



COVER PAGE

Bid Proposal #2252

THREE PHASE PADMOUNT TRANSFORMERS - ELECTRIC DISTRIBUTION

Sealed bids and electronic submitted bids for the above will be received until **10:00 AM CST, Tuesday, July 23, 2019**, and publicly opened in the City of Alexandria Council Chambers or Council Committee Room.

Please file bid by one of the following means:

Hand-Delivered or Express Delivery:

**Attention: Donna Jones, City Clerk
City of Alexandria - City Hall
915 Third Street, First Floor
Alexandria, LA 71301
Phone: 318-449-5047**

Mailed via USPS:

**Attention: Donna Jones, City Clerk
City of Alexandria - City Hall
PO Box 71
Alexandria, LA 71309-0071**

Electronic Bid Submission: Central Bidding

Pursuant to Louisiana R.S. 38:2212 B.(6)(a) through E. (1-7) and R.S. 38:2212.1 B.(4)(a), vendors/contractors have the option to submit their bids and bid bonds electronically. Bids and bonds to be filed electronically shall be posted with **Central Bidding** at www.centrauctionhouse.com (phone 1-225-810-4814). Registration will need to be completed prior to posting of bid.

Complete bid specifications are available for viewing and downloading at the City of Alexandria's website www.cityofalexandrialala.com ; on the left hand side of the opening page, go to the heading "*Business*" then drop down to "*RFP/RFQ/Bids*"; the current bids will be listed for your convenience.

City of Alexandria Buyer Name: Kylie Ingram
Phone Number: [\(318\) 441-6182](tel:3184416182)
Fax Number: [\(318\) 619-3412](tel:3186193412)
E-Mail Address: Kylie.Ingram@cityofalex.com



Jodi McKee
Purchasing Manager

City of Alexandria

Purchasing Department
P.O. Box 71
Alexandria, Louisiana
71309-0071



Office: (318) 441-6180
Fax: (318) 441-6185

Sealed bids will be received until **10:00 AM, Tuesday, July 23, 2019**, and publicly opened in the Council Chambers or Council Committee Room.

City of Alexandria Bid Proposal **#2252**
Page: 1 of 25
Date Specifications Prepared: June 13, 2019

Bid Bond Requirements: A bid bond or check for N/A% of the total amount of bid.

Performance Bond Requirements: In the event bid is accepted, a performance bond shall be required in the amount of N/A%.

Please file bid with the following:

Donna Jones, City Clerk
City of Alexandria - City Hall
915 Third Street
P.O. Box 71
Alexandria, LA 71309-0071
Phone: 318-449-5047

INTRODUCTION

THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK –TWELVE (12) MONTH PERIOD

It is the intent of the City of Alexandria to secure pricing on **Three Phase Padmount Transformers**, for use by the City of Alexandria Light Distribution Department. Pricing shall be for a twelve (12) month period. All transformers shall be warranted for a minimum one (1) year from date of installation or eighteen (18) months from date of delivery, whichever comes first.

All products shall be new and of current manufacture. Quoted prices shall be for a complete unit ready for use. Each unit shall be equipped with the manufacturer’s equipment and accessories which are included as “standard” in the advertised and published literature for the unit. No such item of equipment shall be removed or omitted for the reason that it was not specified in the bid documents.

All bid prices shall include any and all freight charges. All products are to be shipped F.O.B., freight pre-paid, the City of Alexandria Central Warehouse, located at 2021 Industrial Park Road, Building WH, Alexandria, LA 71303.

Completed bid should be returned as issued by the City of Alexandria with ALL PAGES intact and all specification response columns filled in. Incomplete columns or missing pages, to include addendum pages, may result in the bidder's (or proposer's) entire bid being rejected.

Questions and/or clarifications of bid specifications and submittals for “or equal” manufacturers are to be in written form, either mailed, faxed or e-mailed to the attention of Kylie Ingram, City of Alexandria – Purchasing Department, P.O. Box 71, Alexandria, LA 71309-0071; Fax #318-619-3412; email: Kylie.Ingram@cityofalex.com and must be received by close of business on Thursday, July 11, 2019.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

GENERAL CONDITIONS FOR BIDDERS - PLEASE READ CAREFULLY

1. Pursuant to LA R.S 38:2212.1. C.(1)(2), any manufacturer's preference in this proposal is descriptive, but non-restrictive, and is used only to indicate minimum requirement for type, grade and quality unless otherwise specified.
2. Pursuant to LA R.S. 38:2212 B.(1), the provisions and requirement of this bid shall not be considered as informalities and shall not be waived by the City of Alexandria. Therefore, conditions and specifications on this bid form shall be strictly enforced and any and all alterations, deviations, and non-compliance to said conditions and specifications, either on the bid form or by separate attachment, shall be grounds for immediate disqualification.
3. Preference shall be given to bidders quoting F.O.B. Destination (the City of Alexandria using department), FREIGHT PREPAID, unless otherwise requested.
4. Each bidder shall submit his proposal on the proposal form furnished by the City of Alexandria Purchasing Department. The complete bid package must be returned as issued by the City with all pages intact and all specification response columns filled in. Incomplete columns or missing pages, to include addendum pages, shall result in the vendor's entire bid package being rejected.
5. Literature, brochures, and other related paperwork attached to the bid should be identified with the name of the bidder and bid item number.
6. In case of a mathematical discrepancy between unit price and extensions, the unit price shall prevail.
7. Pursuant to LA R.S. 38:2212 F., the bid specifications may contemplate a fixed escalation or de-escalation in accordance with the United States Bureau of Labor Statistic's Consumer Price Index or the Producer Price Index. Bids based on specifications which are subject to a recognized escalation index shall be legal and valid for any item of a public work, at the discretion of the City.
8. Pursuant to LA R.S. 38:2212.1. F., any public procurement unit may participate in a cooperative purchasing agreement with the City of Alexandria to acquire quantities of the above listed items under a contract with the City of Alexandria for items awarded by public bid, pursuant to the cooperative purchasing provisions of Part VII of Chapter 17 of Subtitle III of Title 39 of the Louisiana Revised Statutes of 1950, R.S. 39:1701 et seq.
9. The City of Alexandria reserves the right to award by item or by total bid, unless otherwise specified in the bid specifications. (Price(s) should be itemized.)
10. All erasures or corrections on the bid form must be initialed and the City of Alexandria may rely on the apparent authority represented by the initials.
11. The City of Alexandria reserves the right to reject for cause any and all bids or parts of bids, or accept bids most beneficial to the City.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

General Conditions for Bidders - Please Read Carefully (Continued)

12. Any bid submitted which contains additions, conditional or alternate bids, or irregularities which may make the proposal incomplete, indefinite, or ambiguous as to its meaning, thus requiring clarification after the specified date and time of bid opening shall be rejected.
13. Bids shall be opened publicly in the City Council Chambers or Council Committee Room.
14. Cash discounts may be accepted, but SHALL NOT be considered in making award.
15. Regarding a bid for purchase of materials, supplies or services, not to include construction of any public works, a written notice of acceptance mailed or otherwise furnished to the successful bidder shall result in a binding contract without further action by either party.
16. When any bid is accepted for the construction or doing of any public works, a written contract shall be executed by and between the City of Alexandria and the Contractor. No contract shall be binding upon the City until it has been executed by the City and delivered to the successful bidder. Should the bidder to whom the contract is awarded fail to execute the contract, the award shall then be made to the next lowest responsible bidder, or re-advertised for public bid, said decision to be in the sole judgment of the City of Alexandria. This action may result in the loss of bidding privileges for a period of one (1) year.
17. The City of Alexandria shall schedule for payment the invoices for articles or services purchased under this bid within thirty (30) days after due and proper delivery accompanied by invoice.
18. The City of Alexandria is exempt from all sales taxes. A sales tax exempt form shall be furnished by the City of Alexandria Purchasing Department, if requested.
19. Bidder(s) awarded item(s) by the City of Alexandria shall be responsible for supplying all products at the awarded price(s). Failure may result in the City's cancellation of the remaining items awarded.
20. Regarding Service Contracts and Procurement Contracts, the terms of the contract shall be binding upon any and all parties involved until goods and supplies are delivered, services have been rendered, and/or work has been completed and accepted by the Mayor on behalf of the City of Alexandria and all payments required to be made to the Contractor have been made. However, a contract may be terminated under any and all of the following conditions:
 - (a) By mutual agreement and consent of either party upon thirty (30) days written notice to the other party;
 - (b) By the Mayor, on behalf of the City of Alexandria, as a consequence of the failure of the Contractor to comply with the terms and conditions of the contract or the progress or quality of work to be performed in a satisfactory manner, proper allowance being made for circumstances beyond the control of the Contractor; or
 - (c) By satisfactory completion of all services and obligations described in the contract.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

General Conditions for Bidders - Please Read Carefully (Continued)

If the contract is terminated for any of the terms and conditions authorized in sub-paragraph (b) above, Contractor shall be formally notified in writing by the City of Alexandria Purchasing Department by means of certified mail informing him of cancellation of the contract, giving specific reasons for said cancellation. Contractor shall have the right to appeal to the City Council within ten (10) days from the date that said notification is placed in the U.S. Mail. Contractor's appeal shall be accomplished by means of a letter addressed to the City Council and delivered to the City Clerk, stating that an appeal to the decision of cancellation is desired. The City Council shall thereafter hold a hearing on the appeal, giving all parties the opportunity to present any and all evidence concerning the decision of cancellation. After hearing the appeal, the city Council may, by a majority vote, sustain, modify, or reverse the findings for said decision and shall provide, if requested by Contractor, a written determination of its findings.

21. Contractors submitting bids for Public Works construction projects in excess of \$1.00 must show his Contractor's License Number on the front of the bid envelope, except for certain projects for which a Contractor's License Number is not required by the State Contractor's Licensing Board. Failure to comply with this directive shall result in automatic bid rejection, furthermore, any Contractor who submits a bid for a type of construction for which he is not properly licensed shall be acting in violation of LA R.S. 37:2163, and shall be subject to all provisions for violation and penalties thereof. Contractors who are owned by, and are submitting a bid as a subsidiary of a parent company, whose name is listed in the State of Louisiana's Roster of Licensed Contractors, may do so by including a letter of proof of ownership from the parent company with the submitted bid package. The letter must be signed as per LA R.S. 38:2212 B.(5)(a)(b)(c) (see Item #22 below).

22. All bids submitted via USPS (registered or certified), overnight courier or hand delivered, shall be signed by hand and in ink by an authorized company representative per LA R.S. 38:2212 B.(5)(a)(b)(c), which states:

(c)(i) Evidence of agency, corporate, or partnership authority shall be required for submission of a bid to the division of administration or the State of Louisiana. The authority of the signature of the person submitting the bid shall be deemed sufficient and acceptable if any of the following conditions are met:

(aa) The signature on the bid is that of any corporate officer listed on the most current annual report on file with the Secretary of State, or the signature on the bid is that of any member of a partnership or partnership in commendam listed in the most current partnership records on file with the Secretary of State.

(bb) The signature on the bid is that of an authorized representative of the corporation, partnership, or other legal entity and the bid is accompanied by a corporate resolution, certification as to the corporate principle, or other documents indicating authority which are acceptable to the public entity.

(cc) The corporation, partnership, or other legal entity has filed in the appropriate records of the Secretary of State in which the public entity is located, an affidavit, resolution, or other acknowledged or authentic document indicating the names of all parties authorized to submit bids for public contracts. Such document on file with the Secretary of State shall remain in effect and shall be binding upon the principal until specifically rescinded and canceled from the records of the office.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

General Conditions for Bidders - Please Read Carefully (Continued)

23. In-State preferences shall not apply to procurements involving federal funds.
24. Pursuant to LA R.S. 38:2212 O.(2)(a)(b), any modifications of plans and specifications will be made through an addendum. No addendum shall be issued within seventy-two (72) hours of the bid opening, excluding weekends and legal holidays, without the extension of the bid opening date. An extension of at least seven (7) but no more than thirty (30) working days is required but, re-advertising is not required. The addendum shall be transmitted by any one of the following methods: (1) facsimile transmission; (2) e-mail; (3) by hand; or (4) posted on the City of Alexandria's website (www.cityofalexandria.com) and posted on Central Bidding's website (www.centralauctionhouse.com) if applicable.
25. All Federal Transit Administration (FTA) funded procurements, including operating assistance funding contracts, are to follow the *Master Agreement*, to include all applicable federal clauses.
- a. Any bidder that is found listed on the Federal Government's *System for Award Management* (SAM) website, at www.sam.gov/portal/sam , under the advanced search feature for *Excluded Parties List System* (EPLS), shall automatically be rejected for the award of this bid, by Category and/or in its entirety. This applies to any portion of the bid that is a procurement funded by FTA.
26. Under the City's *AFEAT (Alexandria Fairness, Equality, Accessibility, and Teamwork Program)*, participation by minority and/or disadvantaged business enterprise firms is encouraged. The *AFEAT* Program should be inquired about through the Division of Finance.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

Dear Vendor:

Under the City's *AFEAT (Alexandria Fairness, Equality, Accessibility, and Teamwork Program)*, participation by minority and/or disadvantaged business enterprise firms is encouraged. The AFEAT Program should be inquired about through the Division of Finance. The goals for qualifying disadvantaged, minority and female owned business in the use of professional service agreements with prime contractors will help effectuate the goals of increasing: the competitive viability of small business, minority, and women business enterprise by providing contract, technical, educational, and management assistance; business ownership by small business persons, minority persons, and women (including professional service opportunities); and the procurement by the City of professional services, articles, equipment, supplies, and materials from business concerns owned by small business concerns, minority persons, and women.

Prime contractors offering subcontracting should take specific action to ensure that a bona fide effort is made to achieve maximum results towards meeting the established goals. Primes shall document efforts and shall implement steps at least as extensive as the following in a good faith effort to reach or exceed the established goals:

- A. Establish and maintain a current list of minority and female owned businesses in Alexandria, in Rapides Parish, and in the State of Louisiana.*
- B. Document and maintain a record of all solicitations of offers for subcontracts from minority or female construction contractor and suppliers in Alexandria, in Rapides Parish, and in the State of Louisiana.*
- C. Secure listing of minority and women owned businesses from the City of Alexandria Purchasing Department, the Central Louisiana Business Incubator, and the State of Louisiana Department of Minority Affairs.*
- D. Participate in associations which assist in promoting minority and women owned businesses such as the Central Louisiana Business League, the Central Louisiana Business Incubator, and the Entrepreneurial League System.*
- E. Designate a responsible official to monitor all activity made in the effort to achieve or exceed the established goals; record contacts made, subcontracts entered into with dollar amounts, and other relevant information.*

For more information on AFEAT and the City of Alexandria's Diversity in Action Initiative, and to explore a local and statewide directory of minority businesses, please visit www.diversityinaction.org.

Should you have any questions or comments, please do not hesitate to contact our Finance Department at 318-449-5091 or our Purchasing Department at 318-441-6180.

Sincerely,

City of Alexandria

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

BID SPECIFICATIONS

SCOPE: The following bid specifications are to be used as minimum and maximum standards for THREE PHASE PADMOUNT TRANSFORMERS, for use by The City of Alexandria Electric Distribution Department. All quoted products shall either meet or exceed the following specifications.

Unless otherwise stated, the use of manufacturer's name and product numbers are for descriptive purposes and to establish general quality levels only, they are not intended to be restrictive.

Prospective bidders are required to state exactly what they intend to furnish, otherwise, it is fully understood that they shall furnish all items as stated. Bidder should indicate in the space provided below, under "*Bidder's Response*:", the necessary information to indicate he/she is conforming with the bid specifications for each item as written. If Bidder is in complete compliance with each bid specification item as written, please write "Comply" in the space provided; if not, please indicate in this space, the necessary information on the product you are proposing. Each specification response is necessary to ensure the proper evaluation and tabulation of this bid. If each "*Bidder's Response*" section is not filled in or completed, your bid may be rejected.

Bidder's Response:

1.0 General:

1.1 This specification covers the general, electrical, dimensional and mechanical characteristics of three phase, 60 Hertz, mineral oil filled, self cooled, compartment type, distribution, padmounted transformers, rated 75 through 2500 kVA.

1.2 All characteristics, definitions, terminology, voltage designations and test, except as otherwise specified herein, shall be in accordance with the latest revisions of American National Standards Institute (ANSI) Standards C57.12.00, C57.12.26, C57.12.70, C57.12.80, C57.12.90, C119.2; American Society of Testing and Materials (STM) Standard d877; and National Electrical Manufacturers Association (NEMA) Standards SG-P1/TR-P8 and NEMA 107. The order of precedence for conflicting requirements shall be this specification, ANSI Standards, ASTM Standards, NEMA Standards, and the USDA Rural Development Utilities Programs (RUS) list Publication 202-1.

1.3 All transformer assemblies and components shall be new. No remanufactured or rebuilt transformers shall be considered for evaluation. No used or refurbished parts shall be accepted.

1.4 Transformers must be equipped with Internal Fault Detectors (IFD'S).

1.5 Quantities are estimates, not guaranteed, as noted in Section 16 of these bid specifications.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

Bid Specifications (Continued)

Bidder's Response:

1.0 General: (Continued)

1.5 Award will be based on price and reasonable delivery. The City of Alexandria has defined “reasonable delivery” as being between ten (10) and twelve (12) weeks.

1.6 Bids will be evaluated and awarded in the preferential order listed below:

1.6.1. Lowest price, assuming the bidder meets the “reasonable delivery” lead time.

1.6.2. In the event the apparent low bidder **exceeds** the “reasonable delivery” lead time, award will be made to the next lowest bidder that meets the reasonable lead time.

1.6.3. In the event **no** bidder(s) meet the “reasonable delivery” lead time, award will be made on the basis of price only.

1.7 **All prices submitted shall be firm. NO escalation clause will be considered.**

2. Ratings:

2.1 High voltage windings and insulation shall be the following:

TABLE 1

<u>High Voltage</u> (kV)	<u>Insulation Class</u> (kV)	<u>BIL</u> (kV)
12.470 Delta	15	95

2.2 Low voltage windings and insulation shall be one of the following:

TABLE II

<u>Low Voltage</u> (Volts)	<u>Insulation Class</u> (kV)	<u>BIL</u> (kV)
208Y/120	1.2	30
480Y/277	1.2	30

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

Bid Specifications (Continued)

Bidder's Response:

2. Ratings (Continued)

2.3 kVA ratings shall be: _____

<u>Low Voltage</u>	<u>kVA</u>
208Y/120	75, 112.5, 150, 225, 300, 500, 750, 1000, 1500, 2000, 2500
480Y/277	75, 112.5, 150, 225, 300, 500, 750, 1000, 1500, 2000, 2500

2.4 kVA ratings shall be OA, continuous, and based on not exceeding either 65° C average winding temperature rise or an 80° C hot spot temperature rise above 40° C ambient. The temperature rise above 40° C ambient of the insulating oil at rated load shall not exceed 65° C when measured near the top of the tank. _____

2.5 Transformers shall be designed and constructed to prevent excessive tank heating under single phase supply, or unbalanced load conditions. _____

2.6 Percent impedance at rated voltage shall be: _____

75 – 500 kVA	Not Specified
750 – 2000 kVA	5.75%

2.7 Taps shall be provided in accordance with ANSI C57.12.22 – 1980 (2 up and 2 down at 2½%). The tap changer shall be externally operable. _____

3. Construction:

3.1 The transformer tank and the terminating compartments shall be assembled as an integral unit, tamper resistant and weather resistant, and suitable for mounting on a pad without additional house, fencing or other provisions for making the transformer safe. There shall be a three point latching mechanism for rigid fastening of compartment doors. _____

3.2 Security test, case construction, and penta-head dead bolt locking scheme with a second locking provision, shall be in accordance with the appropriate sections and latest revision

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

Bid Specifications (Continued)

Bidder's Response:

3. Construction (Continued)

of ANSI C57.12.28 – 1988.

3.3 Stainless steel hinges and easily removable door which can only be removed in the completely open position shall be provided.

3.4 The high and low voltage compartments shall be side by side and separated by a metal barrier. When facing the compartments, the low voltage compartment shall be on the right.

3.5 The tank shell shall be fabricated from a minimum of 12 gauge steel, and the compartment door from a minimum of 14 gauge steel. The tank shall be able to withstand a minimum pressure of 7 psi without permanent distortion.

3.6 Construction of the unit shall be such that it can be lifted, skidded or slid into place on the mounting pad without disturbing the entrance cables. The unit shall be furnished with externally welded lift flanges, so arranged to provide a balance total transformer lift.

3.7 Transformer shall have an upper filter press connection at the 25° C oil level and an oil level gauge.

3.8 A pressure relief valve meeting the requirements of ANSI C57.12.55 – 1980, Section 7.5.2, shall be provided above the 140° C oil level for the relief of excess tank pressure. This device shall vent into the secondary terminating compartment and shall be mounted in a threaded port.

3.9 Two ground pads shall be welded to the tank in a continuous seam. They shall be located near the base, one in low voltage compartment and one in the high voltage compartment.

a. For 75 – 500 kVA; two ½ inch– 13UNC tapped holes, 7/16 inches deep. Standard eye-bolt grounding terminals shall be provided with these pads.

b. For 750 – 2500 kVA; two unpainted copper faced or stainless steel pads, 2 x 3½ inches each, with two ½ inch – 13 UNC tapped holes, 7/16 inches deep, on

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

Bid Specifications (Continued)

Bidder's Response:

3. Construction (Continued)

1¾ inch centers. Minimum copper facing thickness shall be 0.015 inches.

3.10 The transformer shall remain effectively sealed throughout a temperature range of minus 5° C to plus 105°C.

3.11 The unit shall have a dial type thermometer and a 1 inch drain valve with a ½ inch sampling device located in the low voltage compartment.

4. Coating:

4.1 The unit shall be furnished in a “7gy 3.29/1.5 Munsell” green color of such quality as to insure a lasting and non-fading finish. All coatings shall be capable of meeting or exceeding the performance tests which are given in the latest EEI Finishing Guidelines.

5. Bushings & Terminals:

5.1 Arrangements in the high voltage compartment shall conform with the dimensions given in **Figure 1** of this specification.

5.2 Dead – Front transformers shall have load break high voltage bushings, bushing wells with inserts shall be externally clamped or bolted to the tank wall, and not welded in place. The arrangement shall permit operation from a 200 ampere continuous to a 10, 000 ampere symmetrical system.

5.3 Low voltage bushings shall be externally clamped or bolted to the tank wall. If the bushings are porcelain, they shall be keyed such that the stud and bushing cannot be twisted. The assembly shall contain a jam nut. Secondary spades shall be six (6) hole, “H” pattern, with NEMA Standard bolt spacing.

5.4 The low voltage neutral termination shall be made through a fully insulated bushing in accordance with 7.2.6 of ANSI C57.12.22.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

Bid Specifications (Continued)

Bidder's Response:

5. Bushings & Terminals (Continued)

5.5 Low voltage bushing terminals shall be tin plated copper pads in a staggered arrangement. For spacing see **Figure 1** of this specification.

6. Fusing:

6.1 A load break, bayonet type, expulsion fuse shall be in series with a internal under oil, partial range current limiting fuse. There shall be adequate clearance from the fixed or lift-up top to the bayonet fuse holder opening to allow rapid bayonet removal without disassembly of the cabinet. The current limiting fuse shall be connected between the high voltage bushing and the lower contact of the bayonet fuse holder so that it is in series with the expulsion fuse.

6.2 A metal oil drip shield shall be provided under all bayonet holders to prevent oil from contacting the high voltage bushings.

6.3 The transformer shall be fused with the appropriate fuse link and current limiting backup fuse as shown in **Table 1**.

7. Terminal Marking:

7.1 Terminal designation shall be in accordance with ANSI C57.12.00, Table 16.

8. Nameplate:

8.1 The nameplate shall be in accordance with ANSI C57.12.00, Table 16.

8.2 The nameplate shall be at a convenient location in the low voltage terminating cabinet, mounted to the tank, and readable with the cable in place.

8.3 The nameplate shall be made of non-corrosive metal and attached with non-corroding fasteners.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

Bid Specifications (Continued)

Bidder's Response:

9. Testing:

9.1 Routine test on all transformers shall be conducted as specified in ANSI C57.12.00.

9.2 ANSI C57.12.90 shall be followed for all testing procedures.

9.3 The transformer shall have successfully withstood the impulse testing as specified in ANSI C57.12.90.

9.4 A certified copy of actual test values shall be submitted upon completion of the transformer.

9.5 A certified copy of the results of no-load and load tests shall be provided for each transformer. If sample testing of a transformer by the City of Alexandria indicates failure of the manufacturer to meet loss guarantees, a purchase price adjustment shall be made. This adjustment shall be based on the difference between guaranteed losses and the average of the tested losses using the same loss penalties that were applied during bid evaluation.

9.6 No-load (core) losses shall be evaluated at **\$2.98** per watt, and full-load (winding) losses shall be evaluated at **\$1.57** per watt.

10. Transformer Oil:

10.1 Type II mineral oil must conform to ASTM-D3487, latest revision.

10.2 All oil shall contain a minimum of 0.15% by weight, of DBPC oxidation inhibitor, and shall be free of all other additives.

10.3 All oil shall be guaranteed to contain no hazardous substances as listed by 40 CRF, part 261, subpart D, "less than 2 ppm/pcb at time of manufacture" shall be permanently imprinted on the nameplate.

11. Safety Labels:

11.1 Safety labels shall be affixed to the transformer in accordance with NEMA26-1982, "Safety Labels for Padmounted Switchgear and Transformer Sighted in Public Areas".

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

Bid Specifications (Continued)

Bidder's Response:

11. Safety Labels (Continued)

11.2 The outside “**WARNING**” label shall be of the standard type and shall be mounted on, or close to, the door. The inside “**DANGER**” label shall be of the standard type and shall be visible when the door is open.

11.3 Transformer kVA shall be painted on the exterior of the low voltage compartment door in 3 inch numbers.

12. Data Required from Manufacturer:

12.1 A copy of the transformer drawing showing all dimensions, placement of bushings and radiators shall be submitted upon award of bid.

12.2 The *Guaranteed Performance Data Table* for each size of transformer shall be completed in order to be considered a valid bid.

13. Warranty:

13.1 Transformer shall be warranted for one (1) year from date of installation or eighteen (18) months from date of delivery, whichever comes first. This shall be a minimum warranty.

TABLE I – Fuse Coordination Chart

<u>kVA</u>	<u>Bayonet</u>	<u>Partial Range</u>
	<u>Expulsion Fuse</u>	<u>Current Limiting Fuse</u>
112.5	RTE/4000353C06	RTE/3544040M61M or equal
150	RTE/4000353C08	RTE/2544050M61M or equal
225	RTE/4000353C10	RTE/3544100M51M or equal
300	RTE/4000353C10	RTE/3544100M51M or equal
500	RTE/4000353C12	RTE/3544125M61M or equal
750	RTE/4000353C14	RTE/3544175M51M or equal
1000	RTE/4000353C16	(2) RTE/3544100M51M or equal
1500	RTE/4000353C17	(2) RTE/3544175M51M or equal
2000	RTE/4000353C17	(2) RTE/3544175M51M or equal
2500	RTE/4000353C17	(2) RTE/3544175M51 M or equal

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

Bid Specifications (Continued)

Bidder's Response:

**14. Guaranteed Performance Data:
(To be furnished by Bidder on Tables, I, II)**

1. Manufacturer of transformer.
2. Unit cost per transformer, delivered.
3. No-load (core) losses (watts) per transformer at rated voltage.
4. Full-load (winding) losses (watts) per transformer at rated voltage.
5. Regulation at 100% power factor.
6. Regulation at 80% power factor.
7. Full load impedance at rated kVA base.
8. Net weight.
9. Manufacturer of bayonet fuse holder.
10. Manufacturer and type of primary bushings.
11. Height.
12. Depth, (including radiators).
13. Width, (including radiators).
14. High voltage windings, (copper or aluminum).
15. Low voltage windings, (copper or aluminum).
16. Delivery time, in days ARO (after receipt of order).
17. Warranty.
18. Attachments may be submitted provided the Guaranteed Performance Data sheet is complete.

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

Bid Specifications (Continued)

Bidder's Response:

15. Stipulations:

15.1 No bid may be withdrawn for at least thirty (30) days after the scheduled closing time of the receipt of bids.

15.2 Each bidder is requested to furnish, attached to the bid, complete descriptive literature on products quoted. Any item(s) appearing in the manufacturer's regularly published specifications as standard equipment are assumed to be included in the bidder's proposal. Each respective bidder shall be held responsible for insuring that his or her product meets or exceeds specifications as described herein.

16. Transformer Description/Size/Quantity

<u>Transformer Description</u>	<u>Bushings</u>	<u>kVA</u>	<u>Estimated Quantity</u>
12470 Delta Primary	DFRF	112.5	1
208Y/120 Volt Secondary	DFRF	150	1
	DFRF	225	2
	DFRF	300	2
	DFRF	500	2
	DFRF	750	2
	DFRF	1000	1
	DFRF	1500	2
	DFRF	2000	2
	DFRF	2500	2
	120470 Delta Primary	DFLF	112.5
DFLF		150	1
DFLF		225	2
DFLF		300	2
DFLF		500	2
DFLF		750	2
DFLF		1000	1
DFLF		1500	2
DFLF		2000	2
DFLF		2500	2

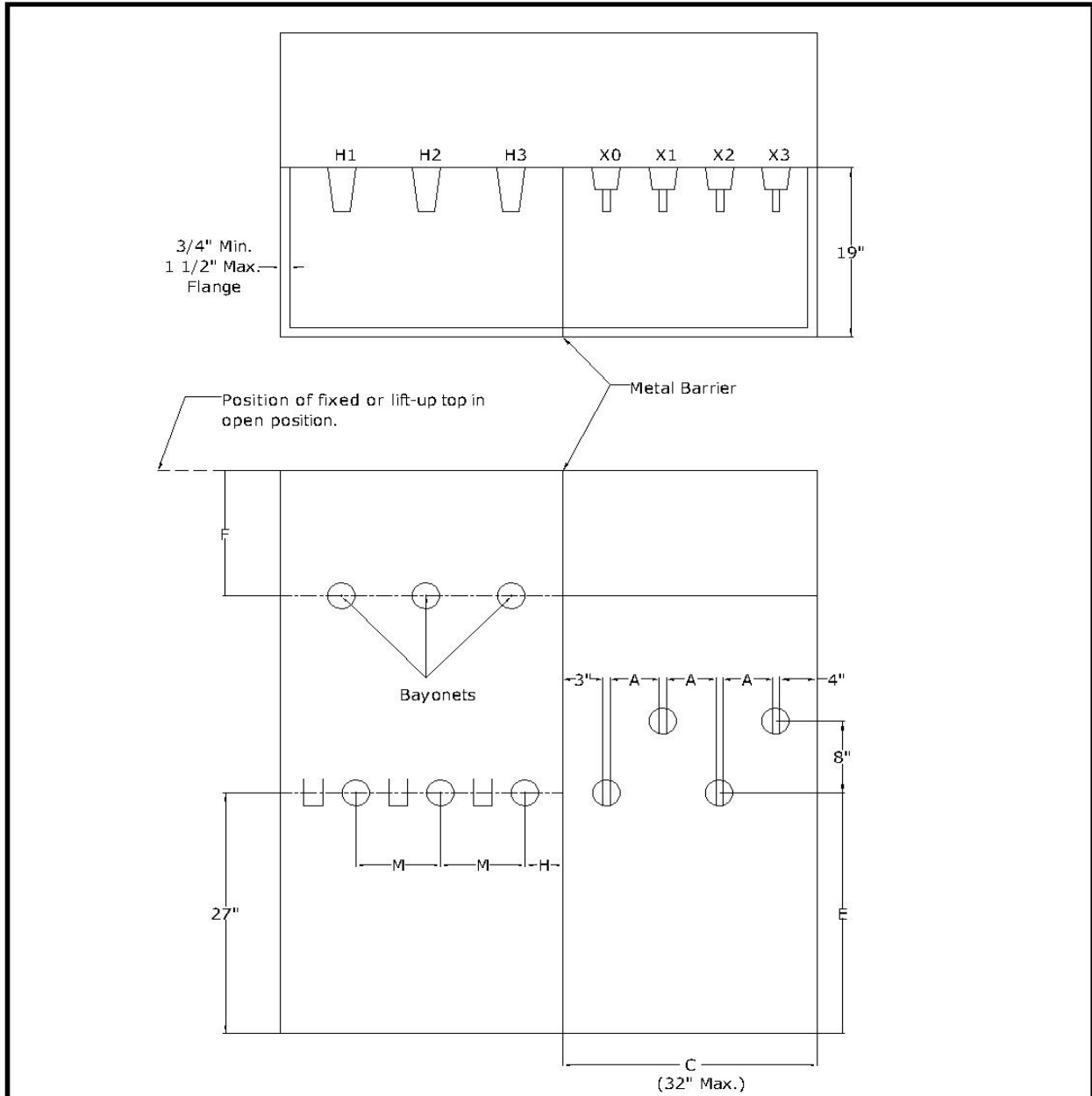
**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**

Bid Specifications (Continued)

16. Transformer Description (Continued)

<u>Transformer Description</u>	<u>Bushings</u>	<u>kVA</u>	<u>Estimated Quantity</u>
12470 Delta Primary	DFRF	112.5	1
480Y/277 Volt Secondary	DFRF	150	1
	DFRF	225	2
	DFRF	300	2
	DFRF	500	1
	DFRF	750	1
	DFRF	1000	1
	DFRF	1500	2
	DFRF	2000	2
	DFRF	2500	2
12470 Delta Primary	DFLF	112.5	1
480Y/277 Volt Secondary	DFLF	150	1
	DFLF	225	2
	DFLF	300	2
	DFLF	500	1
	DFLF	750	1
	DFLF	1000	1
	DFLF	1500	2
	DFLF	2000	2
	DFLF	2500	2

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**



KV	F	H	M
12.47	14*	4*	9*

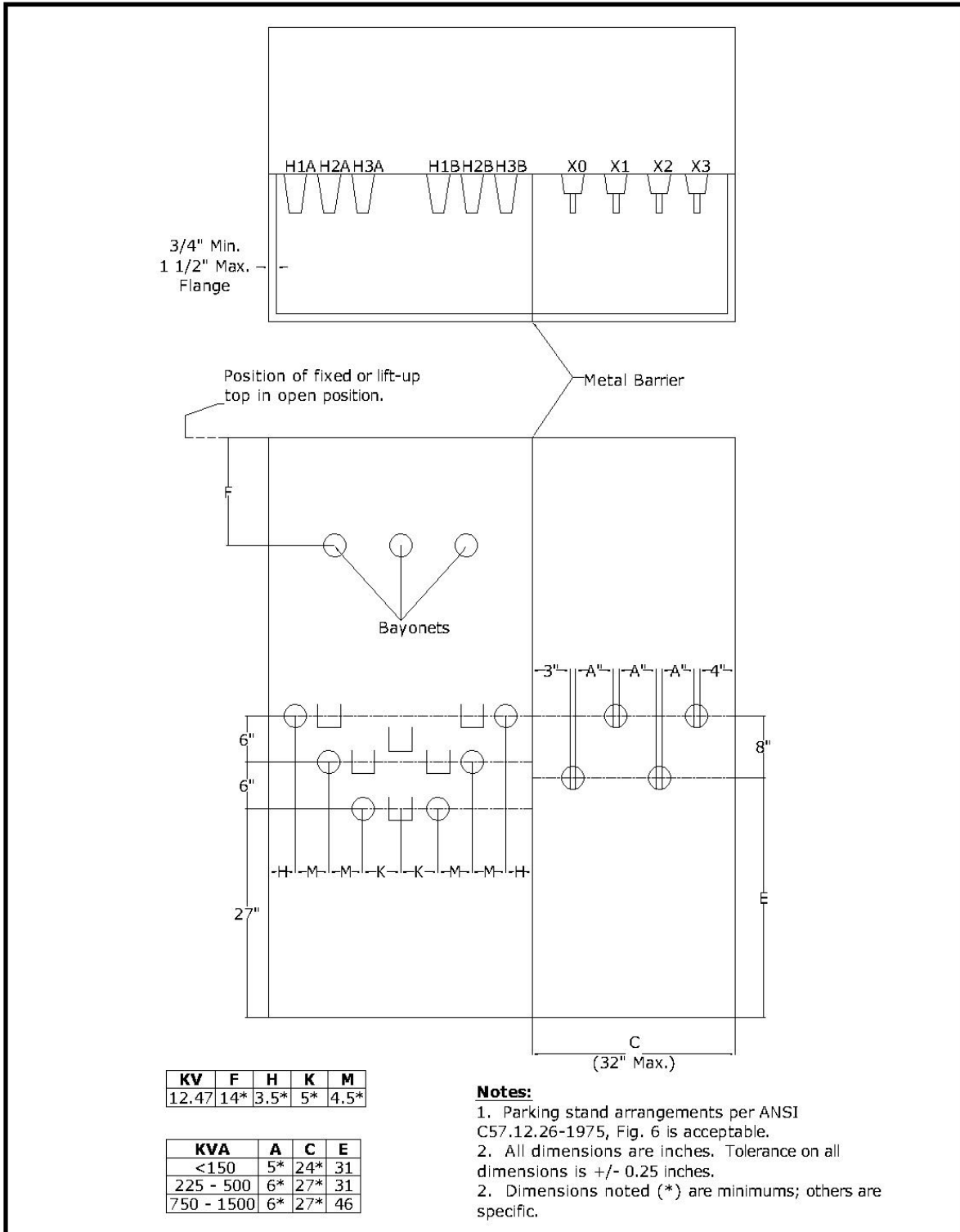
KVA	A	C	E
75 - 150	5*	24*	27
225 - 500	6*	27*	27
750 - 1500	6*	27*	46

Notes:

1. All dimensions are inches. Tolerance on all dimensions is +/- 0.25 inches.
2. Dimensions noted (*) are minimums; others are specific.

<p>City of Alexandria</p> <p>Electric Distribution</p>	<p>3-PHASE TRANSFORMERS SPECIFICATIONS - FIG. 1 DEAD FRONT RADIAL FEED</p>	DATE: 06-08-05
		<p>STANDARD NUMBER</p> <p>DF-RF</p>

**CITY OF ALEXANDRIA BID SPECIFICATIONS FOR:
THREE PHASE PADMOUNT TRANSFORMERS FOR INVENTORY STOCK**



City of Alexandria Electric Distribution	3-PHASE TRANSFORMERS SPECIFICATIONS - FIG. 2 DEAD FRONT LOOP FEED	DATE: 06-08-05
		STANDARD NUMBER DF-LF

Bidder Information:

Company Name: _____

Address: _____

City/State/Zip: _____

Telephone #: (_____) _____ Fax #: (_____) _____

Email (optional) _____

Authorized Printed Name and Title: _____

Authorized Signature: _____

(Per LA R.S. 38:2212(A)(c)(i) - See General Conditions Item #22, Page 4 of these bid specifications.)