot agree on any price redetermination, then the contract will expire. (*See other conditions under Special Terms and Conditions*)

**UNUSUAL CIRCUMSTANCES:** If during a contract term where costs to the City are to remain firm or adjustments are

restricted by a percentage or CPI cap, unusual circumstances that could not have been foreseen by either party to the contract occur, and those circumstances significantly affect the Seller's cost in providing the required items or services, then the Seller may request adjustments to the costs to the City to reflect the changed circumstances. The circumstances must be beyond the control of the Seller, and the requested adjustments must be fully documented. The City may, after examination, refuse to accept the adjusted costs if they are not properly documented, increases are considered to be excessive, or decreases are considered to be insufficient. In the event the City does not wish to accept the adjusted costs and the matter cannot be resolved to the satisfaction of the City, the City will reserve the following options:

1. The contract can be canceled by the City upon giving thirty (30) days written notice to the Seller with no penalty to the City or Seller. The Seller shall fill all City requirements submitted to the Seller until the termination date contained in the notice.
2. The City requires the Seller to continue to provide the items and services at the firm fixed (non-adjusted) cost until the termination of the contract term then in effect.
3. If the City, in its interest and in its sole opinion, determines that the Seller in a capricious manner attempted to use this section of the contract to relieve themselves of a legitimate obligation under the contract, and no unusual circumstances had occurred, the City reserves the right to take any and all action under law or equity. Such action shall include, but not be limited to, declaring the Seller in default and disqualifying him for receiving any business from the City for a state period of time.
4. If the City does agree to adjusted costs, these adjusted costs shall not be invoiced to the City until the Seller receives notice in writing signed by a person authorized to bind the City in such matters.

**INVOICING AND PAYMENT:** Payment for any and all invoice(s) that may arise as a result of a contract or purchase order issued pursuant to this bid specification shall minimally meet the following conditions to be considered as a valid payment request:

- a. A timely submission of a properly certified invoice(s), in strict accordance with the price(s) and delivery elements as stipulated in the contract or purchase order document, and be submitted to the Finance Department at the address as stipulated on the Purchase Order.
- b. All invoices submitted shall consist of an original and one (1) copy; clearly reference the subject contract or purchase order number; provide a sufficient salient description to identify goods or service for which payment

is requested; contain date of delivery; original or legible copy of signed delivery receipt including both manual signature and printed name of a designated City employee or authorized Agent; be clearly marked as "partial", "complete" or "final" invoice. The City will accept partial deliveries.

- c. The invoice shall contain the Bidder's Federal Employer Identification Number (F.E.I.N.).
- d. The City's terms are "Net 30 Days" after acceptance of goods or services and receipt of an acceptable invoice as described herein. Any discounts must be offered on the Bid Response Form.

**GENERAL:** The City of Deltona, having limited storage facilities, requires the service of private firms to provide materials, supplies and/or services on an as needed basis, as indicated herein, to support the City's needs.

**ADDITIONAL TERMS AND CONDITIONS:** Unless expressly accepted by the City, the following conditions shall apply: No additional terms and conditions included with the bid response shall be considered. Any and all such additional terms and conditions shall have no force and effect, and are inapplicable to this bid if submitted either purposely through intent or design, or inadvertently appearing separately in transmittal letters, specifications, literature, price lists or warranties. It is understood and agreed that the general and/or any special conditions in these Bid Documents are the only conditions applicable to this bid and the Bidder's authorized signature on the Bid Response Form attests to this. Exceptions to the terms and conditions will not be accepted.

**INTERPRETATIONS:** All Bidders shall carefully examine the Bid Documents. Any ambiguities or inconsistencies shall be brought to the attention of the City in writing prior to the opening of Bids; failure to do so, on the part of the Bidder, will constitute an acceptance by the Bidder of any subsequent decision. Any questions concerning the intent, meaning and interpretations of the Bid Documents shall be requested in writing (facsimile transmission acceptable (386) 789-7230, and received by the City at least seven (7) calendar days prior to the Bid Opening. Inquires shall be addressed to the attention of the Contact person as indicated on Page 1. No person is authorized to give oral interpretations of, or make oral changes to, the bid. Therefore, oral statements given before the bid opening will not be binding. Any interpretation of, or changes to, the bid will be made in the form of a written Addendum to the bid and will be furnished to all Bidders through DemandStar. Receipt of all addenda shall be acknowledged by the Bidders by signing and enclosing said addenda or addendum acknowledgement with their bid.

**ADDENDUM:** The City will record its responses to inquiries, any supplemental instructions, and/or necessary revisions to Bid Documents, in the form of a written addendum. Should



revisions to the Bid Documents become necessary, the City will post a written addendum to the DemandStar website which will go out to all Bidders who received a bid package through DemandStar. All addendum are posted to the DemandStar website and current planholders are notified that an addendum has been issued. Bidders who obtain Bid Documents from other sources must officially register with the City's Purchasing Manager in order to be placed on the DemandStar website as a bid holder in order to receive any forthcoming addenda or other official communications. Failure to register as a prospective Bidder may cause your bid to be rejected as non-responsive if you have failed to submit a bid without an addendum acknowledgment for the most current addendum. It is the vendor's responsibility to check the DemandStar website at [www.demandstar.com](http://www.demandstar.com) in order to be sure latest addendum and any prior addendum have been received.

**PROTESTS:** Any Bidder who disputes the bid selection or contract award recommendation shall file such protest according to the bid protest procedures. These procedures are available upon request from the City.

**CONFLICT OF INTEREST:** All Bidders must disclose with their bid the name of any officer, director, or Agent who is also an employee of the City. All Bidders must disclose the name of any City employee who owns, directly or indirectly, an interest of five percent (5%) or more in the Bidder's firm or any of its branches.

**LEGAL REQUIREMENTS:** Bidders are required to comply with all provisions of Federal, State, City and local laws and ordinances, rules and regulations that are applicable to the items being bid. Lack of knowledge by the Bidder shall in no way be a cause for relief from responsibility, or constitute a cognizable defense against the legal effect thereof.

**DRUG-FREE WORKPLACE:** Preference shall be given to business with Drug-Free Work Place (DFW) programs. Whenever two or more bids which are equal with respect to price, quality, and service are received by the City for the procurement of commodities or contractual services, a bid received from a business that completes the attached DFW form certifying that it is a DFW shall be given preference in the award process.

**POSTING OF BID AWARD:** Recommendation for award will be posted for review by interested parties on DemandStar. Failure to file a protest to Purchasing within the time prescribed in the CITY's Purchasing Manual, shall constitute a waiver of proceedings.

**AWARD:** As the best interest of the City may require, the right is reserved to make award(s) by individual item, group of items, "All or None", or a combination thereof; with one or more suppliers; to reject any or all bids, or waive any minor

irregularity or technicality in bids received, award or eliminate an portion of the bid, and may, at it's sole discretion, request a re-bid, or abandon the project in it's entirety. Bidders are cautioned to make no assumption until the City has entered into a contract or issued a purchase order.

**EEO STATEMENT:** The City is committed to assuring equal opportunity in the award of contracts, and, therefore complies with all laws prohibiting discrimination on the basis of race, color, religion, national origin, age or sex.

**CONTRACTUAL AGREEMENT:** The contents of this Bid and all provisions of the successful bid proposal deemed pertinent by the City may be incorporated into a contract and become legally binding. A separate contract document, other than the purchase order, may or may not be issued. Any and all legal action necessary to enforce a contract or purchase order will be interpreted according to the laws of Florida. The venue shall be County of Volusia, Florida.

**GOVERNMENTAL RESTRICTIONS:** In the event that any governmental restrictions are imposed which would necessitate alteration of the material quality, workmanship or performance of the items offered on this bid prior to their delivery, it shall be the responsibility of the Bidder to notify Purchasing at once, indicating in his/her letter the specific regulation which required an alteration, including any price adjustments occasioned thereby. The City reserves the right to accept such alteration or to cancel the contract or purchase order at no further expense to the City.

**PERMITS/LICENSES/FEES:** Any permits, licenses, or fees required will be the responsibility of the Contractor, no separate or additional payment will be made.

Adherence to all applicable code regulations (Federal, State, City, City) are the responsibility of the Contractor.

**INDEMNIFICATION:** The Bidder, without exemption, shall indemnify and save harmless, the City, its employees and/or any of its Commissioners from liability of any nature or kind, including cost and expenses for or on account of any copyrighted, patented, or unpatented invention, process, or item manufactured by the Bidder. Further, if such a claim is made, or is pending, the Bidder may, at its option and expense, procure for the City the right to use, replace or modify the item to render it non-infringing. If none of the alternatives are reasonably available, the City agrees to return the article on request to the Bidder and receive reimbursement. If the Bidder used any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood, without exception, that the bid prices shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in the work.

**Bid #22037 – METER LIDS**

**ADVERTISING:** In submitting a bid, Bidder agrees not to use the results therefrom as a part of any commercial advertising, without the express written approval, by the appropriate level of authority within the City.

**ASSIGNMENT:** Any purchase order or contract issued pursuant to this Invitation to Bid and the monies which may become due hereunder are not assignable except with the prior written approval of the City, through the Finance Department.

**COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH:** Bidder certifies that all material, equipment, etc., contained in his/her bid meets all applicable O.S.H.A. requirements. Bidder further certifies that, if he/she is the successful Bidder, and the material, equipment, etc., delivered is subsequently found to be defective in any applicable O.S.H.A. requirement in effect on the date of delivery, all costs necessary to comply with the requirements shall be borne by the Bidder.

**RESPONSIBILITY:** A Bidder must have at the time of bid opening, a company in operation, (if applicable) or be a fully authorized Agent or representative of the product bid, and capable of producing or providing the items bid, and follow-up parts and service, including any warranty services as applicable, and so provide such certification upon request.

**FACILITIES:** The City reserves the right to inspect the Bidder's facilities at any reasonable time, during normal working hours, to determine that Bidder has a bona fide place of business, and is a responsible Bidder.

**DISQUALIFICATION OF BIDDER:** More than one bid from an individual, firm, partnership, corporation, or association under the same or different names will not be considered. Reasonable grounds for believing that a Bidder is involved in more than one bid submittal will be cause for rejection of all bids in which such Bidders are believed to be involved. Any or all bids will be rejected if there is reason to believe that collusion exists between Bidders. Bids in which the prices obviously are unbalanced will be subject to rejection.

**ADJUSTMENTS / CHANGES / DEVIATIONS:** No adjustments, changes or deviations shall be accepted on any item unless conditions or specifications of a bid expressly so provide. Any other adjustments, changes or deviations shall require prior written approval, and shall be binding **ONLY** if issued by the City's Finance Department. The Bidder shall bear sole responsibility for any and all costs of claims arising from any adjustments, changes or deviations not properly executed as required herein.

**PUBLIC RECORDS:** Upon award recommendation or thirty (30) days after opening, whichever is earlier, bids become "public records" and shall be subject to public disclosure

**Bid #22037 – METER LIDS**

consistent with Chapter 119 Florida Statutes. Bidders must invoke the exemptions to disclosure provided by law in the response to the Bid, and must identify the data or other materials to be protected, and must state the reasons why such exclusion from public disclosure is necessary.

Bids may be reviewed at City Hall, 2345 Providence Blvd., Deltona, FL 32725.

**BID PREPARATION COSTS:** Neither the CITY nor its representatives shall be liable for any expenses incurred in connection with preparation of a response to this Invitation to Bid. Bidders should prepare their bids simply and economically, providing all information and prices as required.

**ACCEPTANCE / REJECTION:** The City of Deltona reserves the right to accept or reject any or all bids and to make the award to that Bidder, who in the opinion of the City will be in the best interest of and/or the most advantageous to the City. The City of Deltona also reserves the right to reject the bid of any vendor who has previously failed in the proper performance of an award or to deliver on time contracts of a similar nature or who, in the City's opinion, is not in a position to perform properly under this award. The City of Deltona reserves the right to inspect all facilities of bidders in order to make a determination as to the foregoing. The City of Deltona reserves the right to waive any irregularities, informalities, and technicalities in offers received, and may, at its discretion, request a re-bid, or abandon the project/procurement in its entirety.

**ANY AND ALL SPECIAL TERMS AND CONDITIONS, TECHNICAL REQUIREMENTS, SCOPE OF WORK OR SPECIFICATIONS ATTACHED HERETO WHICH VARY FROM THESE GENERAL CONDITIONS SHALL HAVE PRECEDENCE.**

## **Scope of Work**

The City of Deltona is requesting bids for meter lids as listed below. The specification sheets can be found at the end this document. The city has already purchased the meters.

### **METER LIDS ONLY.**

- DFW Water Lids (DFW1500.1T2 DEEP.LID) – Qty 5,000
- DFW Reclaim Lids (DFW1500.1T2 DEEP.LID) – Qty 1,000
- Glass Master Water Lids (S1517N) – Qty 1,000

## **INSURANCE REQUIREMENTS**

### **WORKERS' COMPENSATION**

Coverage is to apply for all employees for statutory limits in compliance with the applicable state and federal laws. The policy must include Employers' Liability with a limit of \$1,000,000 each accident, \$200,000 each employee, \$500,000 policy limit for disease.

### **COMMERCIAL GENERAL LIABILITY – OCCURRENCE FORM REQUIRED**

Contractor shall maintain commercial general liability (CGL) insurance with a limit of not less than \$1,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall apply separately to this location/project in the amount of \$1,000,000. Products and completed operations aggregate shall be \$1,000,000. CGL insurance shall be written on an occurrence form and shall include bodily injury and property damage liability for premises, operations, independent contractors, products and completed operations, contractual liability, broad form property damage and property damage resulting from explosion, collapse or underground (x, c, u) exposures, personal injury and advertising injury. Fire damage liability shall be included at \$250,000.

### **COMMERCIAL AUTOMOBILE LIABILITY INSURANCE**

Contractor shall maintain automobile liability insurance with a limit of not less than \$1,000,000 each accident for bodily injury and property damage liability. Such insurance shall cover liability arising out of any auto (including owned, hired and non-owned autos). The policy shall be endorsed to provide contractual liability coverage.

### **EVIDENCE OF INSURANCE**

The Contractor shall furnish the City of Deltona with Certificates of Insurance. The Certificates are to be signed by a person authorized by that insurer to bind coverage on its behalf. The City of Deltona is to be specifically included as an additional insured on all policies except Workers' Compensation. In the event the insurance coverage expires prior to the completion of the project, a renewal certificate shall be issued 30-days prior to said expiration date. The policy shall provide a 30-day notification clause in the event of cancellation or modification to the policy. All certificates of insurance must be on file with and approved by the City of Deltona before the commencement of any work activities. Contractor shall have all applicable licenses and insurance required to perform this work.

The terms of the AGREEMENT shall be for a period of one (1) year from date of AGREEMENT. This AGREEMENT may, by mutual assent of all parties, be extended for three (3) additional one year periods; not to exceed 48 months in total. At the end of the first 12 month period, the contractor will be solicited for an extension with all terms, conditions and pricing remaining. If the contractor requests any changes in same, said changes may require City Manager approval or rejection. At such time, staff may be requested to either re-issue a new BID or accept the changes as requested if they are within reason and market value.

The City of Deltona reserves the right to cancel any agreement, or any part thereof without obligation if completion is not made within the time specified. Any work performed after cancellation of order(s) will be at the contractor's expense.

Please be advised that the City of Deltona will not prepay for work. Invoices may be submitted upon completion and acceptance of deliverables and will be paid upon submission of a complete invoice to the Department of Finance and Internal Services, 2345 Providence Blvd., Deltona, FL 32725.

Irrevocable Offer: Bidder warrants by virtue of bidding that the prices bid shall remain firm and be considered an irrevocable offer for a period of sixty (60) days, during which time one or more of the bids received may be accepted by the City of Deltona.

**EXTRA WORK:**

The City, without invalidating this **AGREEMENT**, may order changes in the operation within the general scope of this **AGREEMENT** consisting of additions, deletions, or other revisions, price and time may be adjusted accordingly. All such changes in the **AGREEMENT** may be authorized by a written Change Order to the **AGREEMENT** and may be executed under the applicable conditions of the **AGREEMENT**. If the contractor plans to make a claim for an increase in the price or any changes in Product, machinery, or service, he/she must submit said change request in writing. This may be forwarded to the City Manager, if necessary, for approval or rejection.

**Cancel Agreement:**

The City has the right to cancel this **AGREEMENT** for convenience in accordance with, but not limited to, the terms of default as specified herein. In any of the following events the City at any time hereafter shall have the right to immediately terminate the **AGREEMENT**.

In the event the contractor fails to keep and perform or shall violate any of the terms, covenants and conditions of the **AGREEMENT** on its part to be kept and performed, and the contractor shall not have cured or corrected such failure or violation within 10 days after written notice thereof shall have been given to the contractor; or immediately should the violation affect the health, safety and welfare of the contractor's employees, City employees or the public.

In the event the contractor shall, after 3-separate occasions during the term of this **AGREEMENT**, fail to keep and perform or shall violate any of the terms, covenants and conditions of this **AGREEMENT**, then the City has the right to terminate this **AGREEMENT** with no penalties to the City.

If the contractor shall make an assignment for the benefit of creditors, or shall file a petition in bankruptcy or shall be adjudged a bankrupt, or the interest of the contractor under this **AGREEMENT** shall be levied upon and sold upon execution or shall be operation of law become vested in another person, firm or corporation because of the insolvency of the contractor; or in the event that a receiver or trustee shall be appointed for the contractor or the interest of the contractor under this **AGREEMENT**.

In the event the contractor shall cease to operate the business awarded herein, or shall vacate or abandon said premises or not service and maintain lawn service, or if contractor allows his licenses or permits to expire without renewing as required, contract will be declared null and void.

**Remedies:**

The City may, if it so elects, pursue any other remedies provided by law for the breach of this **AGREEMENT** or any of its terms, covenants, conditions, or stipulations. No right or remedy herein conferred upon or reserved to the City or the contractor is intended to be exclusive of any other right or remedy, and each and every right and remedy given hereunder, or now or hereafter existing at law or at equity or by statute. The contractor is responsible for all damage or loss by fire, theft, vandalism or otherwise to their equipment, including their contents, materials, tools, equipment, and consumables, left on City property by the contractor, his/her employees, agents, subcontractors.

**Compliance with Laws, Regulations, Codes, Etc.:**

The contractor is required to comply with all present and future valid laws, ordinances, codes and regulations of the Federal Government, State of Florida, County of Volusia, City of Deltona and agencies thereof relating to the premises including, but not limited to, those applicable to health and sanitary conditions and safety and fire prevention. Any permits necessary will be the responsibility of the contractor to obtain from the proper agency, paying the fees directly to that agency.

**Federal and State Taxes:**

The City is exempt from payment of Florida State Sales and User Taxes. The City will sign an exemption certificate submitted by the contractor. The contractor shall not be exempted from paying sales tax to its suppliers for materials used to fulfill contractual obligations with the City, nor is the contractor authorized to use the City's Tax Exempt Number in securing such materials, or product.

The contractor shall be responsible for their portion of payment for its own employees FICA and Social Security benefits with respect to the resulting **AGREEMENT**.

**Severability:**

If any term or provision of the resulting **AGREEMENT**, or the application thereof to any person or circumstances shall, to any extent, be held invalid or unenforceable, to remainder of the **AGREEMENT** or the application of such terms or provisions, to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected, and every other term and provision of the **AGREEMENT** shall be deemed valid and enforceable to the extent permitted by law.

**CERTIFICATION OF INDEPENDENT PRICE DETERMINATION**

By submission of this bid, the Bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that in connection with this procurement:

1. The prices in this bid have been arrived at independently, without consultation, collusion, communication, or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor.
2. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly to any other Bidder or to any competitor; and,
3. No attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.
4. Bidder agrees that supplies/services furnished regarding this offer, if awarded, shall be covered by the most favorable commercial warranties the Bidder gives to any customer for such supplies services and that rights and remedies provided herein are in addition to and do not limit any rights offered to the City by any other provision of the bid award.

## **PURCHASING AGREEMENTS WITH OTHER GOVERNMENT AGENCIES**

All Bidders submitting a response to this Invitation to Bid agree that such response also constitutes a bid to all governmental agencies, under the same conditions, for the same contract price, and for the same effective period as this bid, should the Bidder feel it is in their best interest to do so.

Each governmental agency desiring to accept these bids, and makes an award thereof, shall do so independently of any other governmental agency. Each agency shall be responsible for its own purchases and each shall be liable only for materials and/or services ordered and received by it, and no agency assumes any liability by virtue of this bid. This agreement in no way restricts or interferes with the right of any governmental agency to rebid any or all items.

## **REFERENCES**

Bidder must submit with the bid, three (3) references (form attached) for projects of similar scope to include: Point of contact and telephone number. Failure to provide this information with the bid may result in bid being declared non-responsive.

### **Submittals:**

All submittals are **REQUIRED** and must be submitted with the bid package at the time of the bid opening to be considered a responsive bidder.

Bidders shall submit a detailed statement of explanation for each item where the quoted product deviates from the Scope of Services requested in this bid. Failure to comply may be cause for rejection

- Questions regarding this bid are to be addressed in writing to:

Mary E. Perez  
Purchasing Agent  
2345 Providence Blvd.  
Deltona, FL 32725  
E-Mail Address: [meperez@deltonafl.gov](mailto:meperez@deltonafl.gov)  
Or Fax: (386) 878-8571

**TIE ON UNIT PRICE OR BID:** Should there be a tie on either the unit price (if awarded on a per item basis) the deadlock will be decided upon using the following order:

- a. Companies who certify they are a drug-free workplace.
- b. Companies located in Volusia County, Florida.
- c. Companies located in Florida.
- d. All else being equal, both companies will be asked to submit a final bid in a sealed envelope.

The City of Deltona further reserves the right to be the final judge of what is considered equal and hold the bid open for a 90-day period if award is not made on the date specified.

**Bid Evaluation and Award:** The City of Deltona, at its sole discretion reserves the right to waive all technicalities or irregularities to reject any and all bids and/or accept the bid which is in the best interest of the City.

**Bid #22037 – METER LIDS**

The Award, if made, may be based upon considerations including but not limited to: Quantity offered, quality of product, and/or qualifications of the bidder. Good references from prior customers with similar budgets to that of the City or any other quality that may be deemed desirable and beneficial to the City.

**CONTACT: All prospective proposers are hereby instructed not to contact any member of the City of Deltona Commission, City Manager, or City of Deltona Staff members other than the noted contact person OR a member of the Purchasing staff regarding this Request for Proposals or their response at any time during the BID process. Any such contact shall be cause for rejection of your submittal.**



**BID RESPONSE FORM****BID NO. 22037****METER LIDS**

In accordance with the foregoing terms, conditions and specifications, the undersigned bidder, having visited the site of the work and having become familiarized with the conditions affecting the cost of the work and with all requirements of the proposed Contract Documents, and duly issued Addenda to said documents, as acknowledged herein, proposes to furnish and perform all things required in labor, material, necessary tools, expendable equipment, and all services necessary to perform and complete in a workmanlike manner all work required by said documents and Addenda. This bid is for an initial order of the items listed on the bid form and shall remain open for any additional water lids that may be needed for a period of one year. Submit pricing below:

QTY	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
5000	EA	DFW Water Lids (DFW1500.1T2 DEEP.LID)	\$59.20	\$296,000.00 \$
1000	EA	DFW Reclaim Lids (DFW1500.1T2 DEEP.LID)	\$62.90	\$62,900.00 \$
1000	EA	Glass Master Water Lids (S1517N)	\$55.00	\$55,000.00 \$
***Quoting Nicor Alternates, Submittals will be provided*** GRAND TOTAL				\$ 413,900.00

BID SUBMITTED BY: Alexander AshtonCOMPANY NAME: Consolidated Pipe and Supply CompanyDATE: 05/31/2022

*This Form Must Be Completed and Returned with your Submittal.*

**Bid #22037 – METER LIDS**

## HOLD HARMLESS AND INDEMNITY AGREEMENT

Consolidated Pipe and Supply Company, agrees through the signing of this document by an authorized party or agent that it shall defend, indemnify and hold harmless the City of Deltona, and its agents, employees, and public officials from and against all suits, losses, claims, demands, judgments of every name and description arising out of or incidental to the performance of this contract or work performed thereunder, whether or not due to or caused by the negligence of the City of Deltona, its agents, employees, and public officials excluding only the sole negligence of the City of Deltona, its agents, employees, and Public Officials.

This provision shall also pertain to any claims brought against the City of Deltona, its agents, employees, and public officials by an employee of the named Contractor, any Sub-contractor, or anyone directly or indirectly employed by any of them.

The Contractor's obligation to indemnify the City of Deltona, its agents, employees and public officials under this provision shall be limited to \$1,000,000 per occurrence which the parties agree bears a reasonable commercial relationship to the contract.

The Contractor agrees to accept, and acknowledges as adequate remunerations, the consideration of \$10, which is part of the agreed bid price, the promises contained herein, and other good and valuable consideration, the receipt of which is hereby acknowledged, for agreement to enter into this Hold Harmless and Indemnity Agreement.

Alexander Ashton  
CONTRACTOR

05/31/2022  
DATE

*This Form Must Be Completed and Returned with your Submittal.*

**CITY OF DELTONA**  
**BIDDER INFORMATION FORM**

The information below is required to complete your bid packet. Type or print only.

Company Name: Consolidated Pipe and Supply Company

Address: 3010 Eunice Avenue

City: Orlando

State: Florida

Zip Code: 32808

Phone Number: 407-293-2001

Fax Number: 407-293-6522

Project Contact: Alexander Ashton

e-mail address: Alex.Ashton@cspipe.com

**Remittance (Payment) Mailing Information**

Address: 3010 Eunice Avenue

City: Orlando State: Florida Zip Code: 32808

Phone Number: 407-293-2001

Fax Number: 407-293-6522

Project Contact: Alexander Ashton

e-mail address: Alex.Ashton@cspipe.com

Federal Tax ID No.: 63-0418384

Tax ID Type: ☒ Federal Tax ID ☐ Social Security Number

*This Form Must Be Completed and Returned with your Submittal.*

**Bid #22037 – METER LIDS**

## References

CUSTOMER NAME	CONTACT PERSON	TELEPHONE AND FAX NUMBER	SCOPE OF SERVICES PROVIDED/JOB NAME
Jaret Construction	Nelson	( 407 ) 810-8133 (      )	Provided pipe, valves, & fittings for 50+ jobs over the last 5 years.
Florida Public Utilities	Jim	( 863 ) 291-5678 (      )	Provided gas materials consistently for 10 years
Cathcart Construction	Chris	( 407 ) 629-2900 (      )	Provided pipe, valves, & fittings for 10 years

Does Bidder have any similar work in progress at time of Bid Opening?    Yes    ☒    No    ☐

If "Yes", explain:

We have 20+ PVC & HDPE jobs going currently. They all involve Gate Valves, Hydrants, & MJ Fittings

*References who are located in foreign countries are not acceptable.*

*This Form Must Be Completed and Returned with your Submittal.*

## DRUG-FREE WORK PLACE FORM

The undersigned Bidder in accordance with Florida Statute 287.087, hereby certifies that

Consolidated Pipe and Supply Company does:

(Name of Business)

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are proposed a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

X

*Alexander Ashton*

Bidder's Signature

05/31/2022

Date

***This Form Must Be Completed and Returned with your Submittal, if applicable***

**Bid #22037 – METER LIDS**

## Statement of No Bid

Bid No. 22037

### METER LIDS

If your company does not intend to bid on this Procurement, please complete and return this form prior to the date shown for receipt of bids to: CITY OF DELTONA, Purchasing Manager, 2345 Providence Blvd., Deltona, FL 32725.

We, the undersigned, have declined to bid on the above referenced Invitation to Bid for the following reason(s):

- ☐ Specifications are too "restrictive." (please explain below)
- ☐ Unable to meet specifications
- ☐ Specifications were unclear. (please explain below)
- ☐ Insufficient time to respond
- ☐ We do not offer this type of product or equivalent
- ☐ Our production schedule would not permit us to perform
- ☐ Unable to meet bond requirements
- ☐ Other (please explain below)

REMARKS:

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<hr/> <div>Company Name</div>	<hr/> <div>Telephone</div>
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<div>X</div> <hr/> <div>Signature</div>	<hr/> <div>Fax</div>
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<hr/> <div>Title</div>	<hr/> <div>Typed or Printed Name</div>
------------------------	--

<hr/> <div>Address</div>	<hr/> <div>City</div>	<hr/> <div>State</div>	<hr/> <div>Zip</div>
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Bid #22037 - METER LIDS

## E-VERIFY FORM

Project Name:	Bid No. 22037
Project No.:	Meter Lids

### Definitions:

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

- All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and
- All persons (including subvendors/subconsultants/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Coconut Creek; and
- Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. Any challenge to termination under this provision must be filed in the Circuit Court no later than 20 calendar days after the date of termination. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination.

### COMPANY CONTACT INFORMATION:

Company Name: Consolidated Pipe and Supply Company

Authorized Signature: *Alexander Ashton*

Print Name: Alexander Ashton

Title Utility Salesman

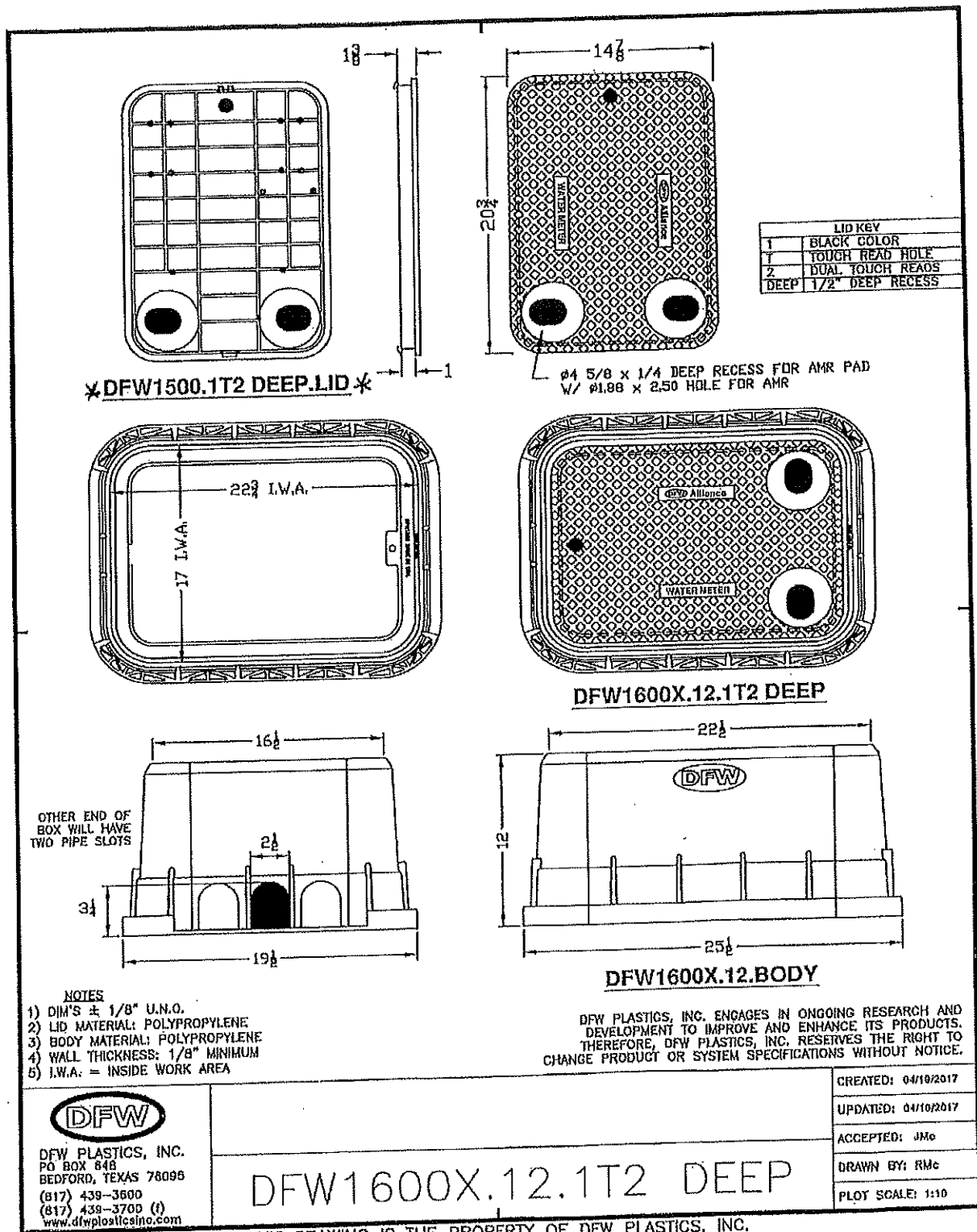
Date: 05/31/2022

Phone: 407-293-2001

Email: Alex.Ashton@cspipe.com

Website: www.cspipe.com

**Bid #22037 – METER LIDS**





# SPECIFICATIONS / DATA

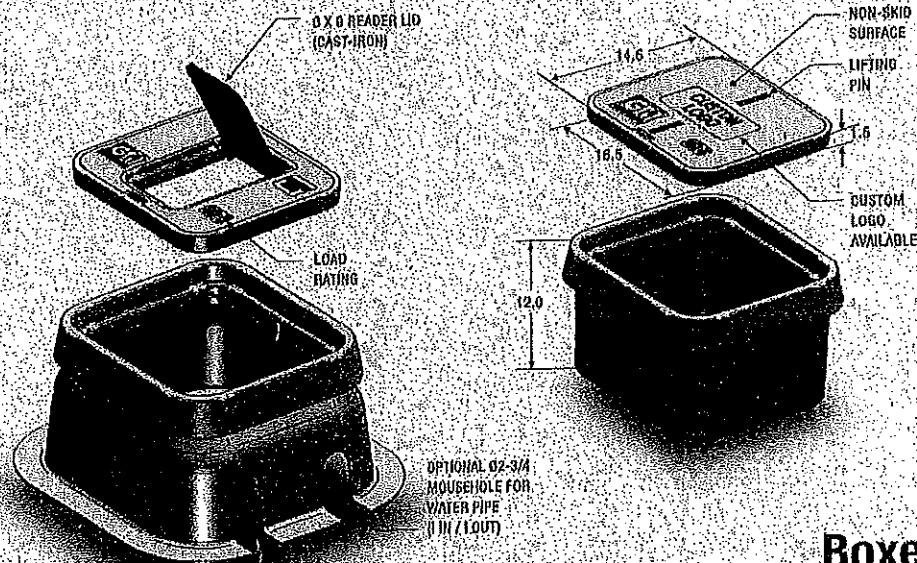
2020

15" X 17" ASSEMBLY



## Lids

Style	Bolt-Down	Part Number	Load Ratings	Weight
Solid	N	S1517P	TIER 8, 15, 22	25
Reader Lid, Hinged 6x9	N	S1517R	TIER 8, 15	23
Reader Lid, Drop-In 6x9	N	S1517C	TIER 8, 15	22
Neptune AMR, R450 6" Dia	N	S1517N	TIER 8, 15, 22	24
Sensus AMR, 4" Dia	N	S1517S	TIER 8, 15, 22	25
Sensus AMR, 4" Dia (Qty: 2)	N, H, P	S1517D	TIER 8, 15, 22	25
Sensus AMR and 6x9 Reader	N	S1517B	TIER 8	22



## Boxes

Part Number	Height	Style	Bottom	Bolt-Down	Load Ratings	Weight
S151712S	12	Straight	S, 0, 3	N, B	TIER 8, 15, 22	26
S151712F	12	Flared	0, 3	N, B	TIER 8, 15	28
J151712S	12	Straight, Jumbo	S, 0, 3	N, B	TIER 8, 15	32

### LIDS DESIGNATIONS

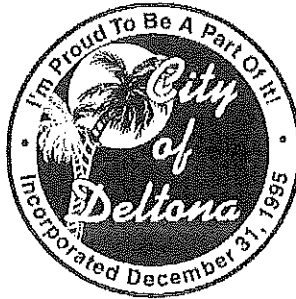
Bolt-Down: N - Not Bolted, H - Hex Head Bolts, P - Penta Head Bolts

### BOXES DESIGNATIONS

Bottoms: S - Solid, 0 - Open, 2 - Two Mouseholes, 3 - Three Mouseholes  
Bolt-Down: B - Bolted, N - Not Bolted

GLASHASTERS | 8870 Western Way, Jacksonville, FL 32256 | PH 904 400-7100 | FAX 904 368-1702 | www.Glashasters.com

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**ADDENDA #1 TO BID#22037**

**Meter Lids**

**May 13, 2022**

This addenda is being issued to **remove** verbiage on page #7 of the bid document:

The terms of the AGREEMENT shall be for a period of one (1) year from date of AGREEMENT. This AGREEMENT may, by mutual assent of all parties, be extended for three (3) additional one year periods; not to exceed 48 months in total. At the end of the first 12 month period, the contractor will be solicited for an extension with all terms, conditions and pricing remaining. If the contractor requests any changes in same, said changes may require City Manager approval or rejection. At such time, staff may be requested to either re-issue a new BID or accept the changes as requested if they are within reason and market value.

***This Form Must Be Completed and Returned with your Submittal.***

***I hereby confirm that I am authorized to submit this bid on behalf of***

Consolidated Pipe and Supply Company

**Company Name**

Alexander Ashton

**Representative**

05/31/2022

**Date**

<p><b>Submit Bid to:</b></p> <p><b>CITY OF DELTONA</b></p> <p>2345 Providence Blvd. Deltona, Florida 32725 Attn: Purchasing</p> <p><b>CLEARLY MARK SEALED ENVELOPE WITH BID NAME AND NUMBER</b></p>	<p><b>INVITATION TO BID# 22037 FOR:</b></p> <p><b>METER LIDS</b></p>
<p><u>Contact:</u></p> <p>Mary E. Perez Purchasing Agent Phone: (386) 878-8580 Fax: (386) 878-8571</p> <p>EMAIL QUESTIONS TO: <b>E-Mail Address: meperez@deltonafl.gov</b></p>	<p><b>BIDDER NAME:</b> _____ <u>Consolidated Pipe and Supply Company</u> _____</p>
<p><b><u>BID DUE DATE &amp; TIME:</u></b> <b>THURSDAY, June 2, 2022 AT 2:00 AT CITY HALL, 1ST FLOOR CONFERENCE ROOM LOCATED AT 2345 PROVIDENCE BOULEVARD, DELTONA, FLORIDA</b></p>	<p><b><u>MAILING ADDRESS:</u></b> _____ <u>3010 Eunice Ave. Orlando, FL 32808</u> _____ _____</p>
<p><u>Location of Public Opening:</u> City of Deltona, 1ST Floor Conference Room 2345 Providence Blvd., Deltona, FL 32725</p>	<p>Phone#: <u>407-293-2001</u> Fax#: <u>407-293-6522</u></p>

**GENERAL CONDITIONS, INSTRUCTIONS AND INFORMATION FOR  
BIDDERS**

These documents constitute the complete set of terms and conditions, specification requirements, and bid forms. All bid sheets and attachments must be executed and submitted in a sealed envelope. The face of the envelope shall contain Bidder's name, return address, the date and time of bid opening, the bid number and title. Bids not submitted on the enclosed Bid Form shall be rejected. Bidders shall submit three (3) complete sets (one [1] original and two [2] copies) of their bid, complete with all supporting documentation. SUBMITTAL OF A BID IN RESPONSE TO THIS INVITATION TO BID CONSTITUTES AN OFFER BY THE BIDDER. Bids which do not comply with these requirements may be rejected at the option of the City.

**CONTACT:** All prospective bidders are hereby instructed not to contact any member of the City of Deltona Commission,  
**Bid #22037 – METER LIDS**

City Manager, or City of Deltona Staff members other than the noted contact person OR another member of the City's

Purchasing Division regarding this Invitation to Bid or their bid proposal at any time during the bid process. Any such contact shall be cause for rejection of your bid proposal. The Bid process is not over until an award is made.

**DELAYS:** The City, at its sole discretion, may delay the scheduled due dates indicated above if it is to the advantage of the City to do so. The City will notify bidders of all changes in scheduled due dates by written addendum.

**EXECUTION OF BID:** Bid must contain a manual signature, in ink, of an authorized representative, who has the legal ability to bind the Bidder in contractual obligations in the space provided on the Bid Response Form. Failure to properly sign the Bid shall invalidate same, and it shall not be considered for award. Bid must be typed or legibly printed in ink. Use of erasable ink is not permitted. All corrections made by Bidder to any part of the bid document must be initialed in ink. The original bid conditions and specifications cannot be changed or altered in any way. Altered bids will not be considered. Clarification of bids submitted shall be in letter form, signed by bidders and attached to the bid.

**BIDDER INFORMATION:** Bidder shall complete the "Corporate Authority", "Joint Venture", "Sole Proprietorship", or "Partnership" portion of the Bidder Information Sheet, whichever part applies, and include with their bid submittal.

**JOINT VENTURES:** Bids submitted by firms under "joint venture" arrangements or other multi-party agreements must submit a power of attorney delegating authority to one principal with authority to negotiate and execute any/all contract documents resulting from negotiations/award of this Invitation to Bid.

**NO BID:** If not submitting a bid, respond by returning only the Statement of No Bid, and give the reason in the space provided. Failure to respond three (3) times in succession without justification may be cause for removal of the Bidders name from the mailing list.

**BID OPENING:** Shall be public, at the above address, on the date and at the time specified above. The bid time shall be scrupulously observed. Under no circumstances shall bids delivered after the time specified be considered; such bids will be returned unopened. The City will not be responsible for late deliveries or delayed mail. The time/date stamp clock located in the Finance Department serve as the official authority to determine lateness of any bid. It is the Bidders sole responsibility to assure that his/her bid is complete and delivered at the proper time and place of the bid opening. Bids which for any reason are not so delivered will not be considered. Offers by facsimile, telegram or telephone are not acceptable. A bid may **NOT** be altered by the Bidder after opening of the bids. Bid tabulations will be furnished upon

written request which includes a self-addressed, stamped envelope.

Persons with disabilities needing assistance to participate in the Public Bid Opening should contact the City Clerk at least 48 hours in advance of the meeting at 386-561-2100.

**TAXES:** The City is exempt from Federal Excise and State Sales Taxes on direct purchases of tangible personal property. The City's exemption numbers are on the face of the purchase order. If requested, the Purchasing Manager will provide an exemption certificate to the awarded Bidder. Vendors/contractors doing business with the City shall not be exempted from paying sales tax to their suppliers for materials to fulfill contractual obligations with the City nor shall any Vendor/Contractor be authorized to use the City's Tax Exemption Number in securing such materials.

**CERTIFICATES**

The City reserves the right to require proof that the bidder is an established business and is abiding by the Ordinances, Regulations, and Laws of their Community and the State of Florida such as but not limited to: Occupational Licenses, Business Licenses, Florida Sales Tax Registration, Federal Employee Identification Number.

**DISCOUNTS:** Cash discounts for prompt payment shall not be considered in determining the lowest net cost for bid evaluation purposes.

**MISTAKES:** Bidders are expected to examine the terms and conditions, specifications, delivery schedule, bid prices, extensions and all instructions pertaining to supplies and services. **FAILURE TO DO SO WILL BE AT BIDDER'S RISK.** In the event of extension error(s), the unit price will prevail and the Bidder's total offer will be corrected accordingly. Written amounts shall take precedence over numerical amounts. In the event of addition errors(s), the unit price, and extension thereof, will prevail and the Bidder's total offer will be corrected accordingly. Bids having erasures or corrections must be initialed in ink by the Bidder.

**AWARD TERM** This bid is for an initial order of the items listed on the bid form and shall remain open for any additional water lids that may be needed for a period of one year.

**PRICE REDETERMINATION** The Contractor may petition the Purchasing Manager for price redetermination within forty-five (45) days of the expiration of each term of the contract. Any price redetermination will include all items awarded. If the City and the Contractor cannot agree on any price redetermination, then the contract will expire. (*See other conditions under Special Terms and Conditions*)

**UNUSUAL CIRCUMSTANCES:** If during a contract term where costs to the City are to remain firm or adjustments are

restricted by a percentage or CPI cap, unusual circumstances that could not have been foreseen by either party to the contract occur, and those circumstances significantly affect the Seller's cost in providing the required items or services, then the Seller may request adjustments to the costs to the City to reflect the changed circumstances. The circumstances must be beyond the control of the Seller, and the requested adjustments must be fully documented. The City may, after examination, refuse to accept the adjusted costs if they are not properly documented, increases are considered to be excessive, or decreases are considered to be insufficient. In the event the City does not wish to accept the adjusted costs and the matter cannot be resolved to the satisfaction of the City, the City will reserve the following options:

1. The contract can be canceled by the City upon giving thirty (30) days written notice to the Seller with no penalty to the City or Seller. The Seller shall fill all City requirements submitted to the Seller until the termination date contained in the notice.
2. The City requires the Seller to continue to provide the items and services at the firm fixed (non-adjusted) cost until the termination of the contract term then in effect.
3. If the City, in its interest and in its sole opinion, determines that the Seller in a capricious manner attempted to use this section of the contract to relieve themselves of a legitimate obligation under the contract, and no unusual circumstances had occurred, the City reserves the right to take any and all action under law or equity. Such action shall include, but not be limited to, declaring the Seller in default and disqualifying him for receiving any business from the City for a state period of time.
4. If the City does agree to adjusted costs, these adjusted costs shall not be invoiced to the City until the Seller receives notice in writing signed by a person authorized to bind the City in such matters.

**INVOICING AND PAYMENT:** Payment for any and all invoice(s) that may arise as a result of a contract or purchase order issued pursuant to this bid specification shall minimally meet the following conditions...to be considered as a valid payment request:

- a. A timely submission of a properly certified invoice(s), in strict accordance with the price(s) and delivery elements as stipulated in the contract or purchase order document, and be submitted to the Finance Department at the address as stipulated on the Purchase Order.
- b. All invoices submitted shall consist of an original and one (1) copy; clearly reference the subject contract or purchase order number; provide a sufficient salient description to identify goods or service for which payment

is requested; contain date of delivery; original or legible copy of signed delivery receipt including both manual signature and printed name of a designated City employee or authorized Agent; be clearly marked as "partial", "complete" or "final" invoice. The City will accept partial deliveries.

- c. The invoice shall contain the Bidder's Federal Employer Identification Number (F.E.I.N.).
- d. The City's terms are "Net 30 Days" after acceptance of goods or services and receipt of an acceptable invoice as described herein. Any discounts must be offered on the Bid Response Form.

**GENERAL:** The City of Deltona, having limited storage facilities, requires the service of private firms to provide materials, supplies and/or services on an as needed basis, as indicated herein, to support the City's needs.

**ADDITIONAL TERMS AND CONDITIONS:** Unless expressly accepted by the City, the following conditions shall apply: No additional terms and conditions included with the bid response shall be considered. Any and all such additional terms and conditions shall have no force and effect, and are inapplicable to this bid if submitted either purposely through intent or design, or inadvertently appearing separately in transmittal letters, specifications, literature, price lists or warranties. It is understood and agreed that the general and/or any special conditions in these Bid Documents are the only conditions applicable to this bid and the Bidder's authorized signature on the Bid Response Form attests to this. Exceptions to the terms and conditions will not be accepted.

**INTERPRETATIONS:** All Bidders shall carefully examine the Bid Documents. Any ambiguities or inconsistencies shall be brought to the attention of the City in writing prior to the opening of Bids; failure to do so, on the part of the Bidder, will constitute an acceptance by the Bidder of any subsequent decision. Any questions concerning the intent, meaning and interpretations of the Bid Documents shall be requested in writing (facsimile transmission acceptable (386) 789-7230, and received by the City at least seven (7) calendar days prior to the Bid Opening. Inquiries shall be addressed to the attention of the Contact person as indicated on Page 1. No person is authorized to give oral interpretations of, or make oral changes to, the bid. Therefore, oral statements given before the bid opening will not be binding. Any interpretation of, or changes to, the bid will be made in the form of a written Addendum to the bid and will be furnished to all Bidders through DemandStar. Receipt of all addenda shall be acknowledged by the Bidders by signing and enclosing said addenda or addendum acknowledgement with their bid.

**ADDENDUM:** The City will record its responses to inquiries, any supplemental instructions, and/or necessary revisions to Bid Documents, in the form of a written addendum. Should

revisions to the Bid Documents become necessary, the City will post a written addendum to the DemandStar website which will go out to all Bidders who received a bid package through DemandStar. All addendum are posted to the DemandStar website and current planholders are notified that an addendum has been issued. Bidders who obtain Bid Documents from other sources must officially register with the City's Purchasing Manager in order to be placed on the DemandStar website as a bid holder in order to receive any forthcoming addenda or other official communications. Failure to register as a prospective Bidder may cause your bid to be rejected as non-responsive if you have failed to submit a bid without an addendum acknowledgment for the most current addendum. It is the vendor's responsibility to check the DemandStar website at [www.demandstar.com](http://www.demandstar.com) in order to be sure latest addendum and any prior addendum have been received.

**PROTESTS:** Any Bidder who disputes the bid selection or contract award recommendation shall file such protest according to the bid protest procedures. These procedures are available upon request from the City.

**CONFLICT OF INTEREST:** All Bidders must disclose with their bid the name of any officer, director, or Agent who is also an employee of the City. All Bidders must disclose the name of any City employee who owns, directly or indirectly, an interest of five percent (5%) or more in the Bidder's firm or any of its branches.

**LEGAL REQUIREMENTS:** Bidders are required to comply with all provisions of Federal, State, City and local laws and ordinances, rules and regulations that are applicable to the items being bid. Lack of knowledge by the Bidder shall in no way be a cause for relief from responsibility, or constitute a cognizable defense against the legal effect thereof.

**DRUG-FREE WORKPLACE:** Preference shall be given to business with Drug-Free Work Place (DFW) programs. Whenever two or more bids which are equal with respect to price, quality, and service are received by the City for the procurement of commodities or contractual services, a bid received from a business that completes the attached DFW form certifying that it is a DFW shall be given preference in the award process.

**POSTING OF BID AWARD:** Recommendation for award will be posted for review by interested parties on DemandStar. Failure to file a protest to Purchasing within the time prescribed in the CITY's Purchasing Manual, shall constitute a waiver of proceedings.

**AWARD:** As the best interest of the City may require, the right is reserved to make award(s) by individual item, group of items, "All or None", or a combination thereof; with one or more suppliers; to reject any or all bids, or waive any minor

irregularity or technicality in bids received, award or eliminate a portion of the bid, and may, at its sole discretion, request a re-bid, or abandon the project in its entirety. Bidders are cautioned to make no assumption until the City has entered into a contract or issued a purchase order.

**EEO STATEMENT:** The City is committed to assuring equal opportunity in the award of contracts, and, therefore complies with all laws prohibiting discrimination on the basis of race, color, religion, national origin, age or sex.

**CONTRACTUAL AGREEMENT:** The contents of this Bid and all provisions of the successful bid proposal deemed pertinent by the City may be incorporated into a contract and become legally binding. A separate contract document, other than the purchase order, may or may not be issued. Any and all legal action necessary to enforce a contract or purchase order will be interpreted according to the laws of Florida. The venue shall be County of Volusia, Florida.

**GOVERNMENTAL RESTRICTIONS:** In the event that any governmental restrictions are imposed which would necessitate alteration of the material quality, workmanship or performance of the items offered on this bid prior to their delivery, it shall be the responsibility of the Bidder to notify Purchasing at once, indicating in his/her letter the specific regulation which required an alteration, including any price adjustments occasioned thereby. The City reserves the right to accept such alteration or to cancel the contract or purchase order at no further expense to the City.

**PERMITS/LICENSES/FEES:** Any permits, licenses, or fees required will be the responsibility of the Contractor, no separate or additional payment will be made.

Adherence to all applicable code regulations (Federal, State, City, City) are the responsibility of the Contractor.

**INDEMNIFICATION:** The Bidder, without exemption, shall indemnify and save harmless, the City, its employees and/or any of its Commissioners from liability of any nature or kind, including cost and expenses for or on account of any copyrighted, patented, or unpatented invention, process, or item manufactured by the Bidder. Further, if such a claim is made, or is pending, the Bidder may, at its option and expense, procure for the City the right to use, replace or modify the item to render it non-infringing. If none of the alternatives are reasonably available, the City agrees to return the article on request to the Bidder and receive reimbursement. If the Bidder used any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood, without exception, that the bid prices shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in the work.

**Bid #22037 – METER LIDS**

**ADVERTISING:** In submitting a bid, Bidder agrees not to use the results therefrom as a part of any commercial advertising, without the express written approval, by the appropriate level of authority within the City.

**ASSIGNMENT:** Any purchase order or contract issued pursuant to this Invitation to Bid and the monies which may become due hereunder are not assignable except with the prior written approval of the City, through the Finance Department.

**COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH:** Bidder certifies that all material, equipment, etc., contained in his/her bid meets all applicable O.S.H.A. requirements. Bidder further certifies that, if he/she is the successful Bidder, and the material, equipment, etc., delivered is subsequently found to be defective in any applicable O.S.H.A. requirement in effect on the date of delivery, all costs necessary to comply with the requirements shall be borne by the Bidder.

**RESPONSIBILITY:** A Bidder must have at the time of bid opening, a company in operation, (if applicable) or be a fully authorized Agent or representative of the product bid, and capable of producing or providing the items bid, and follow-up parts and service, including any warranty services as applicable, and so provide such certification upon request.

**FACILITIES:** The City reserves the right to inspect the Bidder's facilities at any reasonable time, during normal working hours, to determine that Bidder has a bona fide place of business, and is a responsible Bidder.

**DISQUALIFICATION OF BIDDER:** More than one bid from an individual, firm, partnership, corporation, or association under the same or different names will not be considered. Reasonable grounds for believing that a Bidder is involved in more than one bid submittal will be cause for rejection of all bids in which such Bidders are believed to be involved. Any or all bids will be rejected if there is reason to believe that collusion exists between Bidders. Bids in which the prices obviously are unbalanced will be subject to rejection.

**ADJUSTMENTS / CHANGES / DEVIATIONS:** No adjustments, changes or deviations shall be accepted on any item unless conditions or specifications of a bid expressly so provide. Any other adjustments, changes or deviations shall require prior written approval, and shall be binding **ONLY** if issued by the City's Finance Department. The Bidder shall bear sole responsibility for any and all costs of claims arising from any adjustments, changes or deviations not properly executed as required herein.

**PUBLIC RECORDS:** Upon award recommendation or thirty (30) days after opening, whichever is earlier, bids become "public records" and shall be subject to public disclosure

consistent with Chapter 119 Florida Statutes. Bidders must invoke the exemptions to disclosure provided by law in the response to the Bid, and must identify the data or other materials to be protected, and must state the reasons why such exclusion from public disclosure is necessary.

Bids may be reviewed at City Hall, 2345 Providence Blvd., Deltona, FL 32725.

**BID PREPARATION COSTS:** Neither the CITY nor its representatives shall be liable for any expenses incurred in connection with preparation of a response to this Invitation to Bid. Bidders should prepare their bids simply and economically, providing all information and prices as required.

**ACCEPTANCE / REJECTION:** The City of Deltona reserves the right to accept or reject any or all bids and to make the award to that Bidder, who in the opinion of the City will be in the best interest of and/or the most advantageous to the City. The City of Deltona also reserves the right to reject the bid of any vendor who has previously failed in the proper performance of an award or to deliver on time contracts of a similar nature or who, in the City's opinion, is not in a position to perform properly under this award. The City of Deltona reserves the right to inspect all facilities of bidders in order to make a determination as to the foregoing. The City of Deltona reserves the right to waive any irregularities, informalities, and technicalities in offers received, and may, at its discretion, request a re-bid, or abandon the project/procurement in its entirety.

**ANY AND ALL SPECIAL TERMS AND CONDITIONS, TECHNICAL REQUIREMENTS, SCOPE OF WORK OR SPECIFICATIONS ATTACHED HERETO WHICH VARY FROM THESE GENERAL CONDITIONS SHALL HAVE PRECEDENCE.**

**Bid #22037 – METER LIDS**

## **Scope of Work**

The City of Deltona is requesting bids for meter lids as listed below. The specification sheets can be found at the end this document. The city has already purchased the meters.

### **METER LIDS ONLY.**

- DFW Water Lids (DFW1500.1T2 DEEP.LID) – Qty 5,000
- DFW Reclaim Lids (DFW1500.1T2 DEEP.LID) – Qty 1,000
- Glass Master Water Lids (S1517N) – Qty 1,000



## **INSURANCE REQUIREMENTS**

### **WORKERS' COMPENSATION**

Coverage is to apply for all employees for statutory limits in compliance with the applicable state and federal laws. The policy must include Employers' Liability with a limit of \$1,000,000 each accident, \$200,000 each employee, \$500,000 policy limit for disease.

### **COMMERCIAL GENERAL LIABILITY – OCCURRENCE FORM REQUIRED**

Contractor shall maintain commercial general liability (CGL) insurance with a limit of not less than \$1,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall apply separately to this location/project in the amount of \$1,000,000. Products and completed operations aggregate shall be \$1,000,000. CGL insurance shall be written on an occurrence form and shall include bodily injury and property damage liability for premises, operations, independent contractors, products and completed operations, contractual liability, broad form property damage and property damage resulting from explosion, collapse or underground (x, c, u) exposures, personal injury and advertising injury. Fire damage liability shall be included at \$250,000.

### **COMMERCIAL AUTOMOBILE LIABILITY INSURANCE**

Contractor shall maintain automobile liability insurance with a limit of not less than \$1,000,000 each accident for bodily injury and property damage liability. Such insurance shall cover liability arising out of any auto (including owned, hired and non-owned autos). The policy shall be endorsed to provide contractual liability coverage.

### **EVIDENCE OF INSURANCE**

The Contractor shall furnish the City of Deltona with Certificates of Insurance. The Certificates are to be signed by a person authorized by that insurer to bind coverage on its behalf. The City of Deltona is to be specifically included as an additional insured on all policies except Workers' Compensation. In the event the insurance coverage expires prior to the completion of the project, a renewal certificate shall be issued 30-days prior to said expiration date. The policy shall provide a 30-day notification clause in the event of cancellation or modification to the policy. All certificates of insurance must be on file with and approved by the City of Deltona before the commencement of any work activities. Contractor shall have all applicable licenses and insurance required to perform this work.

The terms of the AGREEMENT shall be for a period of one (1) year from date of AGREEMENT. This AGREEMENT may, by mutual assent of all parties, be extended for three (3) additional one year periods; not to exceed 48 months in total. At the end of the first 12 month period, the contractor will be solicited for an extension with all terms, conditions and pricing remaining. If the contractor requests any changes in same, said changes may require City Manager approval or rejection. At such time, staff may be requested to either re-issue a new BID or accept the changes as requested if they are within reason and market value.

The City of Deltona reserves the right to cancel any agreement, or any part thereof without obligation if completion is not made within the time specified. Any work performed after cancellation of order(s) will be at the contractor's expense.

Please be advised that the City of Deltona will not prepay for work. Invoices may be submitted upon completion and acceptance of deliverables and will be paid upon submission of a complete invoice to the Department of Finance and Internal Services, 2345 Providence Blvd., Deltona, FL 32725.

Irrevocable Offer: Bidder warrants by virtue of bidding that the prices bid shall remain firm and be considered an irrevocable offer for a period of sixty (60) days, during which time one or more of the bids received may be accepted by the City of Deltona.

**EXTRA WORK:**

The City, without invalidating this **AGREEMENT**, may order changes in the operation within the general scope of this **AGREEMENT** consisting of additions, deletions, or other revisions, price and time may be adjusted accordingly. All such changes in the **AGREEMENT** may be authorized by a written Change Order to the **AGREEMENT** and may be executed under the applicable conditions of the **AGREEMENT**. If the contractor plans to make a claim for an increase in the price or any changes in Product, machinery, or service, he/she must submit said change request in writing. This may be forwarded to the City Manager, if necessary, for approval or rejection.

**Cancel Agreement:**

The City has the right to cancel this **AGREEMENT** for convenience in accordance with, but not limited to, the terms of default as specified herein. In any of the following events the City at any time hereafter shall have the right to immediately terminate the **AGREEMENT**.

In the event the contractor fails to keep and perform or shall violate any of the terms, covenants and conditions of the **AGREEMENT** on its part to be kept and performed, and the contractor shall not have cured or corrected such failure or violation within 10 days after written notice thereof shall have been given to the contractor; or immediately should the violation affect the health, safety and welfare of the contractor's employees, City employees or the public.

In the event the contractor shall, after 3-separate occasions during the term of this **AGREEMENT**, fail to keep and perform or shall violate any of the terms, covenants and conditions of this **AGREEMENT**, then the City has the right to terminate this **AGREEMENT** with no penalties to the City.

If the contractor shall make an assignment for the benefit of creditors, or shall file a petition in bankruptcy or shall be adjudged a bankrupt, or the interest of the contractor under this **AGREEMENT** shall be levied upon and sold upon execution or shall be operation of law become vested in another person, firm or corporation because of the insolvency of the contractor; or in the event that a receiver or trustee shall be appointed for the contractor or the interest of the contractor under this **AGREEMENT**.

In the event the contractor shall cease to operate the business awarded herein, or shall vacate or abandon said premises or not service and maintain lawn service, or if contractor allows his licenses or permits to expire without renewing as required, contract will be declared null and void.

**Remedies:**

The City may, if it so elects, pursue any other remedies provided by law for the breach of this **AGREEMENT** or any of its terms, covenants, conditions, or stipulations. No right or remedy herein conferred upon or reserved to the City or the contractor is intended to be exclusive of any other right or remedy, and each and every right and remedy given hereunder, or now or hereafter existing at law or at equity or by statute. The contractor is responsible for all damage or loss by fire, theft, vandalism or otherwise to their equipment, including their contents, materials, tools, equipment, and consumables, left on City property by the contractor, his/her employees, agents, subcontractors.

**Compliance with Laws, Regulations, Codes, Etc.:**

The contractor is required to comply with all present and future valid laws, ordinances, codes and regulations of the Federal Government, State of Florida, County of Volusia, City of Deltona and agencies thereof relating to the premises including, but not limited to, those applicable to health and sanitary conditions and safety and fire prevention. Any permits necessary will be the responsibility of the contractor to obtain from the proper agency, paying the fees directly to that agency.

**Federal and State Taxes:**

The City is exempt from payment of Florida State Sales and User Taxes. The City will sign an exemption certificate submitted by the contractor. The contractor shall not be exempted from paying sales tax to its suppliers for materials used to fulfill contractual obligations with the City, nor is the contractor authorized to use the City's Tax Exempt Number in securing such materials, or product.

The contractor shall be responsible for their portion of payment for its own employees FICA and Social Security benefits with respect to the resulting **AGREEMENT**.

**Severability:**

If any term or provision of the resulting **AGREEMENT**, or the application thereof to any person or circumstances shall, to any extent, be held invalid or unenforceable, to remainder of the **AGREEMENT** or the application of such terms or provisions, to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected, and every other term and provision of the **AGREEMENT** shall be deemed valid and enforceable to the extent permitted by law.

**CERTIFICATION OF INDEPENDENT PRICE DETERMINATION**

By submission of this bid, the Bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that in connection with this procurement:

1. The prices in this bid have been arrived at independently, without consultation, collusion, communication, or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor.
2. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening, directly or indirectly to any other Bidder or to any competitor; and,
3. No attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.
4. Bidder agrees that supplies/services furnished regarding this offer, if awarded, shall be covered by the most favorable commercial warranties the Bidder gives to any customer for such supplies services and that rights and remedies provided herein are in addition to and do not limit any rights offered to the City by any other provision of the bid award.

## **PURCHASING AGREEMENTS WITH OTHER GOVERNMENT AGENCIES**

All Bidders submitting a response to this Invitation to Bid agree that such response also constitutes a bid to all governmental agencies, under the same conditions, for the same contract price, and for the same effective period as this bid, should the Bidder feel it is in their best interest to do so.

Each governmental agency desiring to accept these bids, and makes an award thereof, shall do so independently of any other governmental agency. Each agency shall be responsible for its own purchases and each shall be liable only for materials and/or services ordered and received by it, and no agency assumes any liability by virtue of this bid. This agreement in no way restricts or interferes with the right of any governmental agency to rebid any or all items.

## **REFERENCES**

Bidder must submit with the bid, three (3) references (form attached) for projects of similar scope to include: Point of contact and telephone number. Failure to provide this information with the bid may result in bid being declared non-responsive.

### **Submittals:**

All submittals are **REQUIRED** and must be submitted with the bid package at the time of the bid opening to be considered a responsive bidder.

Bidders shall submit a detailed statement of explanation for each item where the quoted product deviates from the Scope of Services requested in this bid. Failure to comply may be cause for rejection

- Questions regarding this bid are to be addressed in writing to:

Mary E. Perez  
Purchasing Agent  
2345 Providence Blvd.  
Deltona, FL 32725  
E-Mail Address: [meperez@deltonafl.gov](mailto:meperez@deltonafl.gov)  
Or Fax: (386) 878-8571

**TIE ON UNIT PRICE OR BID:** Should there be a tie on either the unit price (if awarded on a per item basis) the deadlock will be decided upon using the following order:

- a. Companies who certify they are a drug-free workplace.
- b. Companies located in Volusia County, Florida.
- c. Companies located in Florida.
- d. All else being equal, both companies will be asked to submit a final bid in a sealed envelope.

The City of Deltona further reserves the right to be the final judge of what is considered equal and hold the bid open for a 90-day period if award is not made on the date specified.

**Bid Evaluation and Award:** The City of Deltona, at its sole discretion reserves the right to waive all technicalities or irregularities to reject any and all bids and/or accept the bid which is in the best interest of the City.

**Bid #22037 – METER LIDS**

The Award, if made, may be based upon considerations including but not limited to: Quantity offered, quality of product, and/or qualifications of the bidder. Good references from prior customers with similar budgets to that of the City or any other quality that may be deemed desirable and beneficial to the City.

**CONTACT: All prospective proposers are hereby instructed not to contact any member of the City of Deltona Commission, City Manager, or City of Deltona Staff members other than the noted contact person OR a member of the Purchasing staff regarding this Request for Proposals or their response at any time during the BID process. Any such contact shall be cause for rejection of your submittal.**

**BID RESPONSE FORM**  
**BID NO. 22037**  
**METER LIDS**

In accordance with the foregoing terms, conditions and specifications, the undersigned bidder, having visited the site of the work and having become familiarized with the conditions affecting the cost of the work and with all requirements of the proposed Contract Documents, and duly issued Addenda to said documents, as acknowledged herein, proposes to furnish and perform all things required in labor, material, necessary tools, expendable equipment, and all services necessary to perform and complete in a workmanlike manner all work required by said documents and Addenda. This bid is for an initial order of the items listed on the bid form and shall remain open for any additional water lids that may be needed for a period of one year. Submit pricing below:

QTY	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
5000	EA	DFW Water Lids (DFW1500.1T2 DEEP.LID)	\$59.20	\$296,000.00
1000	EA	DFW Reclaim Lids (DFW1500.1T2 DEEP.LID)	\$62.90	\$62,900.00
1000	EA	Glass Master Water Lids (S1517N)	\$55.00	\$55,000.00
***Quoting Nicor Alternates, Submittals will be provided*** GRAND TOTAL				\$ 413,900.00

BID SUBMITTED BY: Alexander Ashton

COMPANY NAME: Consolidated Pipe and Supply Company

DATE: 05/31/2022

*This Form Must Be Completed and Returned with your Submittal.*

**Bid #22037 – METER LIDS**

## HOLD HARMLESS AND INDEMNITY AGREEMENT

Consolidated Pipe and Supply Company, agrees through the signing of this document by an authorized party or agent that it shall defend, indemnify and hold harmless the City of Deltona, and its agents, employees, and public officials from and against all suits, losses, claims, demands, judgments of every name and description arising out of or incidental to the performance of this contract or work performed thereunder, whether or not due to or caused by the negligence of the City of Deltona, its agents, employees, and public officials excluding only the sole negligence of the City of Deltona, its agents, employees, and Public Officials.

This provision shall also pertain to any claims brought against the City of Deltona, its agents, employees, and public officials by an employee of the named Contractor, any Sub-contractor, or anyone directly or indirectly employed by any of them.

The Contractor's obligation to indemnify the City of Deltona, its agents, employees and public officials under this provision shall be limited to \$1,000,000 per occurrence which the parties agree bears a reasonable commercial relationship to the contract.

The Contractor agrees to accept, and acknowledges as adequate remunerations, the consideration of \$10, which is part of the agreed bid price, the promises contained herein, and other good and valuable consideration, the receipt of which is hereby acknowledged, for agreement to enter into this Hold Harmless and Indemnity Agreement.

Alexander Ashton  
CONTRACTOR

05/31/2022  
DATE

*This Form Must Be Completed and Returned with your Submittal.*

**Bid #22037 -- METER LIDS**

**CITY OF DELTONA**  
**BIDDER INFORMATION FORM**

The information below is required to complete your bid packet. Type or print only.

Company Name: Consolidated Pipe and Supply Company

Address: 3010 Eunice Avenue

City: Orlando

State: Florida

Zip Code: 32808

Phone Number: 407-293-2001

Fax Number: 407-293-6522

Project Contact: Alexander Ashton

e-mail address: Alex.Ashton@cspipe.com

**Remittance (Payment) Mailing Information**

Address: 3010 Eunice Avenue

City: Orlando State: Florida Zip Code: 32808

Phone Number: 407-293-2001

Fax Number: 407-293-6522

Project Contact: Alexander Ashton

e-mail address: Alex.Ashton@cspipe.com

Federal Tax ID No.: 63-0418384

Tax ID Type: ☒ Federal Tax ID ☐ Social Security Number

*This Form Must Be Completed and Returned with your Submittal.*

**Bid #22037 – METER LIDS**



## References

CUSTOMER NAME	CONTACT PERSON	TELEPHONE AND FAX NUMBER	SCOPE OF SERVICES PROVIDED/JOB NAME
Jaret Construction	Nelson	( 407 ) 810-8133 (     )	Provided pipe, valves, & fittings for 50+ jobs over the last 5 years.
Florida Public Utilities	Jim	( 863 ) 291-5678 (     )	Provided gas materials consistently for 10 years
Cathcart Construction	Chris	( 407 ) 629-2900 (     )	Provided pipe, valves, & fittings for 10 years

Does Bidder have any similar work in progress at time of Bid Opening? Yes

☒ No ☐

If "Yes", explain:

We have 20+ PVC & HDPE jobs going currently. They all involve Gate Valves, Hydrants, & MJ Fittings

*References who are located in foreign countries are not acceptable.*

*This Form Must Be Completed and Returned with your Submittal.*

## DRUG-FREE WORK PLACE FORM

The undersigned Bidder in accordance with Florida Statute 287.087, hereby certifies that

Consolidated Pipe and Supply Company does:

(Name of Business)

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are proposed a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

X

Alexander Ashton

Bidder's Signature

05/31/2022

Date

***This Form Must Be Completed and Returned with your Submittal, if applicable***

**Bid #22037 – METER LIDS**

## Statement of No Bid

Bid No. 22037

### METER LIDS

If your company does not intend to bid on this Procurement, please complete and return this form prior to the date shown for receipt of bids to: CITY OF DELTONA, Purchasing Manager, 2345 Providence Blvd., Deltona, FL 32725.

We, the undersigned, have declined to bid on the above referenced Invitation to Bid for the following reason(s):

- ☐ Specifications are too "restrictive." (please explain below)
- ☐ Unable to meet specifications
- ☐ Specifications were unclear. (please explain below)
- ☐ Insufficient time to respond
- ☐ We do not offer this type of product or equivalent
- ☐ Our production schedule would not permit us to perform
- ☐ Unable to meet bond requirements
- ☐ Other (please explain below)

REMARKS:

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\_\_\_\_\_  
Company Name Telephone

**X** \_\_\_\_\_  
Signature Fax

\_\_\_\_\_  
Title Typed or Printed Name

\_\_\_\_\_  
Address City State Zip

Bid #22037 – METER LIDS

## E-VERIFY FORM

Project Name:	Bid No. 22037
Project No.:	Meter Lids

### Definitions:

"Contractor" means a person or entity that has entered or is attempting to enter into a contract with a public employer to provide labor, supplies, or services to such employer in exchange for salary, wages, or other remuneration.

"Subcontractor" means a person or entity that provides labor, supplies, or services to or for a contractor or another subcontractor in exchange for salary, wages, or other remuneration.

Effective January 1, 2021, public and private employers, contractors and subcontractors will begin required registration with, and use of the E-verify system in order to verify the work authorization status of all newly hired employees. Vendor/Consultant/Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

- a) All persons employed by Vendor/Consultant/Contractor to perform employment duties within Florida during the term of the contract; and
- b) All persons (including subvendors/subconsultants/subcontractors) assigned by Vendor/Consultant/Contractor to perform work pursuant to the contract with the Department. The Vendor/Consultant/Contractor acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the contract is a condition of the contract with the City of Coconut Creek; and
- c) Should vendor become successful Contractor awarded for the above-named project, by entering into this Contract, the Contractor becomes obligated to comply with the provisions of Section 448.095, Fla. Stat., "Employment Eligibility," as amended from time to time. This includes but is not limited to utilization of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. The contractor shall maintain a copy of such affidavit for the duration of the contract. Failure to comply will lead to termination of this Contract, or if a subcontractor knowingly violates the statute, the subcontract must be terminated immediately. Any challenge to termination under this provision must be filed in the Circuit Court no later than 20 calendar days after the date of termination. If this contract is terminated for a violation of the statute by the Contractor, the Contractor may not be awarded a public contract for a period of 1 year after the date of termination.

### COMPANY CONTACT INFORMATION:

Company Name: Consolidated Pipe and Supply Company

Authorized Signature: *Alexander Ashton*

Print Name: Alexander Ashton

Title Utility Salesman

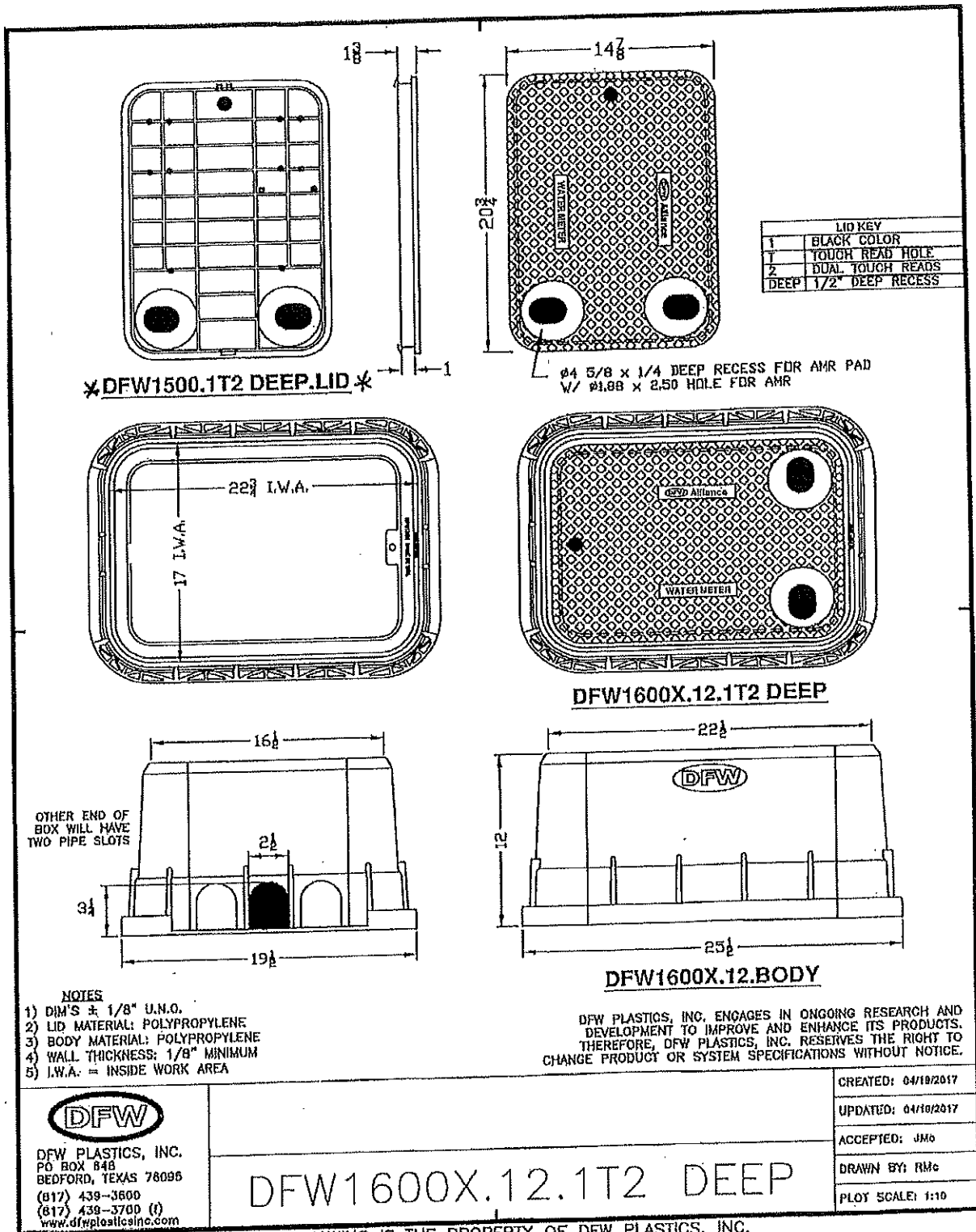
Date: 05/31/2022

Phone: 407-293-2001

Email: Alex.Ashton@cspipe.com

Website: www.cspipe.com

**Bid #22037 – METER LIDS**



# SPECIFICATIONS / DATA

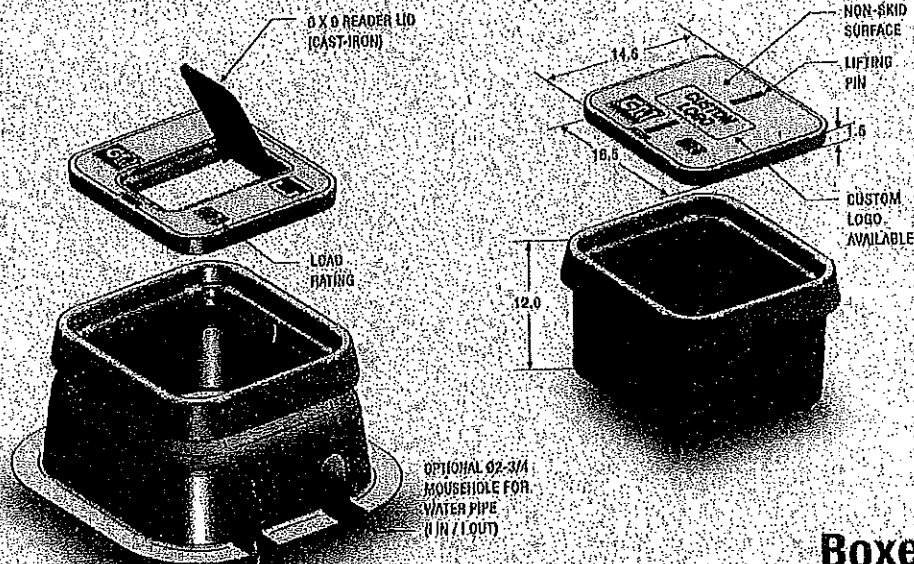
2020

15" X 17" ASSEMBLY



## Lids

Style	Bolt-Down	Part Number	Load Ratings	Weight
Solid	N	S1517P	TIER 8, 15, 22	25
Reader Lid, Hinged 6x9	N	S1517R	TIER 8, 15	23
Reader Lid, Drop-In 6x9	N	S1517C	TIER 8, 15	22
Neptune AMR, R450 6" Dia	N	S1517N	TIER 8, 15, 22	24
Sensus AMR, 4" Dia	N	S1517S	TIER 8, 15, 22	25
Sensus AMR, 4" Dia (Qty 2)	N, H, P	S1517D	TIER 8, 15, 22	26
Sensus AMR and 6x9 Reader	N	S1517B	TIER 8	22



## Boxes

Part Number	Height	Style	Bottom	Bolt-Down	Load Ratings	Weight
S151712S	12	Straight	S, O, 3	N, B	TIER 8, 15, 22	26
S151712F	12	Flared	O, 3	N, B	TIER 8, 15	28
J151712S	12	Straight, Jumbo	S, O, 3	N, B	TIER 8, 15	32

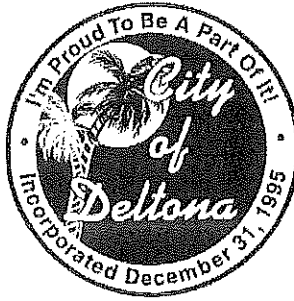
**LIDS DESIGNATIONS**  
Bolt-Down: N - Not Bolted, H - Hex Head Bolts, P - Ponta Head Bolts

**BOXES DESIGNATIONS**  
Bottoms: S - Solid, O - Open, 2 - Two Mouseholes, 3 - Three Mouseholes  
Bolt-Down: B - Bolted, N - Not Bolted

GLASHMASTERS 8873 Woodlawn Way, Jacksonville, FL 32256 | Ph 904 400-7100 | Fax 904 400-1702 | [www.GlashMasters.com](http://www.GlashMasters.com)

15" x 17"

12



**ADDENDA #1 TO BID#22037**  
**Meter Lids**  
**May 13, 2022**

This addenda is being issued to **remove** verbiage on page #7 of the bid document:

The terms of the AGREEMENT shall be for a period of one (1) year from date of AGREEMENT. This AGREEMENT may, by mutual assent of all parties, be extended for three (3) additional one year periods; not to exceed 48 months in total. At the end of the first 12 month period, the contractor will be solicited for an extension with all terms, conditions and pricing remaining. If the contractor requests any changes in same, said changes may require City Manager approval or rejection. At such time, staff may be requested to either re-issue a new BID or accept the changes as requested if they are within reason and market value.

***This Form Must Be Completed and Returned with your Submittal.***

***I hereby confirm that I am authorized to submit this bid on behalf of***

Consolidated Pipe and Supply Company

**Company Name**

Alexander Ashton

**Representative**

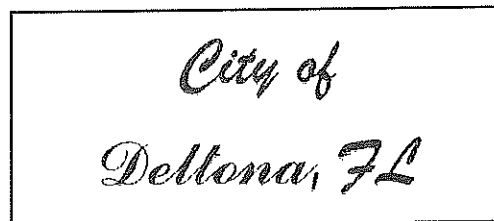
05/31/2022

**Date**



# Nicor Read-Rite Lid Technical Submittal

## May 26, 2022







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# Nicor Inc. Read-Rite® Lids Patented

## Specification for Read Rite Lids

**Product Characteristics-**Read Rite lids feature an impact resistant, low temperature, very stiff, specially formulated Hydrozone HD™ Polyolefin resin with excellent RF transparency characteristics, UV resistance and light weight.

Read Rite lids have been tested independently to the H20 highway proof load rating of 20,000 lbs over a 9" x 9" steel plate for 1 minute.

Typical Properties		Method	Value Unit
<b>Physical</b>			
Density-Specific Gravity( Method B)		ASTM D 792	0.902sp gr at 23°C
Melt Flow rate (230°C/2.16kg)		ASTM D 1238	4.00 g/10 min.
<b>Mechanical</b>			
Tensile Strength@yield		ASTM D 638	
2 in/min			3100 PSI
50 mm/min			21.4 Mpa
Flexural Modulus		ASTM D 790	
0.05 in/min, 1% secant, Procedure A			140,000 PSI
1mm/min, 1% secant, Procedure A			965MPa
Tensile Elongation		ASTM D 638	8%
<b>Impact</b>			
Notched Izod Impact		ASTM D 256	
( 73°F, Method A)			No Break ft-lb/in
(23°C, Method A)			No Break j/m
<b>Hardness</b>			
Rockwell hardness(R Scale)		ASTM D 785	65
<b>Thermal</b>			
DTUL @66 PSI Unannealed		ASTM D 648	81.1°C
<b>Other Properties</b>			
Drop Weight Impact Strength		Bosell Test	method -29 C: > 45 ft-lbs



## **TERMS AND CONDITIONS OF SALE**

**Terms:** Standard terms are NET 30. A 1½% per month (18% per annum) service charge will be added to all past due accounts

**Errors & Claims:** All claims for shortage in shipment or damaged material must be noted on the "Bill of Lading" and a written request for credit submitted to Nicor Inc. within 15 days of shipment. Nicor Inc. responsibility ceases upon delivery to the carrier.

**Returned Goods:** Returned goods will be accepted only after written approval and shipping instructions are received from Nicor Inc. A return goods authorization number is required and must be on all cartons, documents, and correspondence. All returns are subject to a 30% restocking charge, freight cost of returned goods (plus "out freight if applicable"). A higher restocking charge may be assessed against any return requiring extraordinary handling costs.

**Minimum Order:** 100-piece minimum order net billing.

**Limited Three Year Warranty:** The liabilities of Nicor Inc. are limited solely and exclusively to replacement as set forth in our standard "Statement of Warranty", alone and do not include any liability for incidental, consequential or other damage of any kind whatsoever, whether any claim is based upon theories of contract, warranty, negligence or tort and without any limitations and do not include shipping charges, labor, installation or any other losses or expenses incurred in operation of any replacement specialty item or fitting. Nicor Inc. products are designed to be used for meter applications only.

**Limited Lifetime Warranty:** Nicor Inc. warrants to the original owner of its Nicor meter lids and connectors, subject to the conditions set forth in this warranty, that Nicor Inc. products will remain free from manufacturing defects. All Nicor Inc. products are guaranteed against defects resulting from faulty workmanship or materials. Claims for labor costs and other expenses required to replace defective products or repair of any damage resulting from the use thereof will not be allowed by Nicor Inc. Our liability is limited to replacement of products acknowledged by Nicor Inc. to be defective.



**Exclusive Warranties and Remedies:** The FOREGOING REMEDIES ARE EXCLUSIVE AND ARE GIVEN AND ACCEPTED IN LIEU OF (I) ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE; AND (II) ANY OBLIGATION, LIABILITY, RIGHT, CLAIM OR REMEDY IN CONTRACT OR TORT, WHETHER OR NOT ARISING FROM Nicor Inc.'s NEGLIGENCE, ACTUAL OR IMPUTED.

The remedies of customer shall be limited to those provided herein to the exclusion of any and all other remedies including, without limitation, incidental or consequential damages. No agreement varying or extending the foregoing warranties, or these limitations will be binding on Nicor, Inc., unless such is signed in writing by an authorized officer of Nicor, Inc. The liability of Nicor, Inc., hereunder shall be limited to restoring to good working order, provided that Nicor, Inc., is not required to restore the product to good working order when such failure is due to causes beyond Nicor, Inc.'s control, including but not limited to, acts of God, acts of civil or military authority, priorities, strikes, floods, epidemics, war, riots, and other causes that are beyond the manufacturers control. These provisions are complete and exclusive statements of all terms and conditions between Nicor, Inc., and the consumer. These provisions may not be varied, supplemented, qualified or interpreted by any prior course of dealings, written or oral or by trade usage. No Nicor, Inc. agent, officer or employee has authority to make any representation, promise or warranty concerning these provisions.

## Technical Data Sheet

### *Pro-fax 8523*



Polypropylene, Impact Copolymer

#### Product Description

*Pro-fax 8523* very high impact polypropylene copolymer is available in pellet form. This resin is typically used in extrusion or injection molding applications and offers excellent low temperature impact resistance.

ASTM and ISO-based versions of the technical data sheet are available for *Pro-fax 8523*.

#### Regulatory Status

For regulatory compliance information, see *Pro-fax 8523* [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

<b>Status</b>	Commercial: Active
<b>Availability</b>	North America
<b>Application</b>	Automotive Parts
<b>Market</b>	Automotive; Consumer Products
<b>Processing Method</b>	Injection Molding; Sheet and Profile Extrusion
<b>Attribute</b>	Low Temperature Impact Resistance

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
<b>Physical</b>					
Melt Flow Rate, (230 °C/2.16 kg)	4.0	g/10 min	4.0	g/10 min	ASTM D1238
Density, (23 °C)	0.90	g/cm <sup>3</sup>	0.90	g/cm <sup>3</sup>	ASTM D792
<b>Mechanical</b>					
Flexural Modulus					
(0.05 in/min, 1% Secant, Procedure A)	140000	psi			ASTM D790
(1.3 mm/min, 1% Secant, Procedure A)			965	MPa	ASTM D790
Tensile Strength at Yield					
(2 in/min)	3100	psi			ASTM D638
(50 mm/min)			21	MPa	ASTM D638
Tensile Elongation at Yield	8	%	8	%	ASTM D638
<b>Impact</b>					
Notched Izod Impact Strength					
(73 °F, Method A)	No Break				ASTM D256
(23 °C, Method A)			No Break		ASTM D256
<b>Thermal</b>					
Deflection Temperature Under Load					
(66 psi, Unannealed)	165	°F			ASTM D648
(0.45 MPa, Unannealed)			74	°C	ASTM D648

#### Notes

These are typical property values not to be construed as specification limits.

### **Automotive Specifications**

- ▶ FCA MS-DB500 CPN 3478

### **Processing Techniques**

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

### **Company Information**

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

© LyondellBasell Industries Holdings, B.V. 2016

### **Disclaimer**

Before using a product sold by a company of the LyondellBasell family of companies, users should make their own independent determination that the product is suitable for the intended use and can be used safely and legally.

SELLER MAKES NO WARRANTY; EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY WARRANTY) OTHER THAN AS SEPARATELY AGREED TO BY THE PARTIES IN A CONTRACT.

Users should review the applicable Safety Data Sheet before handling the product.

This product(s) may not be used in the manufacture of any of the following, without prior written approval by Seller for each specific product and application:

- (i) U.S. FDA Class I or II Medical Devices; Health Canada Class I, II or III Medical Devices; European Union Class I or II Medical Devices;
- (ii) film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned medical devices;
- (iii) packaging in direct contact with a pharmaceutical active ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or topical (skin) administration;
- (iv) tobacco related products and applications, electronic cigarettes and similar devices.

The product(s) may not be used in:

- (i) U.S. FDA Class III Medical Devices; Health Canada Class IV Medical Devices; European Class III Medical Devices;
- (ii) applications involving permanent implantation into the body;
- (iii) life-sustaining medical applications.

All references to U.S. FDA, Health Canada, and European Union regulations include another country's equivalent regulatory classification.

In addition to the above, LyondellBasell may further prohibit or restrict the use of its products in certain applications. For further information, please contact a LyondellBasell representative.

# Standridge Color

Friday August 7 2020

Plastics Innovation - Transforming Ideas Into Reality

ISO Certified Quality System

## Technical Data Sheet

Code:

17457

BLACK 430 EMA

This is a Colorant compound dispersed into a Polyethylene methylacrylate copolymer resin and should process without any hesitancy at normal extrusion conditions.

### Carrier Resin

Type:

EMAC

Melt Flow:

20

g/10 min

Density:

.95

g/cm<sup>3</sup>

### Concentrate / Compound

Pigment/Additive Loading:

50

%

Melt Flow:

1

g/10 min

Specific Gravity:

1.24

g/cm<sup>3</sup>

Heat Stability:

550

F

Pellets per Gram:

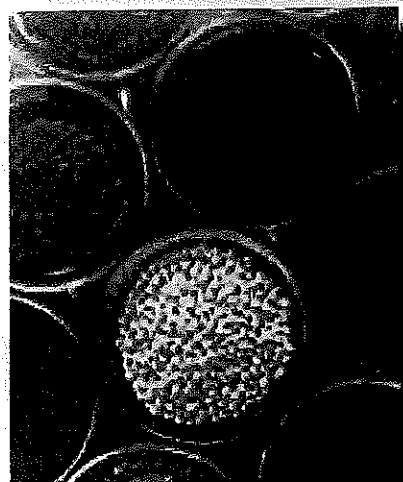
60

CONEG Compliant:

YES

FDA Approved:

NO



Standridge Color Corporation  
196 East Hightower Trail  
Social Circle, GA. 30025  
70.464.3362

sales@standridgecolor.com  
www.standridgecolor.com

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained there from. The information is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance. Because of the variation in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the application disclosed. Full-scale testing and end product performance are the responsibility of the user. Standridge Color Corporation shall not be liable for and the customer assumes all risk and liability of any use or handling of any material beyond Standridge Color Corporation's direct control. STANDRIDGE COLOR CORPORATION MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

COATINGS PLASTICS TONERS INKS COATINGS PLASTICS TONERS INKS

# RAVEN<sup>®</sup> BLACKS

INDUSTRIAL APPLICATIONS REQUIRE POWERFUL SOLUTIONS

**Columbian** 



A carbon black's application performance is determined by its nature and the level of dispersion achieved. The most important physical and chemical properties include particle size, surface area, porosity, structure, surface chemistry, and physical form. The level of dispersion in any given formulation is strongly influenced by the mixing equipment and procedures used.

**PARTICLE SIZE** exerts a primary influence on color properties. Finer particle size leads to jetter (darker) color and higher viscosity, but requires increased dispersion energy. Particle size is measured by electron microscopy.

**SURFACE AREA** is used for quality control purposes and is a function of

the carbon black's particle size and porosity. Smaller particle diameter gives rise to higher surface area. High surface area is usually associated with greater blackness and higher viscosity.

**POROSITY** is indicated by comparing a carbon black's external surface area predicted by EMSA, and STSA, to the total surface area value obtained with the BET NSA method. High color and conductive carbon blacks tend to have a high degree of porosity.

**STRUCTURE** is a measure of the three-dimensional fusion of carbon black particles to form aggregates. Highly structured carbon blacks provide higher viscosity, greater electrical conductivity and easier dispersion. Measures of aggregate structure may be obtained from shape distributions from EM analysis, or oil absorption (OAN).

**SURFACE CHEMISTRY** of Industrial Carbon Blacks generally refers to the oxygen-containing groups present on a carbon black's surface. Oxidized

surfaces improve wettability, rheology and dispersion in selected vehicle systems. In other cases, oxidation increases electrical resistivity and makes carbon blacks more hydrophilic. The extent of surface oxidation is measured by determining the quantity of the "volatile" component on the carbon black. High volatile levels are associated with low pH. A number of Raven® carbon blacks are post-treated to provide enhanced surface functionality.

**PHYSICAL FORM** is important in matching a carbon black to the equipment by which it is to be dispersed. Powdered carbon blacks are recommended in low-shear dispersers and on three-roll mills. Beaded carbon blacks are recommended for shot mills, ball mills and other high energy equipment. Beading provides lower dusting, bulk handling capabilities, higher bulk densities and improved economics, while powdered carbon blacks offer improved dispersibility.

#### FUNDAMENTAL CARBON BLACK PROPERTIES

##### Fineness - Particle Size Distribution



##### Structure - Aggregate Size/Shape Distribution



##### Porosity - Pore Size Distribution



##### Surface Chemistry - Surface Functionality Distribution



##### Additional Properties

Other Constituents - Sulfur, Ash, Residue, Etc.

#### INFLUENCE OF CARBON PROPERTIES ON APPLICATIONS PERFORMANCE

##### Smaller Particle Size (Higher Surface Area)

Increases	Blackness
Increases	Tint
Increases	UV Protection
Increases	Electrical Conductivity
Increases	Vehicle Demand and Viscosity
Reduces	Dispersibility

##### Higher Structure (Increasing Oil Absorption)

Reduces	Blackness and Tint
Improves	Dispersibility
Increases	Vehicle Demand and Viscosity
Increases	Electrical Conductivity

##### Higher Porosity (Higher ratio of NSA/STSA)

Increases	Vehicle Demand and Viscosity
Increases	Electrical Conductivity
Enables	Reduced Loadings in Conductive Applications

##### Higher Surface Functionality (Higher Volatile)

Improves	Vehicle Wetting
Reduces	Viscosity of Liquid Systems
Lowers	Electrical Conductivity

##### Physical Form - Beads or Powder

FOR CARBON BLACK RECOMMENDATIONS BEST SUITED FOR YOUR APPLICATIONS, CONTACT YOUR COLUMBIAN TECHNICAL REPRESENTATIVE

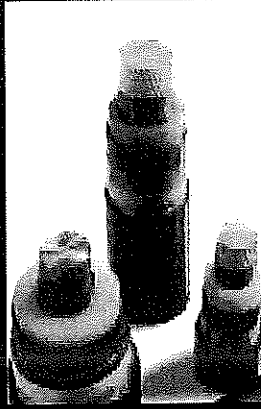
TONERS



INK



PLASTICS



COATINGS



Industrial Carbon Blacks are used in a wide variety of applications including printing inks, toners, coatings, plastics, paper and building products. The selection of a specific carbon black for an application depends on the end product requirements as well as processing conditions.

## INDUSTRIAL CARBON BLACK APPLICATIONS

### ULTRA® INDUSTRIAL CARBON BLACKS

Columbian furnace carbon blacks are high performance pigments targeted for use in demanding applications. Carbon black purity and consistency of performance, always important, are now recognized as being critical to continuing quality improvement. Columbian, committed to improving its quality and meeting the needs of the customers it serves, has developed furnace carbons that are of the highest purity available. These are referred to as Ultra® carbons.

Ultra® carbon blacks benefit various application systems by providing greater uniformity, increased compatibility, improved dispersion, better processing, longer screen life, jetter color development, and reduced scrap. Columbian's Ultra® performance carbons are designed for use in critical quality products with cost effective benefits.

**COATINGS** may be formulated with an extremely wide range of Columbian carbon blacks, ranging from Raven® 410 for low-cost utility finishes to Raven® 5000 Ultra® II & Raven® 5000 Ultra® III for high quality, extremely jet, blue undertone automotive applications. Carbon blacks primarily used for tinting are coarse and have broad particle size distributions. Grades with these properties provide good economics coupled with a desired blue tone and best resistance to flooding and flocculation. For use in machine colorant concentrates, coarse carbon blacks, especially the lampblack replacements, are usually specified. Raven® 14, a post-treated lampblack replacement, can provide sufficient mass color, strong tint strength, high loading capability and good dispersibility.

**PLASTICS** carbon black requirements are also diverse. Carbon black may be incorporated into thermosets or thermoplastics for color, tint or functional reasons. The entire spectrum of carbon blacks is employed in mass color plastic applications and use will depend upon

loading, dispersion and cost. Again as in coatings, the coarser carbon blacks are excellent choices in applications where blue tone, tint strength, ease of dispersion and high gloss are preferred. Carbon blacks, marketed under the Conductex® trade name, provide different degrees of electrical conductivity for a wide range of plastics requirements. Conductex® 7055 Ultra® offers optimum conductivity with minimal contribution to viscosity in applications such as wire & cable, ESD, as well as conductive coatings. By contrast, oxidized carbon blacks such as Raven® 1255 tend to be less conductive and may be used where controlled electrical insulating properties are required. Fiber applications benefit from the excellent filterability of Raven® 1190 Ultra® and Raven® 1220 Ultra®. For applications requiring very high jetness such as engineering plastics parts, Raven® 2000, Raven® 2200 Ultra® and Raven® 2500 Ultra® are recommended.

**INK** grade carbon blacks are generally medium to coarse in particle size and are used for their masstones rather than tint properties. In fluid ink applications such as publication and packaging gravure, Raven® 450 and 460 are widely used because of their rheology, ease of dispersion and blue tone. High quality paste (oil) inks may be formulated with Raven® 760 Ultra®, 860 Ultra®, 1100 Ultra®, 1000, or 1255 depending on specific requirements.

Specialty grade carbon blacks have been engineered by Columbian for specific industries. Raven® H2O is a surfactant-treated carbon black which is extremely hydrophilic and is thus useful in the building product industries for applications such as roofing granules and concrete mortar, and in the paper industry where low shear dispersibility is required. Raven® 1190 Ultra® and Raven® 1220 Ultra® have been developed for the fiber industry. Raven® UV Ultra® is an industry standard for ultra violet protection.



Test Method	D3849 Mean Particle Size nm	D2414 OAN Oil Absorption cc/100gm Beads	D6556 NSA Surface Area m <sup>2</sup> /g	2A-700 STSA Surface Area m <sup>2</sup> /g	4 % Volatiles	Blackness Index	Tint Strength	Country of Origin	Applications Comments
<b>PERFORMANCE FURNACE CARBON BLACKS</b>									
Raven® 7000	11	95	95	575	300	8.5	170	145	USA
Raven® 5000 Ultra® II	8	95	95	583	350	10.5	190	135	USA
Raven® 5000 Ultra® III	8	95	95	583	350	10.5	190	135	USA
Raven® 3500	13	105	105	375	212	5.0	165	145	USA
Raven® 2500 Ultra®	13	65	67	270	206	1.2	168	147	USA
Raven® 2000	18	65	70	194	168	0.9	166	144	USA
Raven® 1255	21	66	66	122	119	2.7	161	135	USA
Raven® 1250	20	55	60	113	102	2.5	165	128	USA
Raven® 1220 Ultra®	21	77	-	124	112	1.0	132	131	USA
Raven® 1200	20	55	60	106	104	1.8	164	128	USA
Raven® 1190 Ultra®	21	57	-	113	100	1.8	162	125	USA
Raven® 1170	21	55	60	107	101	1.8	162	124	USA
Raven® 1100 Ultra®	32	72	72	101	95	2.4	124	120	USA
Raven® 1080 Ultra®	28	60	60	79	77	1.6	140	109	USA
Raven® 1060 Ultra®	30	50	50	66	65	1.6	128	102	USA
Raven® 1040	28	100	100	90	86	2.6	139	115	USA
Raven® 1035	26	65	65	91	91	2.4	155	125	USA
Raven® 1030	24	60	-	95	94	1.5	156	118	USA
Raven® 1020	24	58	60	95	90	1.5	151	121	USA
Raven® 1000	24	58	63	92	91	1.9	155	126	USA
Raven® 890	30	-	102	69	68	1.3	130	97	USA
Raven® 880 Ultra®	30	102	-	78	76	1.3	128	104	USA
Raven® 860 Ultra®	39	48	50	48	48	0.7	112	91	USA
Raven® 850	34	70	75	63	63	1.2	130	101	USA
Raven® 820	32	120	-	73	71	1.7	118	100	Canada
Raven® 790 Ultra®	30	-	105	64	64	1.2	135	95	USA
Raven® 785 Ultra®	31	72	-	89	76	0.6	123	105	USA
Raven® 780 Ultra®	30	58	60	89	77	0.8	134	109	USA
Raven® 760 Ultra®	30	48	50	64	64	1.4	128	102	USA
Raven® 520 / Raven® 520 Ultra®	58	121	-	40	39	0.9	95	58	USA
Raven® 510 Ultra®	58	90	-	38	38	0.9	98	57	USA
Raven® 500	53	75	80	44	44	1.2	100	69	USA
Raven® 460	63	61	-	37	37	1.0	97	68	USA
Raven® 450	65	63	65	35	34	1.0	93	61	USA
Raven® 430 Ultra®	82	75	78	31	31	1.0	85	58	USA
Raven® 420	86	72	75	28	28	1.0	79	50	USA
Raven® 410 / Raven® 410 Ultra®	101	65	68	26	26	0.7	65	47	USA
Raven® 415	65	65	-	32	32	0.8	90	61	USA
Raven® 22	83	-	113	28	27	0.8	79	44	USA
Raven® 16	68	-	105	30	29	0.9	80	46	USA
Raven® 14	55	-	111	44	44	1.7	94	66	USA
Conductex® SC Ultra®	20	115	115	205	124	1.5	146	123	USA
Raven® UV Ultra®	20	114	-	124	112	1.0	142	118	Canada
Raven® L Ultra®	30	72	-	85	85	1.0	132	110	Canada
Conductex® 7055 Ultra®	42	170	-	55	50	1.0	105	61	Canada
Conductex® 7051 Ultra®	56	121	-	43	42	1.0	94	55	Canada
Raven® PFEB	24	98	-	107	91	0.8	143	105	Germany
Raven® P3	24	115	-	102	97	1.4	137	112	Germany
Raven® P	22	113	-	155	109	0.9	138	107	Germany
Raven® P5	25	114	-	105	98	0.7	130	115	Hungary
Statex® F-12	32	-	110	72	72	1.7	121	105	Brazil
Statex® 300	32	-	78	78	78	1.9	125	110	Brazil
Statex® 125	22	-	125	110	107	1.0	135	116	Brazil
Copeblack® 890	18	113	-	139	119	1.4	155	123	Brazil
Copeblack® 690	22	114	-	111	105	0.9	137	115	Brazil
Copeblack® 450	32	72	-	76	76	0.8	125	111	Brazil
Copeblack® 193	66	54	-	36	35	1.0	98	66	Brazil
Copeblack® 49	58	121	-	39	38	0.7	95	57	Brazil
Copeblack® 35	66	90	-	34	33	0.8	90	56	Brazil
Copeblack® 25	100	65	-	31	30	0.8	65	55	Brazil
Raven® 2200 Ultra®	14	65	67	225	187	0.8	167	146	Korea
Raven® UV Ultra®	20	114	-	124	112	1.0	142	118	Korea
Raven® P5 Ultra®	25	112	117	105	98	0.7	130	114	Korea
Raven® L	30	72	75	80	79	0.7	132	112	Korea
Raven® 880	30	102	-	78	76	1.3	128	102	Korea
Raven® 900	30	-	108	82	81	0.8	135	102	Korea
Conductex® 7054 Ultra®	56	122	-	43	42	0.5	95	60	Korea
Conductex® 7067 Ultra®	42	140	-	63	54	1.0	108	65	Korea
Raven® 425	85	72	75	29	29	0.8	82	54	Korea
<b>SPECIALTY ADDITIVE FURNACE CARBON BLACKS</b>									
Raven® H20	55	-	111	45	45	2.2	90	66	USA

- 1 - Surface oxidized, "Treated" grade  
treated grades typically range in pH from 3 - 3.6  
non-treated grades typically range in pH from 6.5 - 8.0
- 2 - Specialty treatment for enhanced dispersion and handling properties

Ultra® indicates carbon black having high purity with exceptionally low levels of ash and residue.

#### Furnace Carbon Blacks FAQs

Nominal specific gravity of 1.80  
Color Index No. 77266  
Pigment Black 7  
CAS No. 1333-86-4

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(E) 01.2010

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### PP chemical resistance

Polypropylene resins are highly resistant to solvents and chemicals.

The results of extensive laboratory and actual field installation tests of polypropylene's chemical resistance are reported in this downloadable PDF which is periodically updated.

The chemical resistance data presented in this PDF for a range of over 260 chemicals and substances is based on ASTM D543.

### Testing

Unstressed resin specimens are used measuring 76mm (3") long x 0.635mm (0.025") thick, in the shape of dumbbells.

Results are reported after 1 month immersion. Important: As it is difficult to create actual service conditions in the laboratory, the results of many of the environments should be taken only as an indication of behavior in service.

### PP chemical resistance capability

Polypropylene resins have outstanding resistance to water and other inorganic environments. In most aqueous environments, its weight increase is less than 0.2% when it has been stored for 6 months at ambient temperatures. When the temperature is increased to 60°C (140°F), the weight increase is less than 0.5% for a similar period. According to ASTM D570, its 24 hr water absorption rate is 0.03%. It resists most strong mineral acids and bases, but it is subject to attack by oxidizing agents.

Polypropylene resins are appreciably affected by chlorosulfonic acid and oleum at room temperature, 98% sulfuric acid, 30% hydrochloric acid, and 30% hydrogen peroxide at 100°C (212°F). They are also affected by 98% sulfuric acid at 60°C (140°F) and fuming nitric acid and liquid bromine at room temperatures. Under strain, failure could occur with strong oxidizing acids at temperatures lower than those mentioned. With few exceptions however, inorganic chemicals produce little or no effect on Polypropylene resins over a period of 6 months at temperatures up to 120°C (248°F).

The permeation resistance of Polypropylene resins to organic chemicals depends on the rate and extent to which absorption occurs. This, in turn, affects the suitability of the resin to serve in a particular environment. When the resin is removed from the environment, evaporation will take place and cause it to return almost to its original dimensions. Property changes resulting from the absorption will be reversed if evaporation is complete.

Temperature and polarity of the organic medium are the foremost factors in determining the extent of absorption by polypropylene. Absorption becomes greater as temperatures are increased and polarity of the medium is decreased. Polypropylene copolymers swell more than homopolymers, indicating greater absorption. Such nonpolar liquids as benzene, carbon tetrachloride, and petroleum ether have a higher absorption rate with polypropylene than polar media such as ethanol and acetone.

Some reduction in tensile strength and an increase in extensibility and elongation-to-break in tension can be expected, depending on the nature and amount of the organic medium absorbed.

Polypropylene resins have excellent resistance to environmental stress-cracking. When they are tested according to ASTM D1693 the brittle fractures that occur with certain polyethylenes in contact with polar organic liquids, detergents, and silicone fluids are not observed. Failure of this type with polypropylene is rare. Those environments known to cause such cracking to polypropylene are 98% sulfuric acid, concentrated chromic/sulfuric acid mixtures, and concentrated hydrochloric acid/chlorine mixtures.

The useful life of Polypropylene resins at elevated temperatures is limited by oxidative degradation. The expected life of polypropylene at any given temperature is also determined by the nature of the environment, and by the extraction of some of the antioxidant system. Any environment that tends to extract the antioxidants may lead to more rapid breakdown of the polypropylene, especially at elevated temperatures.

# Chemicals list

Chemicals A - B

## Rating system

This chart rates the chemical resistance of Polypropylene resin according to the following code:

### A - Negligible effect

Should be suitable for all applications where these environmental conditions exist.

### B - Limited absorption or attack

Should be suitable for most applications, but the user is advised to make his or her own tests to determine the suitability of polypropylene in the particular environment.

### C - Extensive absorption and/or rapid permeation

Should be suitable for applications where only intermittent service is involved, or where the swelling produced has no detrimental effect on the part.

### D - Extensive attack

The specimen dissolves or disintegrates. Polypropylene is not recommended.

Note: The user is advised to make his or her own tests to determine the suitability of polypropylene in the particular environment.

Environment	Conc. %	Temp °C		
		20	60	100
Acetic acid (glacial)	97	A	B (80°C)	-
Acetic acid	50	A	A (80°C)	-
Acetic acid	40	A	-	-
Acetic acid	10	A	A	-
Acetone	100	A	A	-
Acetophenone	100	B	B	-
Acriflavine (2% solution in H <sub>2</sub> O)	2	A	A (80°C)	-
Acrylic emulsions		A	A	-
Aluminium chloride		A	A	-
Aluminium fluoride		A	A	-
Aluminium sulfate		A	A	-
Alums (all types)		A	A	-
Ammonia (aqueous)	30	A	-	-
Ammonia gas (dry)		A	A	-
Ammonium carbonate	Satd.	A	A	-
Ammonium chloride	Satd.	A	A	-
Ammonium fluoride	20	A	A	-
Ammonium hydroxide	10	A	A	-
Ammonium metaphosphate	Satd.	A	A	-
Ammonium nitrate	Satd.	A	A	-
Ammonium persulfate	Satd.	A	A	-
Ammonium sulfate	Satd.	A	A	-
Ammonium sulfide	Satd.	A	A	-
Ammonium thiocyanate	Satd.	A	A	-
Amyl acetate	100	B	C	-
Amyl alcohol	100	A	B	-
Amyl chloride	100	C	C	-
Aniline	100	A	A	-
Anisole	100	B	B	-
Antimony chloride		A	A	-
Aviation fuel (115/145 octane)	100	B	C	-
Aviation turbine fuel	100	B	C	-
Barium carbonate	Satd.	A	A	-
Barium chloride	Satd.	A	A	-
Barium hydroxide		A	A	-
Barium sulfate	Satd.	A	A	-
Barium sulfide	Satd.	A	A	-

# Chemicals list

Chemicals B - D

Environment	Conc. %	Temp °C		
		20	60	100
Beer		A	A	-
Benzene	100	B	C	C
Benzoic acid	A	A	-	-
Benzyl alcohol		A	A	-
		(80°C)		
Bismuth carbonate	Satd.	A	A	-
Borax		A	A	-
Boric acid		A	A	-
Brine	Satd.	A	A	-
Bromine liquid	100	D	-	-
Bromine water	(a)	C	-	-
Butyl acetate	100	C	C	-
Butyl alcohol	100	A	A	-
Calcium carbonate	Satd.	A	A	-
Calcium chloride	Satd.	A	A	-
Calcium chloride	50	A	A	-
Calcium hydroxide		A	A	-
Calcium hypochlorite bleach	20 <sup>(a)</sup>	A	B	-
Calcium nitrate		A	A	-

Environment	Conc. %	Temp °C		
		20	60	100
Calcium phosphate	50	A	-	-
Calcium sulfate		A	A	-
Calcium sulfite		A	A	-
Carbon dioxide (dry)		A	A	-
Carbon dioxide (wet)		A	A	-
Carbon disulfide	100	B	C	-
Carbon monoxide		A	A	-
Carbon tetrachloride	100	C	C	C
Carbonic acid		A	A	-
Castor oil		A	-	-
Cetyl alcohol	100	A	-	-
Chlorine (gas)	100	D	D	-
Chlorobenzene	100	C	C	-
Chloroform	100	C	D	D
Chlorosulfonic acid	100	D	D	D
Chrome alum		A	A	-
Chromic acid	80 <sup>(a)</sup>	A	-	-
Chromic acid	50 <sup>(a)</sup>	A	A	-
Chromic acid	10 <sup>(a)</sup>	A	A	-

Environment	Conc. %	Temp °C		
		20	60	100
Chromic/sulfuric acid		D	D	-
Cider		A	A	-
Citric acid	10	A	A	-
Copper chloride	Satd.	A	A	-
Copper cyanide	Satd.	A	A	-
Copper fluoride	Satd.	A	A	-
Copper nitrate	Satd.	A	A	-
Copper sulfate	Satd.	A	A	-
Cottonseed oil		A	A	-
Cuprous chloride	Satd.	A	A	-
Cyclohexanol	100	A	B	-
Cyclohexanone	100	B	C	-
Decalin	100	C	C	C
Detergents	2	A	A	A
Developers (photographic)		A	A	-
Dibutyl phthalate	100	A	B	D
Dichloroethylene	100	A	-	-
Diethanolamine	100	A	A	-

## POLYPROPYLENE CHEMICAL RESISTANCE

## Chemicals list

Chemicals E - H

Environment	Conc. %	Temp °C	20	60	100
Diisooctyl phthalate	100	A	A	A	-
Emulsifiers		A	A	A	-
Ethanolamine	100	A	A	A	-
Ethyl acetate	100	B	B	B	-
Ethyl alcohol	96	A	A	A	-
		(80°C)			
Ethyl chloride	100	C	C	C	-
Ethylene dichloride	100	B	B	B	-
Ethylene glycol		A	A	A	-
Ethylene oxide	100	B	B	B	-
		(10°C)			
Ethyl ether	100	B	B	B	-
Fatty acids (C <sub>18</sub> )	100	A	A	A	-
Ferric chloride	Satd.	A	A	A	-
Ferric nitrate	Satd.	A	A	A	-
Ferric sulfate	Satd.	A	A	A	-
Ferrous chloride	Satd.	A	A	A	-
Ferrous sulfate	Satd.	A	A	A	-

Environment	Conc. %	Temp °C	20	60	100
Fluorosilicic acid		A	A	A	-
Formaldehyde	40	A	A	A	-
Formic acid	100	A	A	A	-
Formic acid	10	A	A	A	-
Fructose		A	A	A	-
Fruit juices		A	A	A	-
Furfural	100	C	C	C	-
Gas liquor		C	-	-	-
Gasoline	100	B	C	C	C
Gearbox oil	100	A	B	B	-
Gelatin		A	A	A	-
Glucose	20	A	A	A	-
Glycerin	100	A	A	A	A
Glycol		A	A	A	-
Hexane	100	A	B	B	-
Hydrobromic acid	50 <sup>(a)</sup>	A	A	A	-

Environment	Conc. %	Temp °C	20	60	100
Hydrochloric acid	30 <sup>(a)</sup>	A	B	B	D
Hydrochloric acid	20	A	A	A	-
		(80°C)			
Hydrochloric acid	10	A	A	A	B
		(80°C)			
Hydrochloric acid	2	A	A	A	A
50-50 HCl-HNO <sub>3</sub>	(a)	B	D	D	-
		(80°C)			
Hydrofluoric acid	40	A	-	-	-
Hydrofluoric acid	60 <sup>(a)</sup>	A	A	A	B
		(40°C)			
Hydrogen chloride gas (dry)	100	A	A	A	-
Hydrogen peroxide	30	A	-	-	D
Hydrogen peroxide	10	A	B	B	-
Hydrogen peroxide	3	A	-	-	-
Hydrogen sulfide		A	A	A	-
Hydroquinone		A	A	A	-



# Chemicals list

Chemicals I - P

Environment	Conc. %	Temp °C
	20	60 100

Inks	A	A	-
Iodine tincture	A	-	-
Isooctane	100	C	C
Isopropyl alcohol	100	A	A

Ketones	A	-	-
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Lactic acid	20	A	A	-
Lanolin	100	A	A	-
Lead acetate	Satd.	A	A	-
Linseed oil	100	A	A	-
Lubricating oil	100	A	B	-

Magenta dye (aqueous solution)	2	A	A	-
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Some staining

Magnesium carbonate	Satd.	A	A	-
Magnesium chloride	Satd.	A	A	-
Magnesium hydroxide	Satd.	A	A	-

Environment	Conc. %	Temp °C
	20	60 100

Magnesium nitrate	Satd.	A	A	-
Magnesium sulfate	Satd.	A	A	-
Magnesium sulfite	Satd.	A	A	-
Meat juices		A	A	-
Mercuric chloride	40	A	A	-
Mercuric cyanide	Satd.	A	A	-
Mercurous nitrate	Satd.	A	A	-
Mercury	100	A	A	-
Methyl alcohol	100	A	A	-
Methylene chloride	100	A	-	-
Methyl ethyl ketone	100	A	B	-
Milk and its products		A	A	A
Mineral oil	100	A	B	-
Molasses		A	A	-
Motor oil	100	A	B	-

Naphthalene	100	A	A	A
Nickel chloride	Satd.	A	A	-
Nickel nitrate	Satd.	A	A	-

Environment	Conc. %	Temp °C
	20	60 100

Nickel sulfate	Satd.	A	A	-
Nitric acid	fuming	D	D	D
Nitric acid	70 <sup>ab</sup>	C	D	-
Nitric acid	60	A	D	-
			(80°C)	
Nitric acid	10	A	A	A
50-50 HCO <sub>3</sub> -HCl	(a)	B	D	-
			(80°C)	
50-50 HNO <sub>3</sub> -H <sub>2</sub> SO <sub>4</sub>	(a)	C	D	-
			(80°C)	
Nitrobenzene	100	A	A	-
Oleic acid		A	B	-
Oleum		-	-	D
Olive oil	100	A	A	-
Oxalic acid (aqueous)	50	A	B	-
Paraffin	100	A	B	-
Paraffin wax	100	A	A	-
Petrol	100	B	C	-

## POLYPROPYLENE CHEMICAL RESISTANCE

## Chemicals list

Chemicals P - S

Environment	Conc. %	Temp °C	20	60	100
Petroleum ether (boiling point 100°-140°C)	100	C	C	C	-
Phenol	100	A	A	A	-
Phosphoric acid	95	A	A	A	-
Plating solutions, brass		A	A	A	-
Plating solutions, cadmium		A	A	A	-
Plating solutions, chromium		A	A	A	-
Plating solutions, copper		A	A	A	-
Plating solutions, gold		A	A	A	-
Plating solutions, indium		A	A	A	-
Plating solutions, lead		A	A	A	-
Plating solutions, nickel		A	A	A	-
Plating solutions, rhodium		A	A	A	-
Plating solutions, silver		A	A	A	-
Plating solutions, tin		A	A	A	-
Plating solutions, zinc		A	A	A	-
Potassium bicarbonate	Satd.	A	A	A	-
Potassium borate	1	A	A	A	-
Potassium bromate	10	A	A	A	-
Potassium bromide	Satd.	A	A	A	-

Environment	Conc. %	Temp °C	20	60	100
Potassium carbonate	Satd.	A	A	A	-
Potassium chlorate	Satd.	A	A	A	-
Potassium chloride	Satd.	A	A	A	-
Potassium chromate	40	A	A	A	-
Potassium cyanide	Satd.	A	A	A	-
Potassium dichromate	40	A	A	A	-
Potassium ferri-/ferrocyanide		A	A	A	-
Potassium fluoride		A	A	A	-
Potassium hydroxide	50	A	A	A	-
Potassium hydroxide	10	A	A	A	A
Potassium nitrate	Satd.	A	A	A	-
Potassium perborate	Satd.	A	A	A	-
Potassium perchlorate	10	A	A	A	-
Potassium permanganate	20	A	A	A	-
Potassium sulfate		A	A	A	-
Potassium sulfide		A	A	A	-
Potassium sulfite		A	A	A	-
Propyl alcohol	100	A	A	A	-
Pyridine	100	A	A	A	-

Environment	Conc. %	Temp °C	20	60	100
Silicone oil	100	A	A	A	-
Soap solution (concentrated)		A	A	A	-
Sodium acetate		A	A	A	-
Sodium bicarbonate	Satd.	A	A	A	-
Sodium bisulfate	Satd.	A	A	A	-
Sodium bisulfite	Satd.	A	A	A	-
Sodium borate		A	A	A	-
Sodium bromide oil solution		A	A	A	-
Sodium carbonate	Satd.	A	A	A	-
Sodium chlorate	Satd.	A	A	A	-
Sodium chloride	Satd.	A	A	A	A
Sodium chlorite	2	A	A	A	-
Sodium chlorite	5	A	A	A	-
Sodium chlorite	10	A	A	A	-
Sodium chlorite	20	A	A	A	-
Sodium cyanide	Satd.	A	A	A	-

# POLYPROPYLENE CHEMICAL RESISTANCE

## Chemicals list

Chemicals S - Z

Environment	Conc. %	Temp °C	20	60	100
Sodium dichromate	Satd.	A	A	A	-
Sodium ferricyanide	Satd.	A	A	A	-
Sodium ferrocyanide	Satd.	A	A	A	-
Sodium fluoride	Satd.	A	A	A	-
Sodium hydroxide	50	A	A	A	-
Sodium hydroxide	10	A	A	A	A
Sodium hypochlorite	20	A	A	B	B
Sodium nitrate	A	A	A	A	-
Sodium nitrite	A	A	A	A	-
Sodium silicate	A	A	A	A	-
Sodium sulfate	Satd.	A	A	A	-
Sodium sulfide	25	A	A	A	-
Sodium sulfite	Satd.	A	A	A	-
Stannic chloride	Satd.	A	A	A	-
Stannous chloride	Satd.	A	A	A	-
Starch	A	A	A	A	-
Sugars and syrups	A	A	A	A	-

(a) May produce cracking in material under stress

Environment	Conc. %	Temp °C	20	60	100
Sulfamic acid	A	A (80°C)	-	-	-
Sulfates of [calcium and magnesium]	Satd.	A	A	-	-
Sulfates of [potassium and sodium]	A	A	-	-	-
Sulfur	A	A	A	-	-
Sulfuric acid	98 <sup>wt</sup>	C	-	D	-
Sulfuric acid	60	A	B	-	-
Sulfuric acid	50	A	B	-	-
Sulfuric acid	10	A	A	A	A
50-50 H <sub>2</sub> SO <sub>4</sub> /HNO <sub>3</sub>	(a)	C	D	-	-
Tallow	A	A	A	-	-
Tannic acid	10	A	A	-	-
Tartaric acid	A	A	A	-	-
Tetrahydrofuran	100	C	C	C	C
Tetralin	100	C	C	C	C
Toluene	100	C	C	-	-

Environment	Conc. %	Temp °C	20	60	100
Transformer oil	100	A	C	-	-
Trichloroacetic acid	10	A	A	A	-
Trichloroethylene	100	A	A	A	-
Turpentine	100	C	C	C	C
Urea	A	A	A	-	-
Urine	A	A	A	-	-
Water (distilled, soft, hard and vapour)	gas	-	D	-	-
Wet chlorine	70%	-	-	-	-
Whiskey	A	A	A	A	A
White paraffin	100	A	B	-	-
White spirit	100	B	C	-	-
Wines	A	A	A	-	-
Xylene	100	C	C	C	C
Yeast	A	A	A	-	-
Zinc chloride	Satd.	A	A	-	-
Zinc oxide	A	A	A	-	-
Zinc sulfate	Satd.	A	A	-	-

# **SCTE • ISBE** **S T A N D A R D S**

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**Interface Practices Subcommittee**

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**AMERICAN NATIONAL STANDARD**

**ANSI/SCTE 77 2017**

**Specifications for Underground Enclosure Integrity**

# NOTICE

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# **1. Introduction**

## **1.1. Executive Summary**

The purpose of this document is to establish the performance requirements for underground enclosures. The document provides Standards Engineers and Systems Designers a means of evaluating underground enclosure performance regardless of the materials used or the methods employed in the manufacture of the enclosures.

## **1.2. Scope**

The scope of this document covers conformance tests and requirements for the integrity of grade-level enclosures containing telecommunication or other low voltage apparatus that *may* be exposed to the public.

The purpose of this document is to describe the requirements for a comprehensive integrity system for grade-level enclosures providing long installation life and minimal maintenance. This document is intended to provide guidance for the use of enclosures in non-deliberate traffic areas. Requirements for enclosures in deliberate traffic areas are covered by American Association of State Highway and Transportation Officials (AASHTO).

## **1.3. Benefits**

Underground enclosures are designed and used for a variety of applications: slack cable, junction enclosures, and splice enclosures, etc. This document provides the specifier and end user the minimum performance criteria needed to ensure that the enclosure is designed for the outside plant application. Without this document there are no performance requirements for outside plant enclosures, and the long term integrity of the system may be compromised. This document helps specifying individuals design the outside plant and establish enclosure performance requirements throughout the system. The document will serve as a method to ensure long term enclosure integrity as more outside plant systems are installed underground.

## **1.4. Intended Audience**

A Standard Engineer or System Designer will be able to use this document to evaluate products from a variety of manufacturers and specify the best product for the application. It is intended to be used by a large cross section of individuals not just those with engineering backgrounds. The test methods and accompanying figures are intended to guide the individual through the process in a logical manner.

## **1.5. Areas for Further Investigation or to be Added in Future Versions**

Areas of future investigation include:

- Adding a section dedicated to installation applications
- Adding a section dedicated to installation details
- Adding a section for hybrid type installations to help others benefit from work being done across the country



## 2. Normative References

The following documents contain provisions, which, through reference in this text, constitute provisions of the standard. At the time of Subcommittee approval, the editions indicated were valid. All standards are subject to revision; and while parties to any agreement based on this standard are encouraged to investigate the possibility of applying the most recent editions of the documents listed below, they are reminded that newer editions of those documents may not be compatible with the referenced version.

### 2.1. Standards from Other Organizations

1. ASTM D543-14 "Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents"
2. ASTM D570-98 (2010) "Standard Test Method for Water Absorption of Plastics"
3. ASTM D635-06 "Standard Test Method for Rate of Burning and/or Extent and Time of Burning Plastics in a Horizontal Position"
4. ASTM D2444-99 (2010) "Standard Test Method for Determination of the Impact Resistance of Thermoplastic Pipe and Fittings by Means of a Tup (Falling Weight)"
5. ASTM G154-12 "Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials"
6. US Dept. of Agriculture, Rural Utilities Service, 7 CFR 1755.910 "RUS Specification for Outside Plant Housings and Serving Area Interface Systems"
7. ASTM C1028-07 "Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method"

## 3. Informative References

The following documents may provide valuable information to the reader but are not required when complying with this standard.

### 3.1. Published Materials

1. American Association of State Highway and Transportation Officials (AASHTO) "Standard Specification for Highway Bridges" 17<sup>th</sup> Edition.
2. National Fire Protection Association (NFPA 70) National Electric Code 2014, Section 314.30
3. Americans with Disabilities Act (ADA) "Accessibility Guidelines for Buildings and Facilities" (ADAAG) and the "Technical Bulletin: Floor and Ground Surfaces". Both are free from US Government website <http://www.access-board.gov/>.
4. Torque values for UNC threads taken from Audel Mechanical Trades, 4<sup>th</sup> Edition

## 4. Compliance Notation

<i>shall</i>	This word or the adjective means that the item is an absolute requirement of this specification.
<i>shall not</i>	This phrase means that the item is an absolute prohibition of this specification.
<i>forbidden</i>	<i>This word means the value specified shall never be used.</i>
<i>should</i>	<i>This word or the adjective "recommended" means that there may exist valid reasons in particular circumstances to ignore this item, but the full implications should be understood and the case carefully weighted before choosing a different course.</i>
<i>should not</i>	<i>This phrase means that there may exist valid reasons in particular circumstances when the listed behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior described with this label.</i>
<i>may</i>	<i>This word or the adjective "optional" means that this item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because it enhances the product, for example; another vendor may omit the same item.</i>
<i>deprecated</i>	<i>Use is permissible for legacy purposes only. Deprecated features may be removed from future versions of the standard. Implementations should avoid use of deprecated features.</i>

## 5. Definitions

### 5.1. Definitions

Underground Enclosure	An enclosure which houses and protects underground distribution equipment, including but not limited to: splice cases, excess cable, and construction or pull-box equipment. These enclosures are typically non-metallic. The removable cover is typically installed flush to grade and supports the anticipated loading requirements of the installation.
Failure Load	The inability of the product to accept any further increase in load
Design Load	The intended service load of the enclosure
Test Load	The design load multiplied by a safety factor.

## 6. Environmental Test

**Note:** Forty-eight (48) material coupons are required to complete the environmental tests.

### 6.1. Control Coupons

Six (6) coupons of the enclosure material(s) *shall* be prepared. The thickness *shall* match the material thickness of the appropriate section of the enclosure. The length and width *shall* be determined by the testing equipment to be used. These coupons are the control coupons. Test the coupons for ultimate flexural strength. Average the values of stress and deflection at failure for each coupon to establish the control values.

## 6.2. Chemical Resistance

Thirty (30) material coupons with the same dimensions as the control coupons *shall* be measured and weighed, and three coupons exposed to each of the following chemical reagents:

**Table 1 – Reagent/Concentration in Water**

Reagent	Concentration in water solution
Sodium Chloride	5%
Sulfuric Acid	0.1N
Sodium Carbonate	0.1N
Sodium Sulfate	0.1N
Hydrochloric Acid	0.2N
Sodium Hydroxide	0.1N
Acetic Acid	5%
Kerosene	Per ASTM D3699, Type K1
Transformer Oil	Per ASTM D3487, Type II
Magnesium Chloride	5%

Expose the coupons in accordance with ASTM D543, Immersion Test, Practice “A”, Procedures 1 and 2, with both conducted at room temperature, using Standard Laboratory Atmosphere and seven days for all tests. After exposure, measure, weigh and visually examine the coupons for changes. Test the coupons for ultimate flexural strength. Average the values of stress and deflection at failure for each coupon to establish the values for each reagent. The tested coupons *shall* retain at least 75% of the control values for stress and deflection and have no more than a 2% change in weight.

## 6.3. Simulated Sunlight Exposure

Three (3) material coupons with the same dimensions as the control coupons *shall* be measured, weighed, and tested in accordance with ASTM G154 per Cycle #1 of Appendix X2 for 1000 hours to simulate direct solar UV radiation. After exposure, measure, weigh and visually examine the coupons for changes. Test the coupons for ultimate flexural strength. Average the values of stress and deflection at failure for each coupon to establish the test values. The tested coupons *shall* retain at least 75% of the control values for stress and deflection and have no more than a 2% change in weight.

## 6.4. Water Absorption

Six (6) material coupons, three (3) for the twenty-four-hour test and three (3) for the boil test, with the same dimensions as the control coupons *shall* be measured, weighed, and tested in accordance with ASTM D570, sections 6, 7.1, and 7.5. After exposure, measure, weigh and visually examine the coupons for changes. Test the coupons for ultimate flexural strength. Average the values of stress and deflection at failure for each coupon to establish the test values. The tested coupons *shall* retain at least 75% of the control values for stress and deflection and have no more than a 2% change in weight.

## 6.5. Flammability

Three (3) material coupons with dimensions 25mm (1 inch) wide by 125mm (5 inch) long by finished product thickness are held in a horizontal position, ignited on one end, and the rate of burning along the length determined in accordance with ASTM D635, Sections 4, 5 and 6. The burning rate *shall* be less than 8mm (0.3 inch) per minute for each 3mm (0.1 inch) of thickness.

## 6.6 Internal Equipment Protection Test

The enclosure and the internal equipment therein *shall* remain suitable for use when tested for fire resistance in accordance with US Dept. of Agriculture, Rural Utilities Service, 7 CFR 1755.910 Section (e) "Performance Criteria and Test Procedures for Housings", subsection (3) "Environmental Requirement for Housings", paragraph xiii, "Fire Resistance", requirement (A).

The test housing *shall* be installed in a manner typical of field installation. U.S. No. 1 wheat straw *shall* be placed on the ground around the housing base in an one meter (3 ft) radius at an approximate depth of 10 cm (4 in.). The straw *shall* be ignited and permitted to burn fully. After the housing has cooled, its contents *shall* be inspected for evidence of ignition, melting, burning, or structural damage. Damage sufficient to impair service constitutes failure.

## 7. Structural Load Tests on Full-Size Products

It is recognized that as wheels roll over an enclosure, loads are imparted laterally and vertically into the sidewall, and vertically onto the cover. The structural load tests *shall* use the three test positions as described in paragraphs 7.1 through 7.3 to evaluate enclosures and match the intended application with enclosure performance: Figure 2, Figure 4, Figure 5, Figure 8 and Figure 10 for all Tiers up to and including Tier 15; Figure 3, Figure 6, Figure 7, Figure 9 and Figure 11 for Tier 22; Figure 12, Figure 13, Figure 14 and Figure 15 for the Lateral Sidewall Test for the enclosures. Enclosures *should* be 72 +/- 8 °F when tested. See Table 2 for the Load Requirements for all Tiers.

**Table 2 - Design/Test Loads**

Application	Loading Requirements			
<b>Light Duty</b> Pedestrian Traffic Only	Vertical	Test Load	13.3kN	3000 pounds
<b>Tier 5</b> Sidewalk applications with a safety factor for occasional non-deliberate vehicular traffic	Vertical	Design Load	22.2 kN	5000 pounds
		Test Load	33.3 kN	7500 pounds
	Lateral	Design Load	28.7 kPa	1800 pounds.
		Test Load	43.1 kPa	2700 pounds.
<b>Tier 8</b> Sidewalk applications with a safety factor for non-deliberate vehicular traffic	Vertical	Design Load	35.6 kN	8000 pounds
		Test Load	53.4 kN	12000 pounds
	Lateral	Design Load	28.7 kPa	1800 pounds
		Test Load	43.1 kPa	2700 pounds
<b>Tier 15</b> Driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic	Vertical	Design Load	66.7 kN	15000 pounds
		Test Load	100.1 kN	22500 pounds
	Lateral	Design Load	38.3 kPa	2400 pounds
		Test Load	57.5 kPa	3600 pounds
<b>Tier 22</b> Driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic	Vertical	Design Load	100.1 kN	22500 pounds
		Test Load	150.1 kN	33750 pounds
	Lateral	Design Load	38.3 kPa	2400 pounds
		Test Load	57.5 kPa	3600 pounds
<b>AASHTO H-20</b> Deliberate vehicular traffic applications.	Certified precast concrete, cast iron, or AASHTO-recognized materials.			

### 7.1. Lateral Sidewall Load Test

Apply the uniformly distributed lateral load parallel to the top surface of the enclosure on the longest wall as shown in of Figure 12, Figure 13, Figure 14 and Figure 15. Transmit the load using a flat, rigid steel plate(s) 610mm (24 inch) x 457mm (18 inch) x 25mm (1 inch), yielding a surface area of 3 ft<sup>2</sup>, bearing against any suitable medium which will conform to the shape and angle of the enclosure sidewall (such as sand bags) to achieve uniform load. For enclosures with a long wall dimension less than 1524mm (60 inches), a single loading plate 24 inch wide x 18 inch x 1 inch thick is centered on the sidewall as shown in Figure 12, Figure 14 and Figure 15. For enclosures with a long wall dimension 1524mm (60 inches) or greater, two loading plates 24 inch deep x 18 inch wide x 1 inch thick are used, and the loading plates are located at the L/3 positions and centered vertically as shown in Figure 13. Apply the design load listed in Table 2 to each of the plates. For all lengths of enclosures, support the opposite sidewall in a like manner to achieve a uniform reaction, or support the enclosure on ribs or stiffeners so that no local failure occurs. Use a spherical swivel head in the testing machine. Install a typical cover during this test. Position a deflection measuring device to measure the relative deflection between the testing machine table and the inside center of the loaded sidewall of the enclosure. If a compressible medium is used for a reaction base, its deflection is measured and subtracted from the total to yield the net deflection. Zero the deflection gauge prior to the application of the first design load, and do not re-zero the gauge between cycles. Load the enclosure ten times to design load and record the corresponding deflections for each cycle. Load the enclosure to the test load, or failure, whichever occurs first.

### 7.2. Vertical Sidewall Load Test

For Tiers up to and including Tier 15, distribute the load over a 127mm (5 inch) x 254mm (10 inch) area (see Figure 8 and Figure 10). Position a 254mm (10 inch) x 254mm (10 inch) x 25mm (1 inch) thick steel load plate over a 13mm (1/2 inch) thick rubber pad so that a 127mm (5 inch) x 254mm (10 inch) area is effective in transferring the load. Center the ram on the 127mm (5 inch) x 254mm (10 inch) area. For Tier 22, distribute the loads over a 127mm (5 inch) x 508mm (20 inch) area (see Figure 9 and 11). Position a 254mm (10 inch) x 508mm (20 inch) x 25mm (1 inch) thick steel load plate over a 13mm (1/2 inch) thick rubber pad so that a 127mm (5 inch) x 508mm (20 inch) area is effective in transferring the load. Center the ram on the 127mm (5 inch) x 508mm (20 inch) area. For all Tiers, support the base with rigid material. The loading pad is centered on the long dimension and performed with a typical cover in-place. Position the deflection measuring devices to indicate both the vertical deflection of the load plate, and the lateral deflection of the center of the wall below the load plate. Zero the deflection gauge prior to the application of the first design load, and do not re-zero the gauge between cycles. Load the enclosure ten times to the design load and record the corresponding deflections for each cycle. Load the enclosure to the test load, or failure, whichever occurs first.

### 7.3. Cover Vertical Load Test

For Tiers up to and including Tier 15, distribute the vertical load over a 254mm (10 inch) x 254mm (10 inch) area (see Figure 2, Figure 4 and Figure 5). Apply the load with a 254mm (10 inch) x 254mm (10 inch) x 25mm (1 inch) thick steel load plate backed with a 13mm (1/2 inch) thick rubber shim. For Tier 22, distribute the vertical load over a 254mm (10 inch) x 508mm (20 inch) area (see Figure 3, Figure 6 and Figure 7). Apply the load with a 254mm (10 inch) x 508mm (20 inch) x 25mm (1 inch) thick steel load plate backed with a 13mm (1/2 inch) thick rubber shim. For all Tiers, use a spherical bearing swivel head in the testing machine. Install a cover in an enclosure during the test. Center the loading pad over the portion of the cover which will produce the maximum deflection under load. Test Multiple-piece covers on both on the center of the cover and on the center of the partial cover. Measure deflection of the load plate perpendicular to the cover on the long centerline of the enclosure. Zero the deflection gauge prior to the application of the first design load, and do not re-zero the gauge between cycles. Position deflection

measuring device or devices so as to measure only the deflection of the cover. Load the cover ten times to the design load and record the deflection for each cycle. Load the cover to the test load, or failure, whichever occurs first.

#### 7.4. Loading Acceptance Criteria

Failure of any enclosure component *shall not* occur at less than the tabulated test load based on the test conducted and the application. The maximum allowable deflection at the Design Load is indicated in Table 3. For tapered enclosures, use average outside wall length (excluding ribs) to determine maximum allowable lateral deflection. For round enclosures with a tapered wall, use the average outside diameter (excluding ribs) as the wall length. For round enclosures with a straight wall, use the outside diameter (excluding ribs) as the wall length.

**Table 3 – Maximum Allowable Deflection at Design Load**

Structural Load Test	Maximum Vertical Deflection at Design Load	Maximum Lateral Deflection at Design Load
Lateral Sidewall load Test	N/A	21mm per meter (0.25 inches per foot) of average wall length
Vertical Sidewall Load Test	13mm (0.5 inch)	21mm per meter (0.25 inches per foot) of average wall length
Cover Vertical Load Test	13mm (0.5 inch)	N/A

#### 7.5. Cover Impact

Any exposed portion of the cover *shall* withstand a 95 Nm (70 foot pound) impact administered by a weight having a “C” tup per ASTM D2444 without puncturing or splitting. The test is conducted with the cover on a flat rigid surface such as concrete or steel plate.

#### 7.6. Coefficient of Friction Test

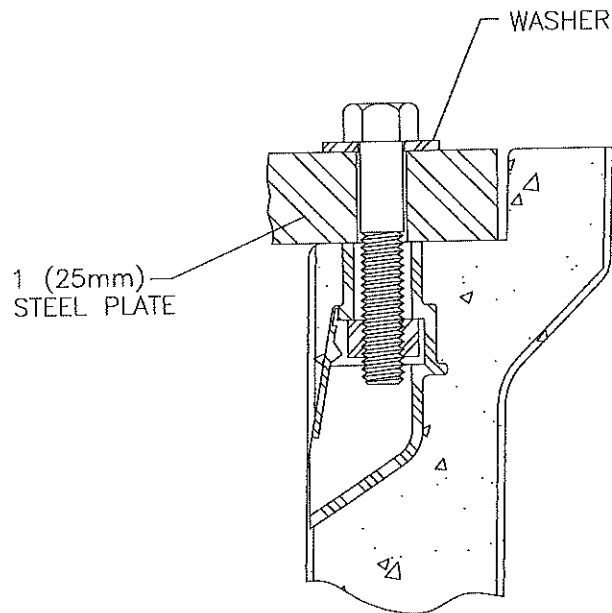
A typical production cover is tested to assess the slip resistance of the walking surface that is or *may* be exposed to pedestrian traffic. The static coefficient of friction of this surface *shall* be a minimum of 0.50 as determined using ASTM 1028-06 Section 8, or any equivalent test method. Other test methods are described in Reference 2.1.

#### 7.7. Torque Value of Fastening Devices

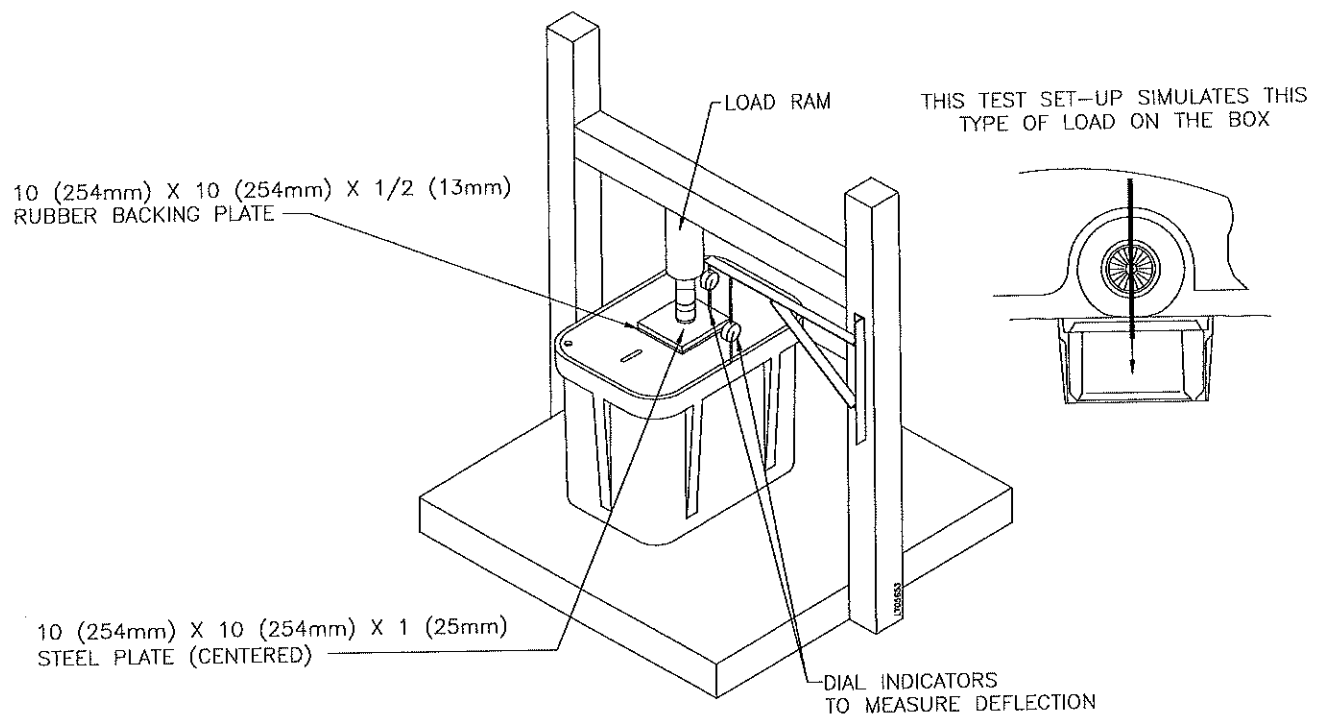
A typical enclosure has threaded inserts in the box with a bolt that fastens the cover to the box. The torque value of the threaded insert and bolt is based on the thread size. Table 4 shows the recommended design and test torque value of the standard inserts and bolts in use. A typical bolt and insert is tested to determine if it will meet the torque value. Thread the bolt into the insert through a steel plate on the bearing ledge of the box, as shown in Figure 1. Tighten the bolt to the test torque value and then remove the bolt from the insert. Failure of a bolt or insert is the inability to remove the bolt by hand from the insert after the load has been released. The box *should not* show any detrimental effects such as cracking, splitting or spalling.

**Table 4 – Recommended Torque Values**

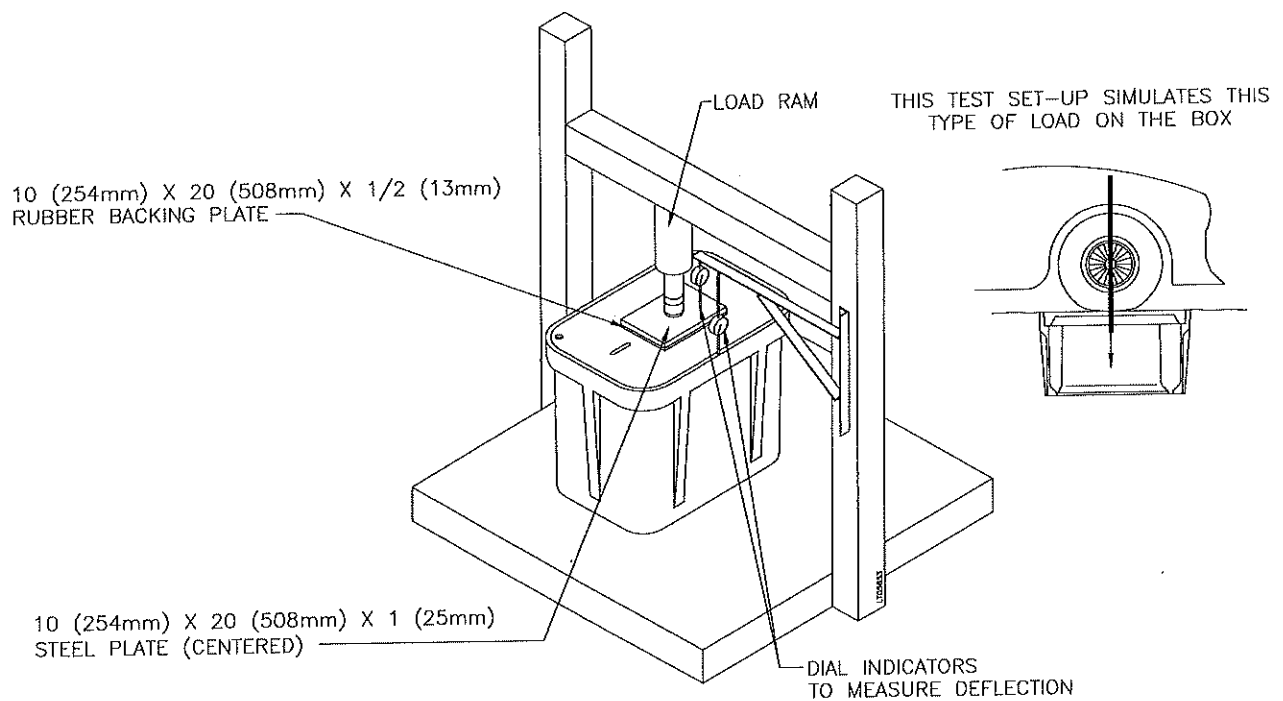
Thread Size	Grade 2		Grade 5		Grade 8	
	Design	Test	Design	Test	Design	Test
3/8-16 UNC	20 Nm (15 ft lbs)	31 Nm (23 ft lbs)	34 Nm (25 ft lbs)	52 Nm (38 ft lbs)	50 Nm (37 ft lbs)	76 Nm (56 ft lbs)
1/2-13 UNC	50 Nm (37 ft lbs)	76 Nm (56 ft lbs)	81 Nm (60 ft lbs)	122 Nm (90 ft lbs)	125 Nm (92 ft lbs)	187 (138 ft lbs)
5/8-11 UNC	100 Nm (74 ft lbs)	150 Nm (111 ft lbs)	163 Nm (120 ft lbs)	244 Nm (180 ft lbs)	244 Nm (180 ft lbs)	366 Nm (270 ft lbs)
3/8-7 lag thread	20 Nm (15 ft lbs)	31 Nm (23 ft lbs)	N/A		N/A	
1/2-6 lag or coil thread	50 Nm (37 ft lbs)	76 Nm (56 ft lbs)	N/A		N/A	



**Figure 1 – Torque Test Setup for Threaded Inserts and Bolts**

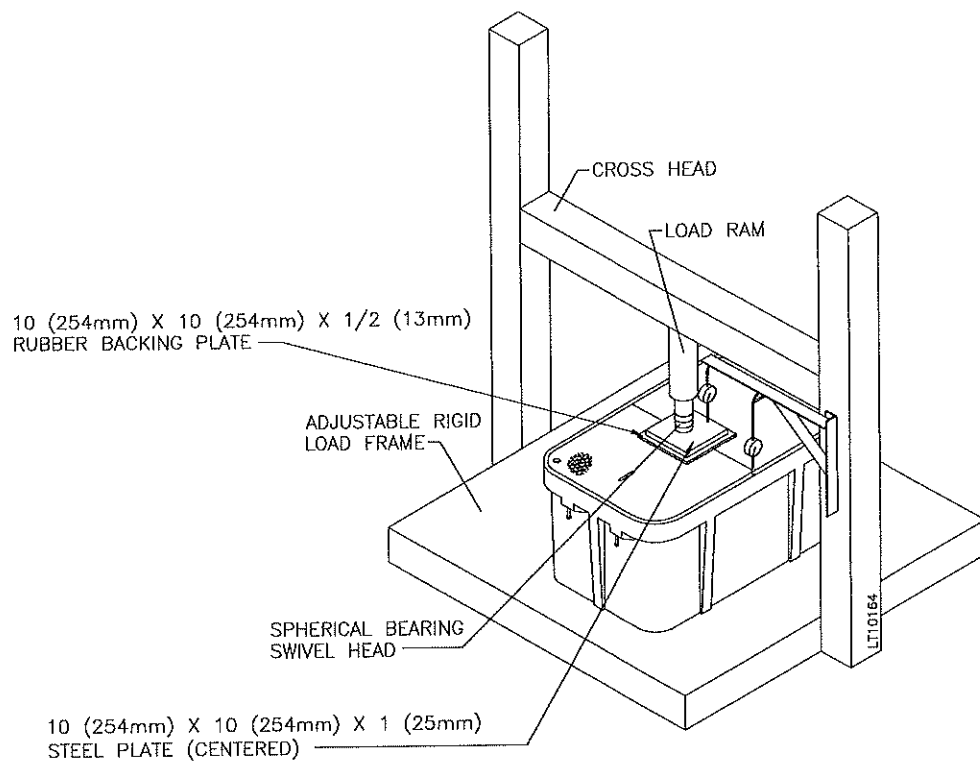


**Figure 2 - Cover Vertical Load Test (Pedestrian, Tiers 5, 8, & 15)**

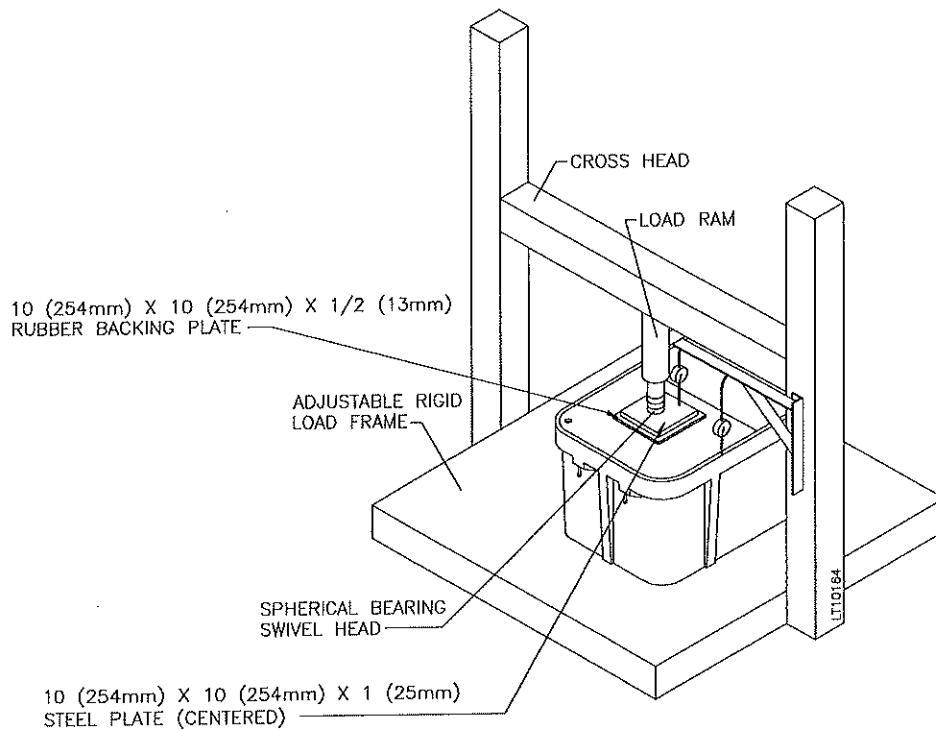


**Figure 3 - Cover Vertical Load Test (Tier 22)**

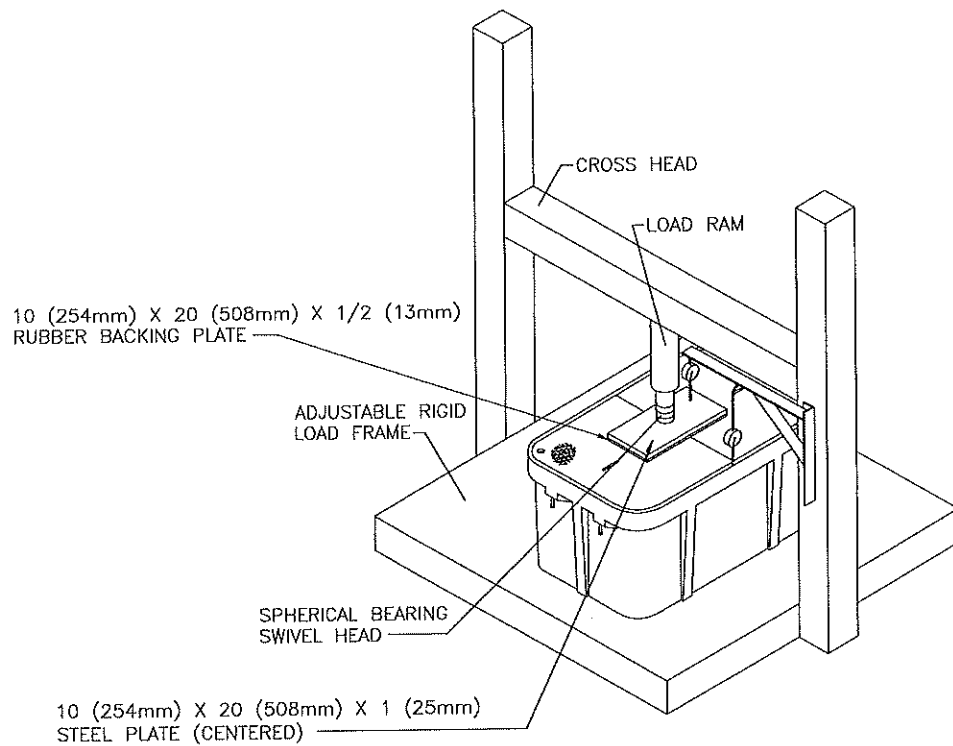




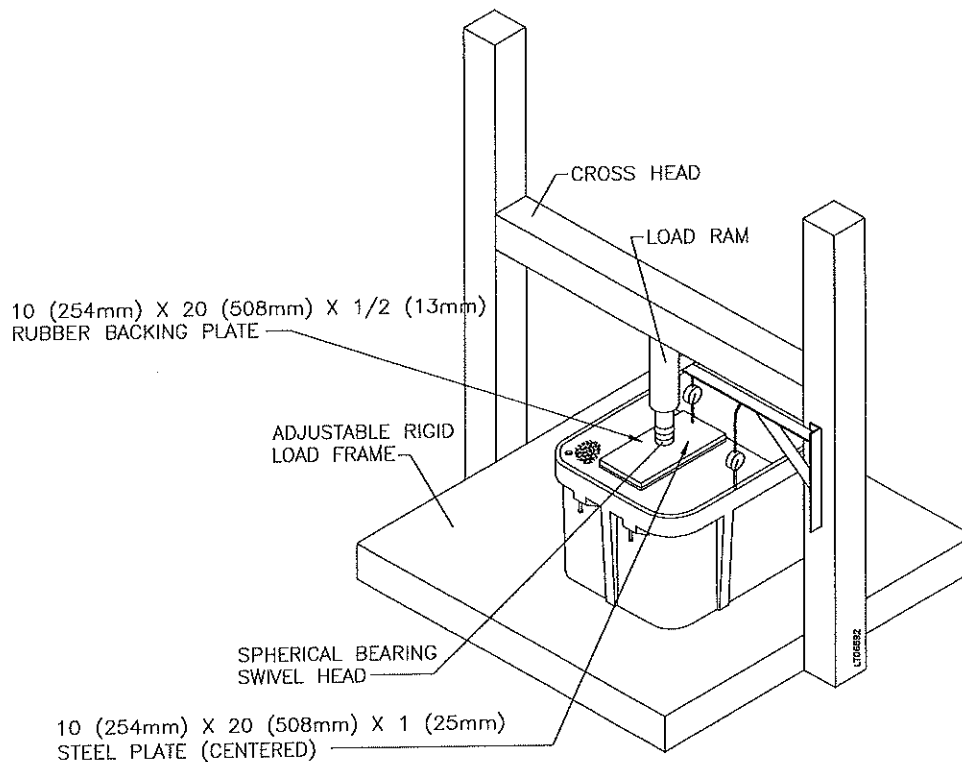
**Figure 4 - Cover Vertical Load Test for Multiple Covers (Center of Cover) (Pedestrian, Tiers 5, 8, & 15)**



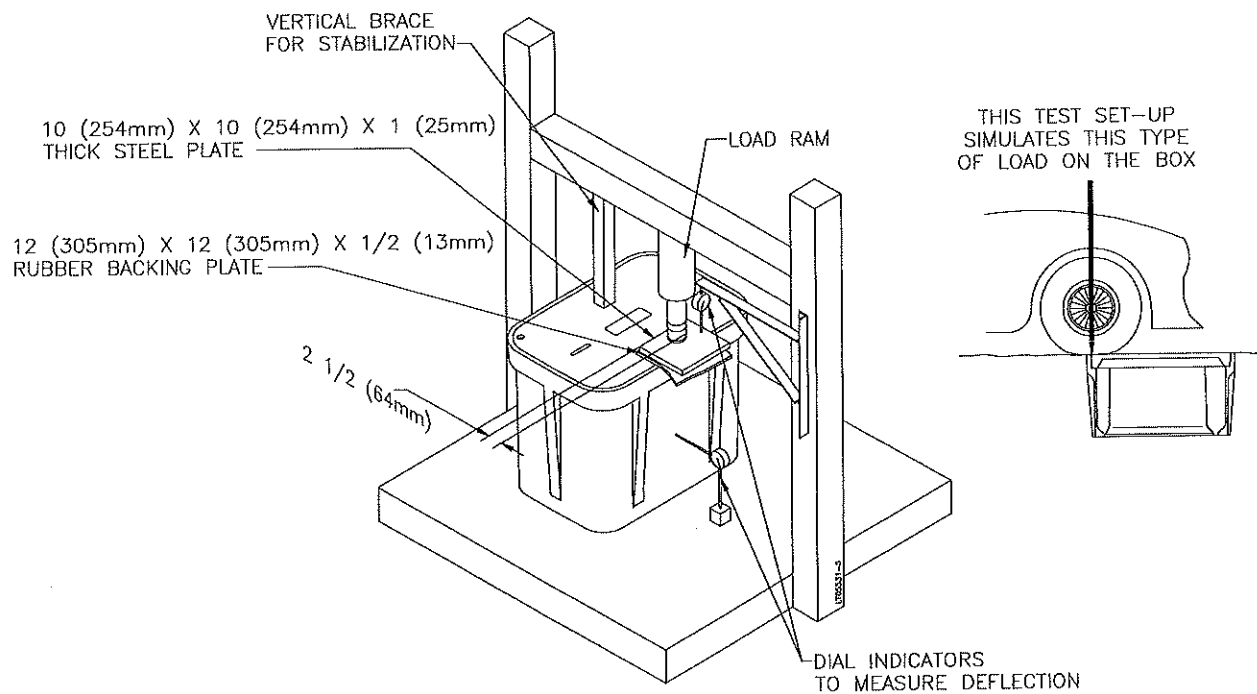
**Figure 5 - Cover Vertical Load Test for Multiple Covers (Center of Partial Cover) (Pedestrian, Tiers 5, 8, & 15)**



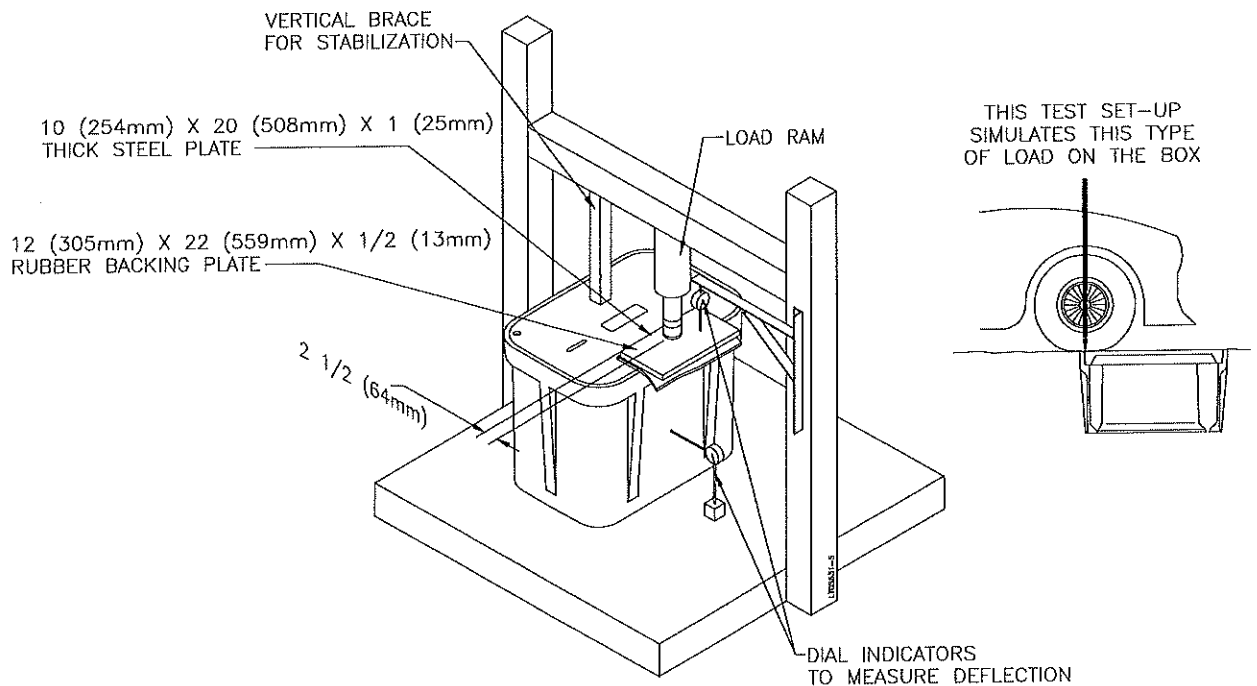
**Figure 6 - Cover Vertical Load Test for Multiple Covers (Center of Cover) (Tier 22)**



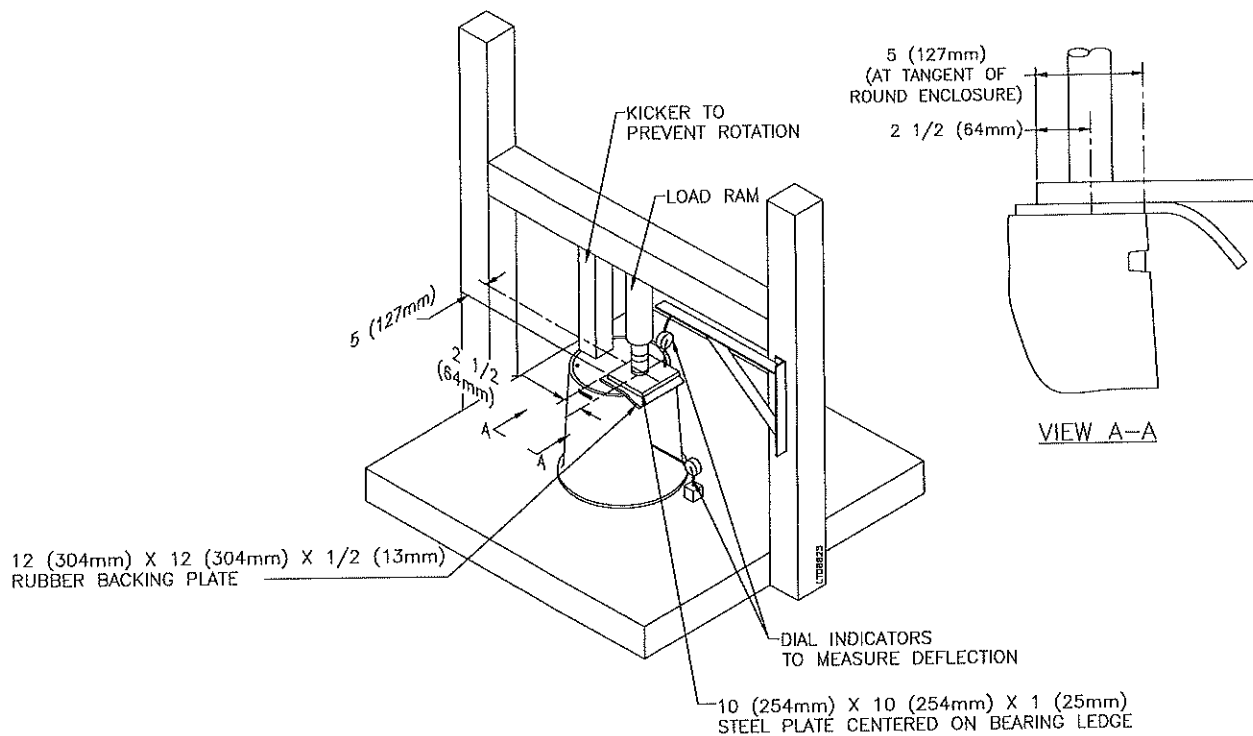
**Figure 7 - Cover Vertical Load Test for Multiple Covers (Center of Partial Cover) (Tier 22)**



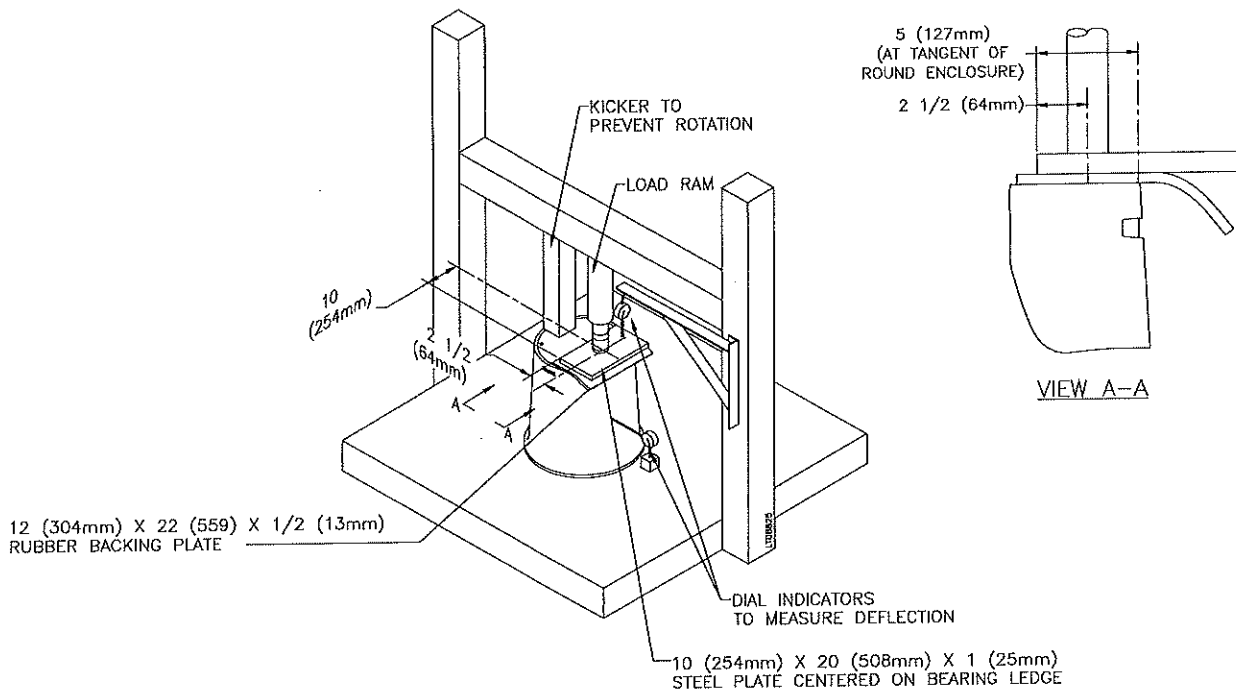
**Figure 8 - Box Vertical Sidewall Load Test (Pedestrian, Tiers 5, 8 & 15)**



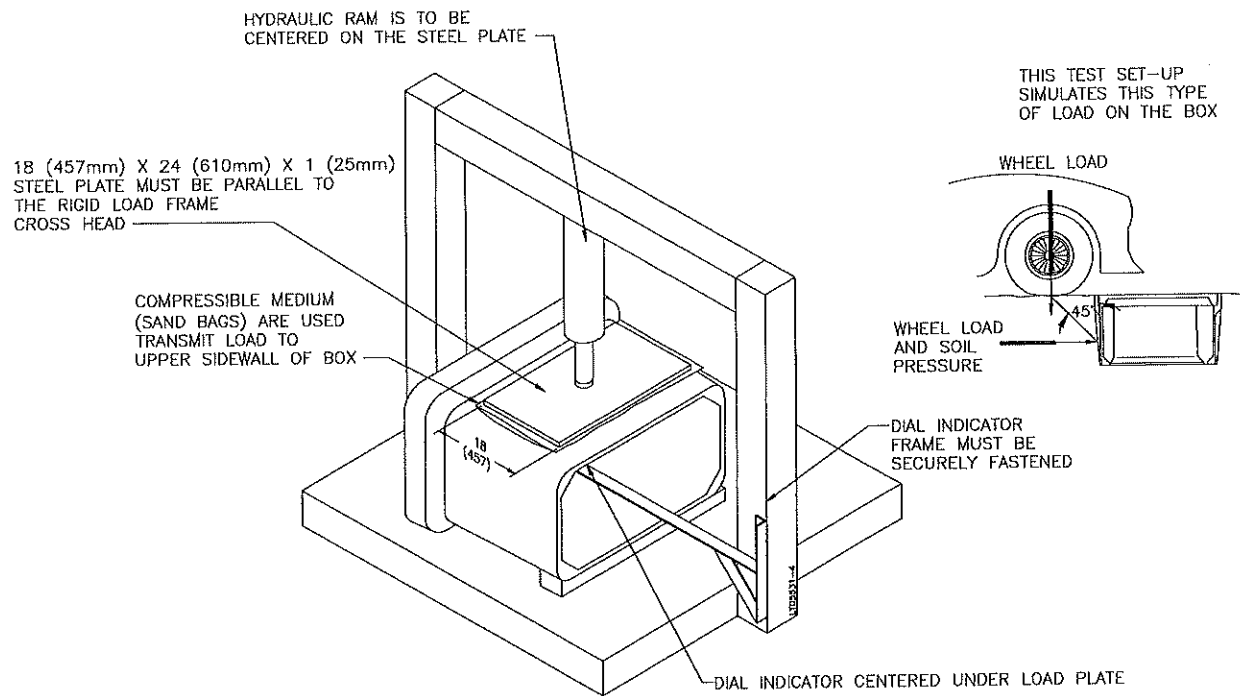
**Figure 9 - Box Vertical Sidewall Load Test (Tier 22)**



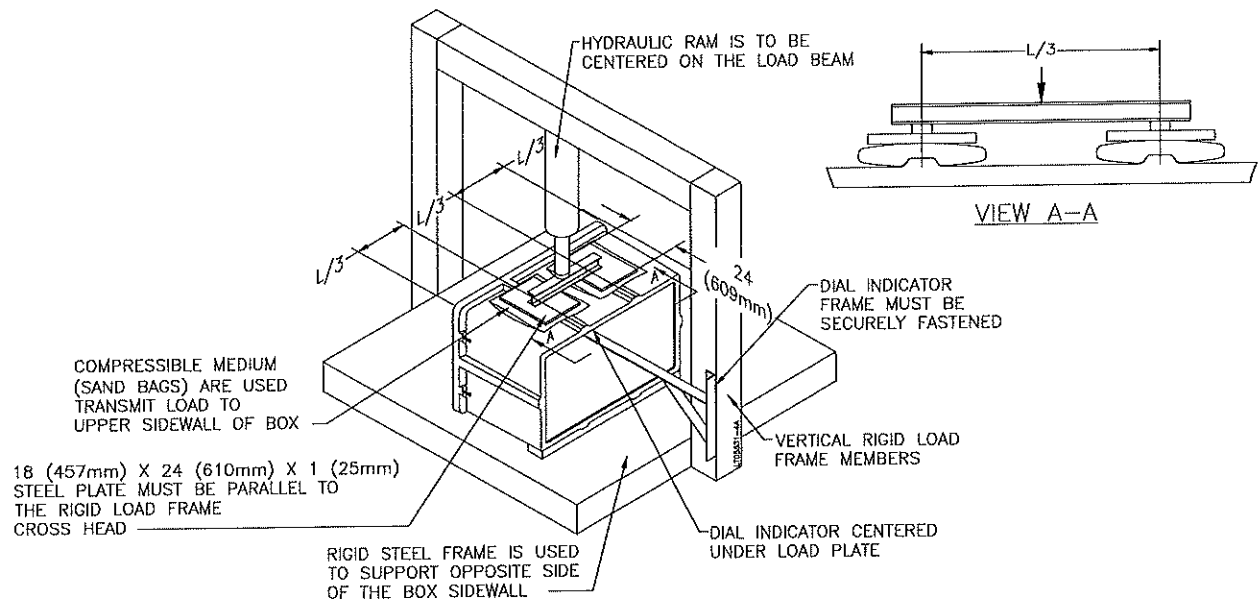
**Figure 10 - Vertical Sidewall Load Test for Round Enclosures (Pedestrian, Tiers 5, 8, & 15)**



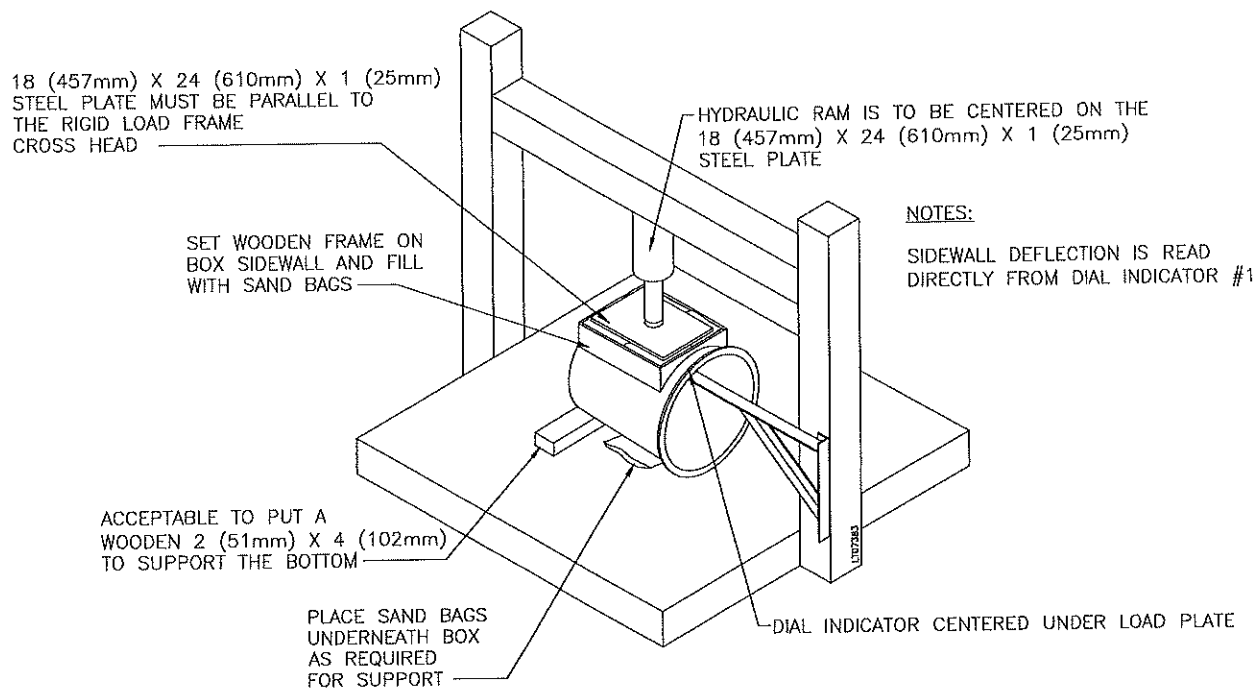
**Figure 11 - Vertical Sidewall Load Test for Round Enclosures (Tier 22)**



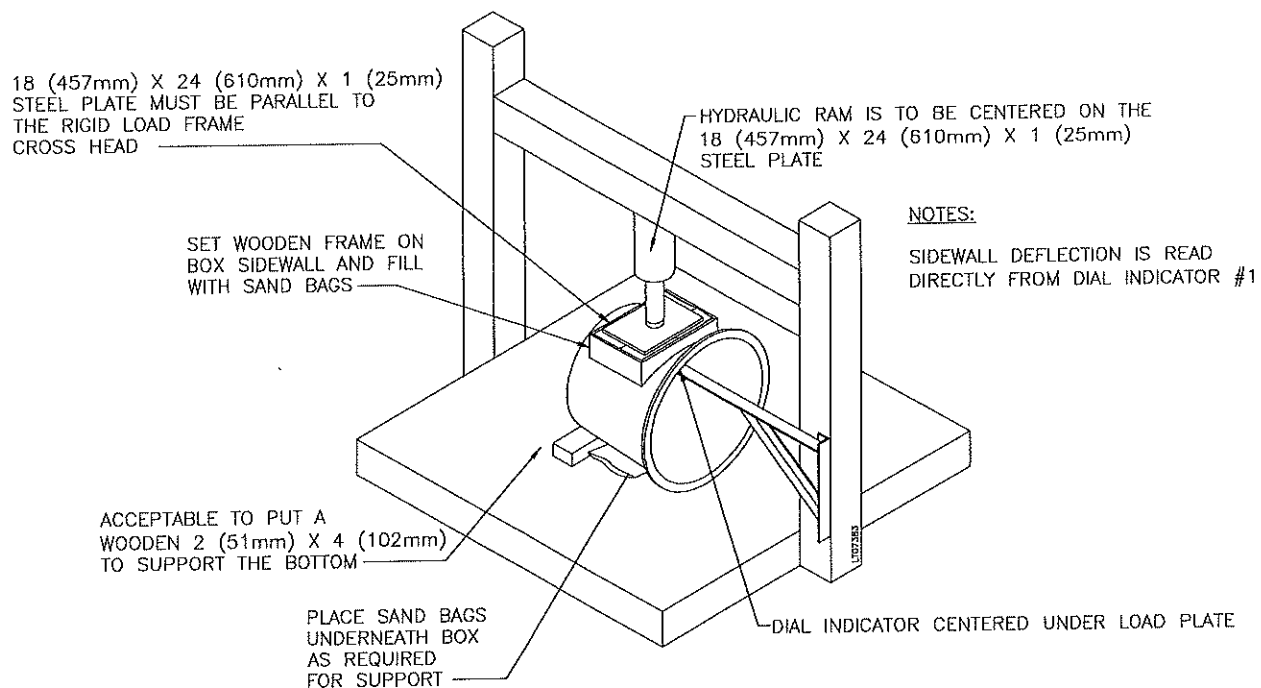
**Figure 12 - Box Lateral Sidewall Test for Boxes < 60" Long**



**Figure 13 - Box Lateral Sidewall Test for Boxes ≥ 60" long**



**Figure 14 - Lateral Sidewall Test for Round Enclosures  $\geq 24''$  in Depth**



**Figure 15 - Lateral Sidewall Test for Round Enclosures  $< 24''$  in Depth**

**NICOR**

ID NO.	UTILITY NAME	POINT OF CONTACT	POSITION	PHONE	EMAIL	STATE	START DATE	PROJECT DURATION	QUANTITIES	LOT TYPES	NOTES
1	Sorta Co., City of	Jim Foster	Project Manager	619-420-0883	Jim.Foster@sorta-co.org	CA	2021	2 years	20,000	Barriers, Barren road Ditch	Grading
2	California American Water	Andie Foster	Director of Utility Operations	916-251-1254	andie.foster@calwater.com	CA	2019	year	5,000	18 Solid Fuel Box	Grading
3	Joint Basin Water	Tai Tapia	Assistant General Manager, Operations	562-570-2472	Tai.Tapia@jbasinwater.org	CA	2018	year	70,000	18 Solid Fuel Box	Grading
4	Havens, City of	Ray Leckard	Utility Field Services Manager	916-881-7833	Ray.Leckard@havens-ca.gov	CA	2017	4 years	2,017	18 Solid Fuel Box	Grading
5	Little River Water District	Tracy Nguyen	Customer Service Lead	927-544-5388	tracy.nguyen@lrwd.com	CA	2019	Feb 2019 - May 2021	8,000	13,07, 13,25	
6	City of San Mateo	Michael Burt	Water Team	650-604-2704	michael.burt@cityofsam.net	CA	2018		10,000	18,17	
7	Public Board of Water Works	Quincy Gots	Field Services Manager	708-584-0245	quincy.gots@pbww.org	CO	2023	4 years	40,000	13,07, 13,25, 21,25	
8	Pueblo Water	Beth Elenos	Utilities, Collection & Distribution Manager	781-561-5541	Beth.Elenos@pueblowater.com	CO	2017		12,000	13,07, 13,25	Continuing to order
9	San Diego Regional Council of Governments	Paul Borewell	Director of Procurement and Risk Management	619-410-5905	Paul.Borewell@scrgo.org	CA	2019	2 years	12,000		Ordering material (10,000)
10	City of Vista	Phyllis Knapp	Project Manager	619-873-3452	phyllis.knapp@cityofvista.com	CA	2019	2 years	15,000		
11	North Miami Beach, City of	Joann Rossy	Utilities Engineering Manager	305-294-2845 ext. 2852	joann.rossy@nmbc.org	FL	2019	2 years	8,000		
12	Richardson Water Works, City of	Chas Bergman	Utilities Engineering Manager	214-958-4800 ext. 255	chris.bergman@cityofrichardson.com	TX	2019	2 years	8,000		
13	Greene City	Quincy Gots	Field Services Manager	954-481-0283	quincy.gots@greene.org	FL	2019	2 years	8,000		
14	Miami Dade Water and Sewer Department	Water Distribution Chief		786-229-3354	Juan.Perez@miamidade.gov	FL	2019				
15	Twin Falls	Justin Ash	Twin Falls Water Dept	208-338-4484	justin.ash@twinfalls.org	ID	2020		400	530 with utility coop	
16	Star Street and Water	Hank Day	Person	(208) 338-7148	hank.day@twinfalls.org	ID	2020		1,000	12,25 Type 13 with utility coop	
17	Midwest, City of	Jim Brown	Public Works Crew Supervisor	214-472-1882	jim.brown@midwestenergy.com	TX	2020		550	872 (1148) 1881 1847	
18	Kansas City, MO	Run Roy	AMI Project Manager	817-573-8922	run.roy@kcwater.com	MO	2019	5 years	30,000	7 different sizes/types	
19	Diablo	Troya Roberts	AMI Project Manager/Water Reading Supervisor	916-871-8423	troya.roberts@diablo.org	CA	2019	5 years	35,000	4 different round sizes	
20	Bakers, City of	Charles Stachurski, Jr.	AMI Services	362-438-4219	charles.stachurski@cityofbakers.com	LA	2019	8 years	5,000		
21	Lafayette Utilities System	Catherine Boer	Non-Res	337-499-5724	cboer@lafayette.org	LA	2019	8 years	20,000		
22	Saltwater	Non-Res	Utilities Superintendents	402-744-3816	nonres@saltwater.org	ND	2019	20 years	5,000	13.5 and 27	
23	Norco Gas Utility	Ben Carter	Operations Director	(410) 820-3277	ben.carter@norcoenergy.com	MD	2019	3 years	5,000		
24	San Jose City Department of Public Works	Mary D. Navarro	Director	575-555-7415	mary.navarro@cityofsanjose.org	CA	2019	year	4,000		4,273 to continue
25	Las Cruces Utilities	Eric Dorian	Water Reading and Billing Support Supervisor	505-402-8638	eric.dorian@lascruces.gov	NM	2018		3,000		Continuing to order up to 10,000
26	Jericho Water	Paul Lohan	Superintendent	516-462-8638	paul.loan@jerichowater.com	NY	2019		7,000		
27	Managers County	Lisa Norrini	Water Services	(817) 770-2676	lisa.norrini@managers.org	OH	2019	7 years	5,000	2 Ford Style Lids	
28	Cottage Grove	Greg Grinnell	Public Works & Utilities Supervisor	762-819-4217	greg.grinnell@cityofcottagegrove.org	IL	2019		8,000	185X, 8.75, 88L, 8420, 8442	
29	Laboe Overlook, City of	Tom Kunkel	Water Superintendent	618-534-5769	tom.kunkel@laboe.org	OR	2019		240	18 1/2", 8420	
30	Paramount, City of	Mark Johnston	Water and Parks Operations Manager	615-420-6427	mark.johnston@cityofparamount.net	OR	2019		3,000	12.25 DIA with utility legs	
31	Orion	Mark Peay	Project Manager	800-229-7142	mark.peay@orionwater.com	SC	2019	3 years	3,000	3 different separate sizes	
32	Piedmontville Water District	Condon Brown	Director of Finance and Administration	864-401-2104	condon.brown@piedmontvillewater.com	SC	2019	2 years	2,500		
33	Lake Worth, City of	Chris Walker	Distribution Supervisor	561-727-7461	chris.walker@cityoflakeworth.com	TX	2019	2 years	3,300	5,000	
34	Quincy Park, City of	Eric Bauman	Director of Utilities	916-401-5570	eric.bauman@cityofquincy.org	TX	2019	2 years	2,500		
35	Quincy Park, City of	Robert Madson	Engineering	916-401-5570	robert.madson@cityofquincy.org	TX	2019	2 years	2,500		
36	Quincy Park, City of	Robert Madson	Utility Services Superintendent	916-401-5570	robert.madson@cityofquincy.org	TX	2019	2 years	2,500		
37	San Jose City Public Utilities	Andie Foster	Water Reading and Billing Support Supervisor	505-402-8638	andie.foster@calwater.com	CA	2019	2 years	2,500	12.25 DIA with utility legs	
38	Alpine City	Andie Foster	Assistant City Engineer	916-402-1078	andie.foster@calwater.com	CA	2019	2 years	2,500	12.25 DIA with utility legs	
39	Bountiful City Water Department	Tim Barnett	Planning Engineer	801-271-6800	tim.barnett@cityofbountiful.org	UT	2019	2 years	2,500	12.25 DIA with utility legs	
40	Wetzel Park	Steve Cunningham	Engineering System Analyst	801-271-6800	steve.cunningham@cityofbountiful.org	UT	2019	2 years	2,500	12.25 DIA with utility legs	
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hereby grants

**National Women's Business Enterprise Certification**

9

NICOR INC

who has successfully met WBENC's standards as a Women's Business Enterprise (WBE).

This certification affirms the business is woman-owned, operated and controlled and is valid through the date herein.

WBENC National WBE Certification was processed and validated by Women's Business Enterprise Alliance, a WBENC Regional Partner Organization.

Certification Granted: May 26, 2021

Expiration Date: May 31, 2022

WBENC National Certification Number: WBE2101242



Authorized by April Day, President Women's  
Business Enterprise Alliance

NAICS: 334514, 333249  
UNSPSC: 31141901





Nicor Part Number	B131DLBKWATHN92	B131DLWATHN92	M131DLWBLKWATHN92		
Weight	13.25"x19.75"x1.75"	13.25"x19.75"x1.75"	14.5"x16.375"x1.5"		
Dimensions	10.5 lbs.	10.5 lbs.	10.3 lbs.		
# of lids per pallet	130	130	150		
Pallet Weight	1365 lbs.	1365 lbs.	1545 lbs.		
Color	BLACK	LAVENDAR	BLACK		
Material	No Break Polypropylene, Ribbing Reinforcement	No Break Polypropylene, Ribbing Reinforcement	No Break Polypropylene, Ribbing Reinforcement		
RF Transparency	Excellent	Excellent	Excellent		
Recycle Material	10% PP Regrind	10% PP Regrind	10% PP Regrind		
Recyclable	Yes	Yes	Yes		
Anti-float, ferrous element	Yes, Rebar	Yes, Rebar	NO		
Chemical Resistant	High	High	High		
Climatic Conditions Resistance	Maintains physical properties and is resistant to thermal expansion/contraction and deformation in an operating range of -40 to 190 degrees Fahrenheit.	Maintains physical properties and is resistant to thermal expansion/contraction and deformation in an operating range of -40 to 190 degrees Fahrenheit.	Maintains physical properties and is resistant to thermal expansion/contraction and deformation in an operating range of -40 to 190 degrees Fahrenheit.		
UV Stabilized	Yes	Yes	Yes		
Water Absorption	Impervious	Impervious	Impervious		
Non -Flammable	Polymer will burn but does not easily ignite. Melting point/range 50 - 170 °C. Autoignition temperature > 300 °C.	Polymer will burn but does not easily ignite. Melting point/range 50 - 170 °C. Autoignition temperature > 300 °C.	Polymer will burn but does not easily ignite. Melting point/range 50 - 170 °C. Autoignition temperature > 300 °C.		
ADA Compliant	Yes	Yes	Yes		
System Specific AMR/AMI recessed Through Hole or Under Lid Mounting Available	RECESS FOR2 NEPTUNE R900 & THRU HOLE	RECESS FOR2 NEPTUNE R900 & THRU HOLE	RECESS FOR2 NEPTUNE R900 & THRU HOLE		
Application	ANSI Tier 15 Driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic	ANSI Tier 15 Driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic	ANSI Tier 15 Driveway, parking lot, and off-roadway applications subject to occasional non-deliberate heavy vehicular traffic		
Warranty	3 year	3 year	3 year		

14.50"

16.375"

WATER

2- 4.50" NEPTUNE RECESS

This technical drawing shows a top-down view of a rectangular recessed area. The overall width is 14.50 inches and the overall height is 16.375 inches. The recessed area is filled with a cross-hatched pattern. A rectangular label with the word "WATER" is positioned on the left side. Two circular features, each with a dark center, are located on the right side. A bracket on the right side indicates that these two features are "2- 4.50" NEPTUNE RECESS".

Diagram illustrating the reinforcement layout for the slab. The grid shows the placement of rebar (labeled REBAR X2) and 2x2" thru holes (labeled 2-2" THRU HOLES) within the slab area.

1.50"

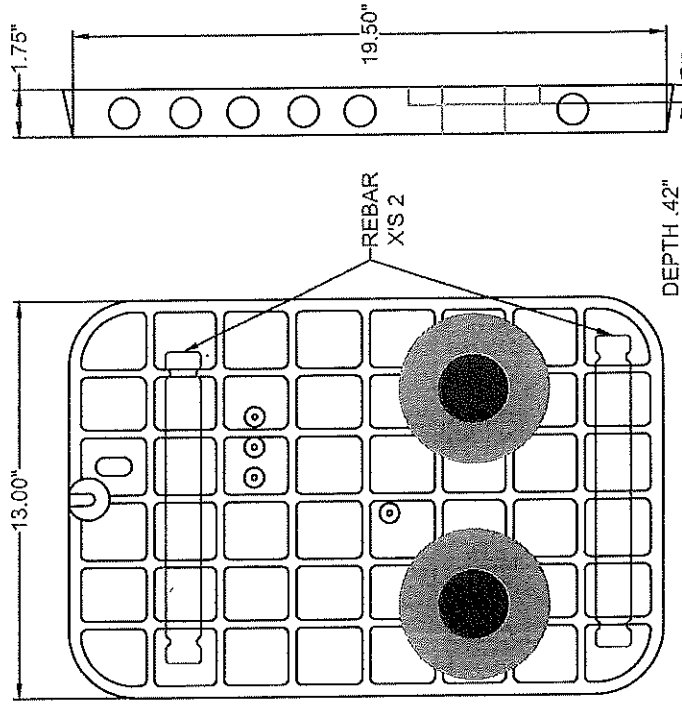
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MB DUAL with 2 Neptune  
R900 Recess & Thru Holes  
with Water Logo

Customer Drawing  
14.50" X  
16.375"

# PROPRIETARY

SIDE VIEW



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PROPRIETARY

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