CITY OF GRAND ISLAND
UTILITIES DEPARTMENT

Working Together for a Better Tomorrow. Today.

DISTRIBUTION TRANSFORMERS REQUEST FOR PROPOSALS

BID OPENING DATE/TIME
JULY 28TH @ 4:00 P.M.
CITY OF GRAND ISLAND, CITY HALL
100 E. 1ST STREET, P.O. BOX 1968
GRAND ISLAND, NE 68802

ADVERTISMENT
REQUEST FOR PROPOSALS

DISTRIBUTION TRANSFORMERS

Sealed Proposals will be received at the City Clerk's Office, 100 E. First Street, Grand Island, NE 68801 or P.O. Box 1968, Grand Island, NE 68802 until 4:00 PM. (local time) on July 28th, 2021, for furnishing a Proposal for all pad-mount and/or pole mount transfer types/sizes listed in the Bid sheets between the dates of August 16th, 2021, and January 1st, 2023, F.O.B. for the City of Grand Island Utilities Department. Proposals received after the specified time will be returned unopened to sender.

The specifications, and any addenda, may be viewed on-line at www.grand-island.com under Business-Bid Calendar. Documents for use in preparing the Proposal may be downloaded from the Quest CDN website, www.QuestCDN.com for a thirty-dollar ($30) fee.

Proposals shall be marked "DISTRIBUTION TRANSFORMERS". All Proposals must be signed and dated in order to be accepted. The original Proposal and two (2) additional complete copies (3 total) shall be submitted for evaluation purposes. If Proposals are being submitted online via QuestCDN, the submitter is NOT required to submit hard copies. Proposals not containing the correct number of copies will not be considered.

Proposals will be evaluated by the Purchaser based on the firm's ability and responsiveness; experience; schedule and efficiency of operation; rates and fees; reputation and ability to perform the project's requirements.

The chosen firm will be required to comply with the City's insurance requirements and fair labor standards.

The Proposal should list: professional qualifications necessary for satisfactory performance, specialized experience and technical competence in the type of work required, past performance on contracts with government agencies and private industry, the capacity to accomplish the work in the required time, and location of the project and knowledge of the area. Proposals shall remain firm for a period of sixty (60) days after Proposal due date. The City of Grand Island reserves the right to reject any or all Proposals and to waive technicalities therein and accept whichever Proposal that may be in the best interest of the City of Grand Island, at its sole discretion.

The City of Grand Island does not discriminate on the basis of disability in admission of its programs, services, or activities, in access to them, in treatment of individuals with disabilities, or in any aspect of their operations. The City of Grand Island also does not discriminate on the basis of disability in its hiring or employment practices.

This notice is provided as required by Title II of the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973. Questions, complaints, or requests for additional information or accommodation regarding the ADA and Section 504 may be forwarded to the designated ADA and Section
504 compliance
coordinator.

RaNae Edwards, City Clerk

CONTRACT AGREEMENT

THIS AGREEMENT made and entered into by and between **[SUCCESSFUL PROPOSAL],** hereinafter called the Contractor, and the **CITY OF GRAND ISLAND, NEBRASKA**, hereinafter called the City.

WITNESSETH:

THAT, WHEREAS, in accordance with law, the City has caused contract documents to be prepared and an advertisement calling for proposals to be published for *DISTRIBUTION TRANSFORMERS* and

WHEREAS, the City, in the manner prescribed by law, has evaluated the proposals submitted, and has determined the aforesaid Contractor to be the responsible proposer, and has duly awarded to the said Contractor a contract therefore, for the sum or sums named in the Contractor's proposal, portions thereof being attached to and made a part of this contract.

NOW, THEREFORE, in consideration of the compensation to be paid to the Contractor and of the mutual agreements herein contained, the parties have agreed and hereby agree, the City for itself and its successors, and the Contractor for itself, him/herself, or themselves, and its, his, or their successors, as follows:

ARTICLE I. That the following documents shall comprise the Contract, and shall together be referred to as the "Agreement" or the "Contract Documents";

1. This Contract Agreement.

2. Noted Exceptions

3. City of Grand Island Request for Proposals.

4. Vendor Response to Proposal

In the event of any conflict between the terms of the Contract Documents, the provisions of the document first listed shall prevail.

ARTICLE II. That the Contractor shall (a) furnish all tools, equipment, superintendence, transportation, and other construction materials, services and facilities; (b) provide and perform all necessary labor; and (c) in a good substantial and workmanlike manner and in accordance with the requirements, stipulations, provisions, and conditions of the contract documents as listed

in the attached General Specifications, said documents forming the contract and being as fully a part thereof as if repeated verbatim herein, perform, execute, construct and complete all work included in and covered by the City's official award of this contract to the said Contractor, such award being based on the acceptance by the City of the Contractor's proposal;

ARTICLE III. The proposed pricing will commence as soon as possible after Contract execution, **and that the Contract shall run through January 1, 2023.**

ARTICLE IV. The Contractor hereby agrees to act as agent for the City. The invoice for contractor's services will be paid after approval at the next regularly scheduled City Council meeting and occurring after departmental approval of invoice. The City Council typically meets the second and fourth Wednesday of each month. Invoices must be received well in advance of Council date to allow evaluation and processing time.

ARTICLE V. The Contractor agrees to comply with all applicable State fair labor standards in the execution of this contract as required by Section 73-102, R.R.S. 1943. The Contractor further agrees to comply with the provisions of Section 48-657, R.R.S. 1943, pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. During the performance of this contract, the Contractor and all subcontractors agree not to discriminate in hiring or any other employment practice on the basis, of race, color, religion, sex, national origin, age or disability. The Contractor agrees to comply with all applicable Local, State and Federal rules and regulations. The Contractor agrees to maintain a drug-free workplace policy and will provide a copy of the policy to the City upon request. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

GRATUITIES AND KICKBACKS

City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor

or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

[SUCCESSFUL PROPOSAL]

By_____ Date _____

Title_____

CITY OF GRAND ISLAND, NEBRASKA

By_____ Date _____
Mayor

Attest:_____
City Clerk

The contract is in due form according to law and hereby approved.

_____ Date _____
Attorney for the City

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1 GENERAL INFORMATION

1.1 BACKGROUND

Grand Island Utilities has historically procured multiple quotes on an order by order basis. The purpose of this RFP is to award a Contract, to selected vendor(s), to purchase all pad-mount and/or pole mount transformer types/sizes listed in the Proposal sheets from August 16th, 2021, to January 1st, 2023. The Contract will be contingent upon all parameters of the enclosed specification being upheld by the vendor.

1.2 PROPOSAL DATE, LOCATION, AND CONTACT INFO

- Sealed Proposals must be received at City Hall by 4:00 P.M. on Wednesday, July 28th, 2021. Proposals may be mailed to the City Clerk's Office (100 E. 1st Street), hand delivered, or submitted online by accessing the Proposal specification calendar at http://www.grand-island.com/business/Proposals-and-request-for-Proposals/Proposal-calendar. Late Proposals will not be considered.

  Note: The Grand Island Utilities Department is NOT tax exempt and is subject to State and City sales tax. See the Nebraska Department of Revenue's web site at www.revenue.state.ne.us for contractor's tax information.

- Direct all Proposal related questions to Ryan Schmitz at Phone: (308) 385-5463 Ext 2132, Email: rschmitz@giud.com.

1.3 DEFINITIONS

- **City or City of Grand Island** – An employee representative of the City of Grand Island.
- **Vendor** – Representative term for company being awarded a Contract for procurement.
- **Contract** – Signed agreement between the City of Grand Island and Vendor. Note: Contract will begin August 16th, 2021, and run until January 1st, 2023.
- **BLS** – U.S. Bureau of Labor Statistics

1.4 PRICING AND PRICE ADJUSTMENTS

- The Vendor shall submit pricing for each transformer size. This pricing shall be referenced to two (2) index options as follows: a) each company's internal or preferred componentized index and b) the BLS index for 'Electric Power and Specialty Transformer Manufacturing: Power and Distribution Transformers, Except Parts' (PCU3353113353111).

- Each quarter (January 1st, April 1st, July 1st, October 1st), for the life of the Contract, index pricing will be updated by the Vendor and submitted to the City. Transformer pricing will be adjusted up or down according to the percentage change in each index and the component weighting factors. All non-proprietary indexes shall be verifiable via the website links submitted in this proposal.

- The City reserves the right to, quarterly, compare both index options and choose the lower of the two (2) offerings for purchasing purposes. The City reserves the right to quarterly analyze each of the three (3) transformer classes being bid, individually, and choose the lowest cost index for each.

  EXAMPLE:

  Quarterly Index Pricing is received and tabulated for both index's below. After comparing, the Utility would use the BLS Index for the next quarters purchases in the this example.

COMPANY INDEX PRICING					
Commodity	**Base Commodity Index**	**Current Commodity Index**	**Percent Change**	**Weighting Factor (% of Price)**	**Weighted Percent Change**
Carbon Steel	100	105	5.0%	41%	2.05%
Silicon Steel	100	110	10.0%	30%	3.00%
Copper	100	115	15.0%	4%	0.60%
Aluminum	100	95	-5.0%	15%	-0.75%
Oil	100	85	-15.0%	10%	-1.50%
				Percent Price Adjustment	3.40%
				Multiplier x Original Bid Price	1.034

BLS INDEX PRICING		
Base BLS Index	Current BLS Index	Percent Change
100	98	-2%
	Multiplier x Original Bid Price	-1.02

1.5 PROPOSAL REQUIREMENTS

The following information must be provided/completed and submitted with the Proposal:

- **Verification of 10-year history manufacturing transformers.**
- **Provide Completed Index Sheet(s).** A digital copy is available upon request by contacting Ryan Schmitz at 308.385.5463 Ext 2132 or rschmitz@giud.com.
- **Provide Completed Bid Sheet(s).** A digital (self-calculating) copy is available upon request by contacting Ryan Schmitz at 308.385.5463 Ext 2132 or rschmitz@giud.com.
- **Provide Completed Information Sheet(s).** A digital copy is available upon request by contacting Ryan Schmitz at 308.385.5463 Ext 2132 or rschmitz@giud.com.
  Note: All pricing and guaranteed values will be fixed for the life of the Contract.
- **Any exceptions taken to this specification.**

1.6 TRANSFORMER INDEX SHEET

The enclosed Proposal sheet includes the following criteria:

COMPANY INDEX PRICING

- **Commodity –** List each, separately indexed, commodity material
- **Base Commodity Cost or Index –** List the base index used to calculate the pricing submitted with this proposal.

- **Weighting Factor –** List, by percentage, the factor on pricing for each commodity
- **Reference Website for Future Index Verification –** List website links for each index being used. These links will be used, mutually, by the City and the vendor as a basis for verifying quarterly index adjustments. If, alternatively, the index is proprietary, it should be noted in this column.

BLS INDEX PRICING

- **BLS Base Index –** List the BLS base index used to calculate the pricing submitted with this proposal.
- **Reference Website for Future Index Verification –** List website links for each index being used. This site will be used, mutually, by the City and the vendor as a basis for verifying quarterly index adjustments.

1.7 TRANSFORMER BID SHEET

The enclosed Proposal sheet includes the following criteria:

- **Ave No. Purchased Per Year** – This number is the approximate average number of transformers, by style and class, that were purchased by the City over past four years. These numbers will be used for evaluating Proposals. The City does not guarantee the number of transformers it will purchase under this Contract.
- **Price** – Vendor price for given transformer class and rating. This value is guaranteed over the life of the Contract. The price shall cover all materials and labor necessary to manufacture and package the transformer(s) for shipment. Proposal sheet prices shall NOT include sales tax.
- **Total Price** – Total Price will be calculated as:
  (4 year annualized purchase average) x (Unit Price + ($8.41 x Guaranteed NL Losses) + ($2.69 x Guaranteed FL Losses)).
- **Guaranteed No-Load Losses & Full-Load Losses** – The guaranteed average over the life of the Contract (not on a transformer by transformer basis).
  - Differences from the guaranteed numbers, across all transformer classes, will be accrued over the Contract.
  - The City will NOT credit vendor for any net load losses that exceed guarantees.
  - If a balance in exceedance of the guaranteed numbers exists at the end of the Contract, the vendor must pay penalties at the rate of $8.41 (No-Load Losses) and $2.69 (Live-Load Losses)

Example:

Padmount Transformers	KVA	No-Load Losses (watts)	Full-Load Losses (watts)	No-Load Difference (watts)	Live-Load Difference (watts)
13.2/480/277 DF SS	500	**800**	**4000**		
Purchase 1		850	4050	(50)	(50)
13.2/480/277 DF SS	750	**800**	**4000**		
Purchase 2		760	3940	40	60
			Total	(10)	10
			Cost per watt	$ 8.41	$ 2.69
			Vendor Penalty Fee	$ (84.10)	$ -

**Note: Bold numbers indicate the guaranteed losses in the example above*

1.8 TRANSFORMER INFORMATION SHEET

The enclosed information sheet includes the following criteria:

- **Guaranteed Lead Time -** All orders will be guaranteed to arrive within this period. This window is assessed from the date of purchase.
- **Average Lead Time –** This is a non-binding time frame that provides a normal lead-time for the given transformer class.
- **XFMR Weight –** Typical weight of transformer class
- **Footprint Dimensions –** Typical dimensions of transformer class

1.9 PROPOSAL EVALUATIONS

Evaluations will be based on the following criteria:

- Transformer Pricing (Both index options will be analyzed, but the BLS option will be weighted more heavily for equitable comparison purposes).
- No-Load Losses (assessed at $8.41 per watt)
- Full-Load Losses (assessed at $2.69 per watt)
- Vendor reputation, lead-time guarantees, and impedance guarantees will also be taken into account when evaluating Proposals.

1.10 AWARD PROCESS

Proposals will be analyzed and awarded, independently, for the following three categories:

1) Three Phase Pad-Mounted Transformers
2) Single Phase Pad-Mounted Transformers
3) Pole-Mounted Transformers

- Proposals may include single or multiple categories. Categories may be awarded to three individual vendors or a single vendor strictly based on the evaluation of the City.
- If a vendor is awarded multiple categories, he or she will be allowed to balance load losses across all awarded categories over the course of the Contract.

1.11 PENALTIES AND VOIDABLE OFFENSES

- Vendor must reimburse the City for net load losses, exceeding those guaranteed in the Contract, at the culmination of the Contract.
- The City reserves the right to withhold payment on invoices received in the final month(s) of the Contract to offset load loss penalties.
- Any transformer not meeting a ± 7.5% impedance tolerance will be rejected by the City and returned at the cost of the Vendor.
- Failure to meet lead-time or impedance guarantees may render the Contract as 'void' at the sole discretion of the City.
- Failure to comply with the specifications detailed in this document may render the Contract as 'void' at the sole discretion of the City.
- Any Proposal from a vendor not in good financial standing with the City of Grand Island (specifically where unpaid debt is owed for past load loss penalties) will not be considered.

1.12 DELIVERY AND NOTIFICATION

- Shall be F.O.B. Grand Island, Nebraska
- The Bill of Lading is to be marked "Notify Storeroom (Call 308-385-5469), Weekdays, 8-12 or 1-3".
- Notice for a Monday delivery must be received by 4:00 P.M. on Friday
- Delivery will be accepted only during normal working hours (8 A.M. to Noon and 1 P.M. to 3 P.M. on Weekdays)
- Transformers shipped in an enclosed truck will be rejected. **Flat-bed trucks only.**

2 THREE PHASE PAD-MOUNTED TRANSFORMERS REQUIREMENTS

2.1 GENERAL SPECIFICATIONS

All equipment specified herein shall be:

- 60 Hz, Liquid-Immersed, Self-Cooled (ONAN), transformers.
- Three Phase, Dead Front, mineral oil filled, pad-mounted style transformers
- Remanufactured or reconditioned equipment will not be considered. All materials must be new.
- Any more restrictive requirements listed here-in shall supersede those detailed in the codes and standards listed.
- Category will consist of two styles:
    1) 13,200V Delta Primary → 480V/277 Wye Secondary
    2) 13,200V Delta Primary → 208V/120 Wye Secondary

2.1.1 CODES AND STANDARDS

All transformers must be in accordance with the most recent revision to of the following Standards:

IEEE C57.12.34 (Pad-Mounted Three Phase Transformers)

ANSI C57.12.70	(Terminal Markings and Connections)
ANSI/IEEE C57.12.00	(General Requirements for Liquid-Immersed)
ANSI/IEEE C57.12.90	(Standard Test Code for Liquid-Immersed)
ANSI/IEEE 386	(Separable Insulated Connections)
NEMA TR 1	(Design Test Method for Cabinet Security)
NEMA TR P9; WUG 2.13	(Security for Pad-Mounted Equipment Enclosures)
ANSI C57.12.29	(Pad-Mounted Equipment – Enclosure Integrity for Coastal Env.)

2.1.2 CERTIFIED TEST REPORTS

The following standard tests are to be performed with copies of the results for each transformer identified by serial number:

- Percent impedance
- Exciting current
- Applied potential certification
- No-Load losses
- Load losses
- Total losses
- Ratio certification
- Polarity certification
- Full Wave Impulse (1.2 x 50µS)
- Leak Test
- 100% Resistance Testing for all windings on rated voltage connection
- Certification of full nameplate load without exceeding 65° C
- ANSI Short-Circuit certified test reports per ANSI C57.12.00 and ANSI C57.12.90
- Certification of passing results on EEI paint tests on identical units, per current ASTM Standards (salt spray, humidity, impact, weathering, adhesion, and abrasion).

If these are not standard tests, please take exception, and provide the cost of performing the specified tests. The costs of the additional testing will be taken into account during Proposal evaluation where the City will have the option of purchasing these tests.

2.1.3 DOCUMENTATION

Each item shall be supplied with one complete copies of transformer documentation including (but not limited to):

- instruction manuals
- drawings
- replacement part manuals
- certified test reports for each transformer

Note: Documentation must be received before payment is approved.

2.1.4 OIL

- Oil shall have a PCB content of 1 PPM or less

- Transformers to be provided with certification of non-PCB status
- Nameplate labeled as non-PCB
- Nameplate showing number of gallons of oil

2.1.5 PRIMARY TAPS

Each transformer must meet the following requirements:

- The location for the control shall be in the primary compartment
- Five primary taps; with two 2½% taps below and two 2½% taps above the 13.2 kV of tap C.
- Labeled as being for de-energized operation only
- Externally operable with a hotstick when primary side door is open
- Shall require at least two operator actions to change taps.
- Shall be of a single shaft / direct connection style – between external operation handle and interior mechanism.

2.1.6 PRIMARY FUSING

Each transformer must meet the following requirements:

- Shall be protected by three RTE Bay-O-Net type fuses located in the primary compartment.
- Fuse holders shall be provided with plastic spill pans/metal drip trays and flapper valves.
- Fuses shall be oil immersed one fuse per phase; dual (load) sensing for 500 KVA and below and current (fault) sensing for 750 KVA and above.
- Fused 1½ times to 2 times full load current.
- An under-oil partial range current limiting fuse will be in a series with the Bay-O-Net fuse to provide interrupting up to 30,000 amperes.

2.1.7 WARRANTY

- Warranty must be for a minimum of one year from date of installation or 36 months from date of purchase.

2.1.8 LOOP FEED PRIMARY SWITCH

Provide three loop-feed, internal, oil-immersed, 3-phase gang operated, load break, manually operated switches that shall meet the following requirements:

- Three - two-position switches
- Must have metal locknuts on the handle side of the switch
- Rated for a minimum of 200 amps at 15 kV.
- Located in the primary compartment
- Hot stick operable
- Labeled - One switch – A - on / off
  One switch – B - on / off
  One switch – Transformer - on / off

2.1.9 NAMEPLATE

Based upon IEEEC57.12.00, 5.12.2 – NAMEPLATE 'A'

- All units of measure (with the exception of temperature) must be depicted in imperial units

2.1.10 CORE

There shall be three primary and three secondary windings wound on a five-legged or equivalent core design. A three-legged core is not acceptable.

2.1.11 TEMPERATURE/INSULATION

Per ANSI C57.12.34 – Under continuous loading at listed KVA rating , Three Phase Transformers must meet the following temperature requirements:

- Not exceed 65 deg C temp rise on windings
- Not exceed 80 deg C hot spot conductor temperature rise
- Not exceed 65 deg C temp rise on insulating oil
- BIL ratings per ANSI C57.12.34

2.1.12 AUDIBLE SOUND LEVELS

Audible sound levels should not exceed those as specified in NEMA TR-1 – Table 1.

2.1.13 IMPEDANCE

Transformers shall have impedance based upon IEEE C57.12.34, 5.1, Table 2 and IEEE C 57.12.00, 9.2.

2.1.14 PRIMARY TERMINATIONS

- All applicable components shall meet – IEEE Std. 386
- The primary connections shall be dead front, 200 amp load break 15kV class with bushings arranged per IEEE C57.12.34 (Figure 16 - 15.2 kV and Figure 12)
- Centerline of lowest high voltage connection of 27" (Drawing No. 3)

Each of the six (6) 200 ampere bushing well interface shall:

- Be capable of being replaced per IEEE C57.12.34 (8.7.2.2)
- Be equipped with 200 ampere load break interface (bushing insert) – IEEE Std. 386 Figure 5
- Have a yellow indicator ring – *Cooper LB1215 or exact equivalent

2.1.15 LOW VOLTAGE BUSHINGS/TERMINALS

The fully insulated neutral bushing spade shall be solidly bonded to the tank wall, externally, with a removable ground strap(s) or appropriately sized blade connected directly to the tank per IEEE 57.12.34. Must fully conform with Drawings No. 1 – 4 in this specification.

For 75, 150, 225 and 300 KVA, the 6-Hole arrangement detailed in Drawing No. 4 applies.

For 500, 750, 1000, 1500 and 2500 KVA, the 10-Hole arrangement detailed in Drawing No. 4 applies.

2.1.16 CABINET AND RELATED TANK

Cabinet, tank, sill & hood and related fastening devices shall:

- Meet the IEEE C57.12.29 Standard for Pad-Mounted Equipment - Enclosure Integrity for Coastal Environments.
- Be Stainless Steel (#304L)
- Exterior and Inside Termination Area to be painted standard ANSI 61 GRAY.
- All base coat(s), primer and following layer(s) of paint shall be gray.
- Ground provisions Per IEEE C57.12.34 8.11.1, 8.11.2 and 8.11.3

2.1.17 TANK AND RELATED ACCESS TO INSIDE CONNECTIONS

Must be able to access the following items from the top of the tank area by means of bolts or reversible mechanical fasteners and still meet the limited access requirements of C57.12.29-2014:

- Primary bushings as needed to meet replacement needs per IEEE C57.12.34, 8.7.2.2
- Secondary bushings
- Bay-o-net fuse housings
- Current limiting fuse
- Oil thermometer
- Liquid level gauge
- Tap changer
- Primary switches

2.1.18 ACCESSORY EQUIPMENT

- Top oil dial thermometer
- Liquid-level gauge located in termination area
- 1” (National Pipe Thread) - Upper fill plug
- 1” (National Pipe Thread) – Drain valve with sampling valve assembly – (located in the primary voltage compartment)
- 1 - Grounding lug - (Burndy - #K2C26 or exact equivalent) shall be installed into the primary side tank ground provision of IEEE C57.12.34 8.11
- The KVA Rating & Secondary voltage shall be permanently affixed or painted on the outside, at the top of the door(s)
- Fuse catalog number, amperage and brand if other than RTE, shall be permanently affixed or painted on inside of primary compartment door.

3 SINGLE PHASE PAD-MOUNTED TRANSFORMERS REQUIREMENTS

3.1 GENERAL SPECIFICATIONS

All equipment specified herein shall be:

- 60 Hz, Liquid-Immersed, Self-Cooled (ONAN), transformers.
- Single Phase, Single Ratio, Dead Front, mineral oil filled, pad-mounted style transformers
- Remanufactured or reconditioned equipment will not be considered. All materials must be new.
- Any more restrictive requirements listed here-in shall supersede those detailed in the codes and standards listed.
- Category will consist of two styles:
    1) 13,200V Grounded Wye Primary → 240V/120 Secondary – Type 1 Bushing
    2) 13,200V Grounded Wye Primary → 240V/120 Secondary – Type 2 Bushing

3.1.1 CODES AND STANDARDS

All transformers must be in accordance with the most recent revision to of the following Standards:

ANSI C57.12.25	(Pad-Mounted Single Phase Transformers)
ANSI C57.12.70	(Terminal Markings and Connections)
ANSI/IEEE C57.12.00	(General Requirements for Liquid-Immersed)
ANSI/IEEE C57.12.90	(Standard Test Code for Liquid-Immersed)
ANSI/IEEE 386	(Separable Insulated Connections)
NEMA TR 1	(Design Test Method for Cabinet Security)
NEMA TR P9; WUG 2.13	(Security for Pad-Mounted Equipment Enclosures)
ANSI C57.12.29	(Pad-Mounted Equipment – Enclosure Integrity for Coastal Env.)

3.1.2 CERTIFIED TEST REPORTS

The following standard tests are to be performed with copies of the results for each transformer identified by serial number:

- Percent impedance
- Exciting current
- Applied potential certification
- No-Load losses
- Load losses
- Total losses
- Ratio certification
- Polarity certification
- Full Wave Impulse (1.2 x 50µS)
- Leak Test
- 100% Resistance Testing for all windings on rated voltage connection
- Certification of full nameplate load without exceeding 65° C
- ANSI Short-Circuit certified test reports per ANSI C57.12.00 and ANSI C57.12.90
- Certification of passing results on EEI paint tests on identical units, per current ASTM Standards (salt spray, humidity, impact, weathering, adhesion, and abrasion).

If these are not standard tests, please take exception, and provide the cost of performing the specified tests. The costs of the additional testing will be taken into account during Proposal evaluation; the City will have the option of purchasing these tests.

3.1.3 DOCUMENTATION

Each item shall be supplied with one complete copies of transformer documentation including (but not limited to):

- instruction manuals
- drawings
- replacement part manuals
- certified test reports for each transformer
- Note: Documentation must be received before payment is approved.

3.1.4 OIL

- Oil shall have a PCB content of 1 PPM or less
- Transformers to be provided with certification of non-PCB status
- Nameplate labeled as non-PCB
- Nameplate showing number of gallons of oil

3.1.5 TEMPERATURE/INSULATION

Per ANSI C57.12.25 – Under continuous loading at listed KVA rating , Single Phase Transformers must meet the following temperature requirements:

- Not exceed 65 deg C temp rise on windings
- Not exceed 80 deg C hot spot conductor temperature rise
- Not exceed 65 deg C temp rise on insulating oil
- BIL ratings per ANSI C57.12.25

3.1.6 PRIMARY TAPS

Each transformer must meet the following requirements:

- The location for the control shall be in the primary compartment
- Five primary taps; with two 2½% taps below and two 2½% taps above the 7620V of tap C.
- Labeled as being for de-energized operation only
- Externally operable with a hotstick when primary side door is open
- Shall require at least two operator actions to change taps.
- Shall be of a single shaft / direct connection style – between external operation handle and interior mechanism.

3.1.7 PRIMARY FUSING

- Shall be protected by a single RTE Bay-O-Net type fuse (or interchangeable and exact equivalent and noted in the exceptions), located in the primary compartment.
- Fuse holders shall be provided with plastic spill pans/metal drip trays and flapper valves.
- Fused 1½ times to 2 times full load current.

- An under-oil partial range current limiting fuse will be in a series with the Bay-O-Net fuse to provide interrupting up to 30,000 amperes.

3.1.8 WARRANTY

- Warranty must be for a minimum of one year from date of installation or 36 months from date of purchase.

3.1.9 ACCESSORY EQUIPMENT

- Liquid-level gauge located in termination area
- Palletized
- Lifting provisions w/bolts
- Connector and terminal marking
- Replaceable, self-resealing pressure relief device per ANSI C 57.12.25 - 6.5.2
- Two "Burndy #EQC632C1" grounding lugs shall be installed
- KVA Rating and Secondary Voltage shall be permanently affixed or painted on the outside of the unit.

3.1.10 NAMEPLATE

Based upon IEEEC57.12.00, 5.12.2 – NAMEPLATE 'A'

- All units of measure (with the exception of temperature) must be depicted in imperial units

3.1.11 CABINET FEATURES

- ½" x 1½ inch penta-head bolt for security of compartment door.
- Meet the IEEE C57.12.29 Standard for Pad-Mounted Equipment - Enclosure Integrity for Coastal Environments.
- Be Stainless Steel (#304L)
- Exterior and Inside Termination Area to be painted standard ANSI 61 GRAY.
- All base coat(s), primer and following layer(s) of paint shall be gray.
- Fuse catalog number and amperage shall be listed inside lid (viewable when open) and brand (if other than RTE).

3.1.12 AUDIBLE SOUND LEVELS

Audible sound levels should not exceed those as specified in NEMA TR-1 – Table 1.

3.2 SINGLE PHASE (MAXI-PAK) PAD-MOUNTED TRANFORMERS; TYPE 1 BUSHING ARRANGEMENT

3.2.1 PRIMARY TERMINATIONS AND ACCESSORIES

- Type-1 bushing arrangement as shown on Figure 1, Detail "B" of ANSI C57.12.25
- Loop feed with bushing wells.
- Double parking stand shall be provided per Detail "B', Figure 1, of ANSI C57.12.25.
- Loop feed with bushing wells.

- Load break inserts; Cooper #LB1215 or Elastimold #16014-1 (with yellow indicator ring to determine if elbow is fully seated).

3.2.2 SECONDARY TERMINATIONS AND ACCESSORIES

- Type-1 bushing arrangement as shown on Figure 1, Detail "B" of ANSI C57.12.25-1990 including:
- Three insulated bushings.
- Stud connector per ANSI C57.12.25 - 6.2.5.Figure 4-(c) and 6.2.6

4 SINGLE PHASE POLE-MOUNTED TRANSFORMERS REQUIREMENTS

4.1 GENERAL SPECIFICATIONS

All equipment specified herein shall be:

- 60 Hz, Liquid-Immersed, Self-Cooled (ONAN/OFAF), transformers.
- Single Phase, Single Ratio, Overhead Type Distribution Transformers
- Amorphous core units are NOT acceptable
- Constructed of Mild Steel
- Remanufactured or reconditioned equipment will not be considered. All materials must be new.
- All 120V/208 Secondary transformers shall be labeled "120/208" on their exterior.
- Category will consist of three styles:
    1) 13,200V/7620 Grounded Wye Primary → 120V/240 Secondary
    2) 13,200V/22,860 Grounded Wye Primary → 277V/480 Secondary
    3) 13,200V/22,860 Grounded Wye Primary → 120V/208 Secondary

4.1.1 CODES AND STANDARDS

All transformers must be in accordance with the most recent revision to of the following Standards:

IEEE C57.12.20-201	(Terminal Markings and Connections)
ANSI C57.12.28	(Enclosure Integrity)
ANSI C57.12.90	(Standard Test Code for Liquid-Immersed)

4.1.2 CERTIFIED TEST REPORTS

The following standard tests are to be performed with copies of the results for each transformer identified by serial number:

- Percent impedance
- Exciting current
- Applied potential certification
- No-Load losses
- Load losses
- Total losses

- Ratio certification
- Polarity certification
- Full Wave Impulse (1.2 x 50µS)
- Leak Test
- 100% Resistance Testing for all windings on rated voltage connection
- Certification of full nameplate load without exceeding 65° C
- ANSI Short-Circuit certified test reports per ANSI C57.12.00 and ANSI C57.12.90
- Certification of passing results on EEI paint tests on identical units, per current ASTM Standards (salt spray, humidity, impact, weathering, adhesion, and abrasion).

4.1.3 DOCUMENTATION

Each item shall be supplied with one complete copies of transformer documentation including (but not limited to):

- instruction manuals
- drawings
- replacement part manuals
- certified test reports for each transformer
- Note: Documentation must be received before payment is approved.

4.1.4 OIL

- Transformers shall be insulated with new (unused) mineral oil.
- Oil shall meet the requirements of ANSI C57.12.00, Article 6.6.1 (1), ANSI C57.106 and ASTM 3487 Type II.
- The transformer nameplate shall indicate that the PCB content of said transformer is less than 1 PPM or at time of manufacture gas chromatographic analysis certified non-detectable PCB.
- The oil shall be inhibited mineral oil containing 0.2 % by weight DBPC.
- The nameplate shall show the gallons of oil.

4.1.5 PRIMARY TAPS

- Five Primary Taps with two 2½% taps below and 2½% taps above the rated voltage.
- External tap changer for de-energized operation only, requiring two separate actions to change taps.

4.1.6 PRESSURE RELIEF DEVICE

- All transformers shall be designed such that all excessive pressure build-ups are released without damage to the tank in accordance with ANSI C57.12.00

4.1.7 ACCESSORY EQUIPMENT

- Liquid-level markings
- Lifting lugs

- Stainless steel nameplate (Anodized Aluminum Nameplates are also allowed)
- kVA rating on tank
- ½" tap pad for tank grounding with Burndy #EQC-632C lug (only).
- Two (2) ½" nuts welded near base of units (see attached drawing).

Note: "277/480" must be stenciled below KVA rating on all pertinent transformers.

4.1.8 AUDIBLE SOUND LEVELS

Audible sound levels should not exceed those as specified in NEMA TR 1.

4.1.9 PAINT FINISH

- The transformer shall have a corrosion resistant finish that shall be capable of meeting the functional specifications or exceed paint requirements of ANSI C57.12.28, latest revision. The outside shall be properly prepared, primed and painted with highly weather resistant finish coat. All transformers shall have the manufacturer's premium paint system.
- Transformers shall be given a phosphatizing bath, or sand blasted and then primed. Transformers shall have a corrosion resistant finish that shall be capable of meeting or exceeding ANSI C57.12.28 specifications. The exterior finish coat shall meet or exceed the following: be semi-gloss polymer, or powder coated free of runs and sags, primed with a primer, no less than 2.0 mils dry thickness and a coat of semi-gloss polymer type enamel paint no less than one (1) mil dry thickness (total measured thickness three (3) mils).
- The finish coat shall be semi-gloss sky gray similar in color to ANSI Standard No. 70. The transformer top shall meet or exceed the following: have at least ten (10) mils of paint. The transformer sides and bottom shall have at least three (3) mils of paint.
- The inside of the tank shall be painted a light gray color (ANSI 70) from 2" below the oil fill line to the top

Table 2: Single Phase Pole Mount Transformers – Max Dimensions

Size (KVA)	Weight (lbs.)	Height (in.)*	Width (in.)**	
25	400	36	22	
37.5	500	36	22	
50	600	38	26	
75	900	40	26	
100	1000	40	30	

*measured from bottom of tank to top of primary bushing.

**measured from lifting hook to lifting hook.

4.2 13,200 GRD Y/22,860 WYE VOLTS TO 277/480 VOLTS & 13,200 GRD Y/22,860 WYE VOLTS TO 120/208 VOLTS

4.2.1 BUSHINGS AND CONNECTORS

- All primary and secondary connectors shall be suitable for both copper and aluminum conductor.
- Two (2) primary bushings each, rated for 125 kV BIL.

4.2.2 HANGERS

- Single position, Type “A”, hanger.

4.3 13,200 GRD Y/7,620 WYE VOLTS TO 120/240 VOLTS

4.3.1 BUSHINGS AND CONNECTORS

- All primary and secondary connectors shall be suitable for both copper and aluminum conductor.
- The single primary bushing will be rated for 95 kV BIL.

4.3.2 HANGERS

- Dual, Type “A”, hangers spaced 180^{o} apart (two position mounting)

4.3.3 WARRANTY

- Warranty must be for a minimum of one year from date of installation or 36 months from date of purchase.

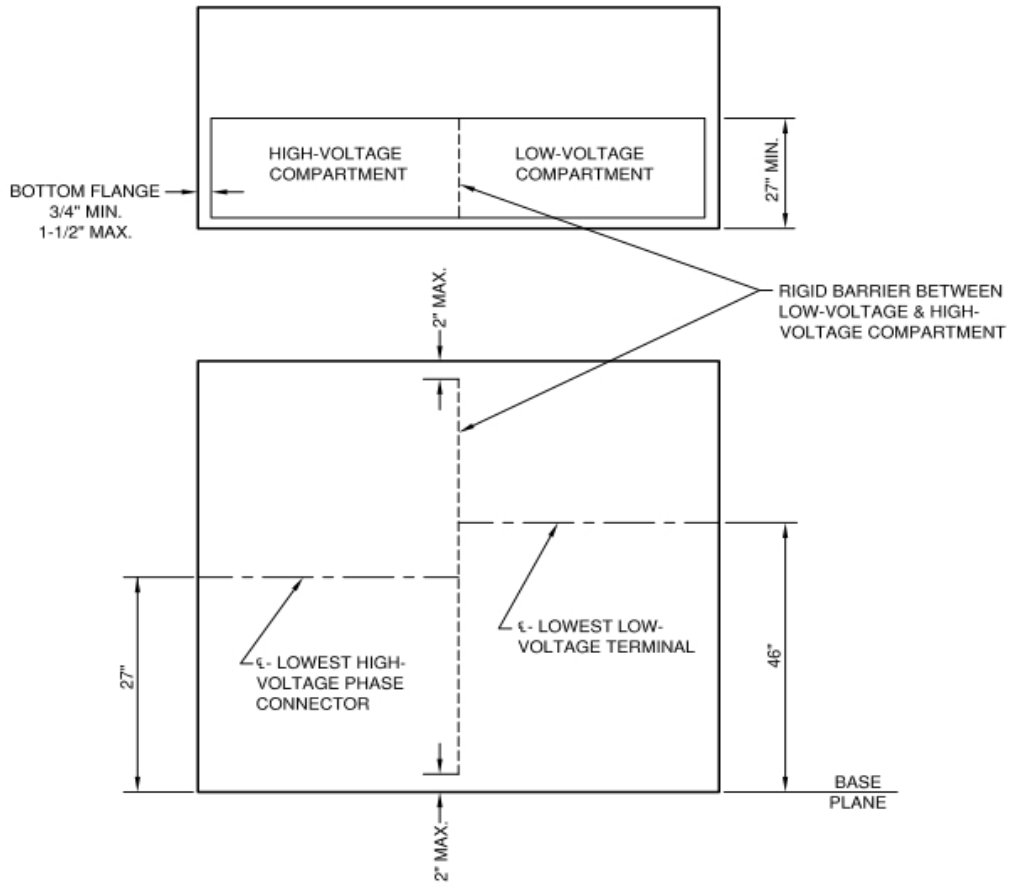
5 DRAWINGS

All transformers must conform to the details shown in the attached drawings (listed below).

THREE PHASE PAD-MOUNTED TRANSFORMERS	
Drawing No.	**Drawing Title**
1	Compartment Specs 500,750,1000,1500, & 2500 KVA 3PH XFMRS
2	Compartment Specs 75,150,225, & 300 KVA 3PH XFMRS
3	Separable Insulated Connector Specs
4 (6-Hole Detail)	Low-Volt. Term. Spec. (75,150,225 & 300 KVA XFMRS)
4 (10-Hole Detail)	Low-Volt. Term. Spec. (500,750,1000,1500 & 2500 KVA XFMRS)
SINGLE PHASE PAD-MOUNTED TRANSFORMERS	
Drawing No.	**Drawing Title**
5	Plan & Profile (Type 1 Bushing Arrangement)

SINGLE PHASE POLE-MOUNTED TRANSFORMERS	
Drawing No.	**Drawing Title**
6	Typical Distribution Transformer (277/480) and (120/208)
7	Typical Distribution Transformer (120/240)

5.1 DRAWING NO. 1

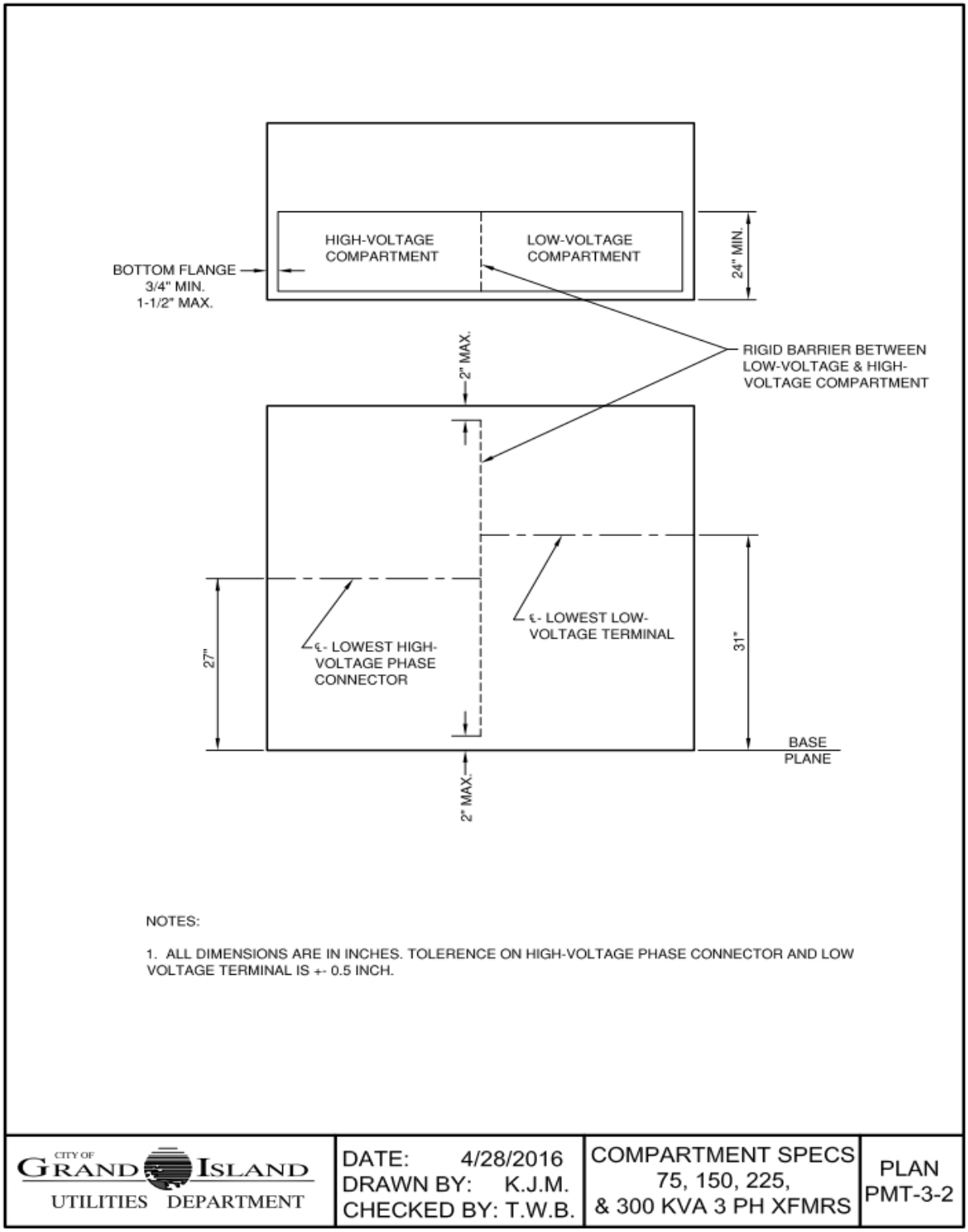


NOTES:

1. ALL DIMENSIONS ARE IN INCHES. TOLERENCE ON HIGH-VOLTAGE PHASE CONNECTOR AND LOW VOLTAGE TERMINAL IS +- 0.5 INCH.

CITY OF GRAND ISLAND UTILITIES DEPARTMENT	DATE: 4/28/2016 DRAWN BY: K.J.M. CHECKED BY: T.W.B.	COMPARTMENT SPECS 500, 750, 1000, 1500, & 2500 KVA 3PH XFMRS	PLAN PMT-3-1

5.2 DRAWING NO. 2

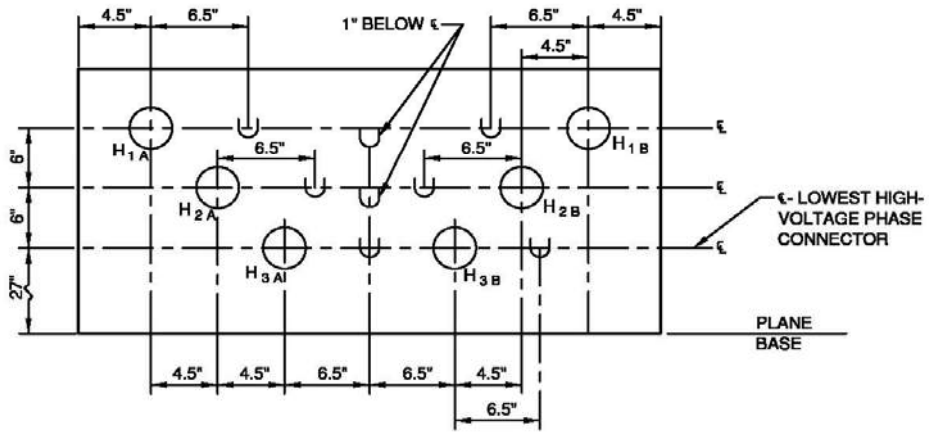


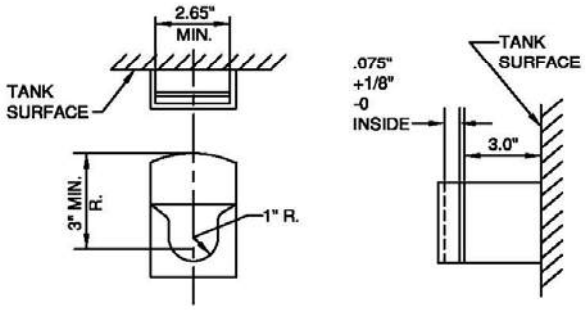
NOTES:

1. ALL DIMENSIONS ARE IN INCHES. TOLERENCE ON HIGH-VOLTAGE PHASE CONNECTOR AND LOW VOLTAGE TERMINAL IS +- 0.5 INCH.

CITY OF GRAND ISLAND UTILITIES DEPARTMENT	DATE: 4/28/2016 DRAWN BY: K.J.M. CHECKED BY: T.W.B.	COMPARTMENT SPECS 75, 150, 225, & 300 KVA 3 PH XFMRS	PLAN PMT-3-2

5.3 DRAWING NO. 3





CABLE ACCESSORY PARKING STAND

NOTES:

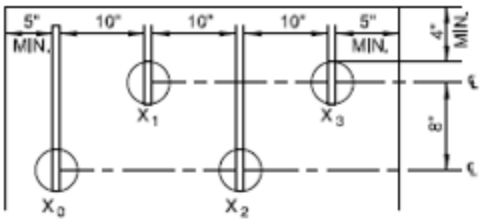
1. HIGHVOLTAGE CONNECTOR ARRANGEMENTS AND DIMENSIONS ARE FOR APPLICATIONS REQUIRING CERTAIN SPECIFIC DIMENSION.

2. ALL DIMENSIONS ARE IN INCHES.

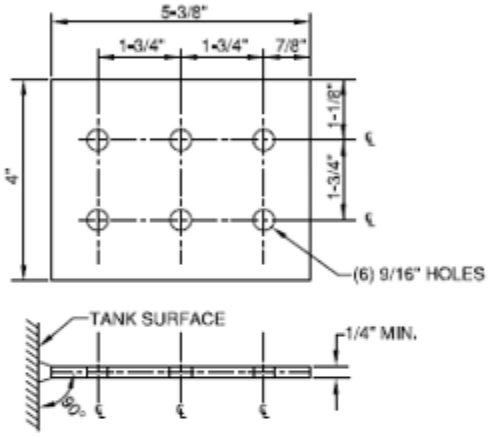
3. H & P ARE MINIMUM DIMENSIONS. DIMENSIONS K, M, AND N, HAVE A TOLOERANCE OF +- .025 INCH.

CITY OF GRAND ISLAND UTILITIES DEPARTMENT	DATE: 4/28/2016 DRAWN BY: K.J.M. CHECKED BY: T.W.B.	SEPARABLE INSULATED CONNECTOR SPECS.	PLAN PMT-3-3

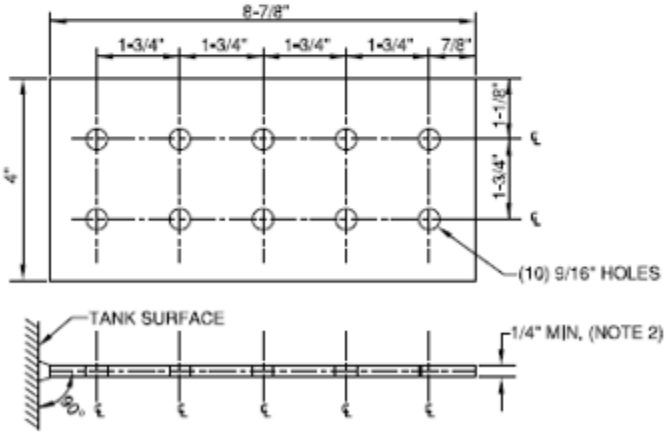
5.4 DRAWING NO. 4



LOW-VOLTAGE
STAGGERED TERMINAL
(TYPICAL)



LOW-VOLTAGE
TERMINAL (6 HOLE)
75, 150, 225, 300 KVA



LOW-VOLTAGE
TERMINAL (10 HOLE)
500, 750, 1000,
1500, 2500 KVA

NOTES:

1. TO BE FURNISHED WITH ADDITIONAL SUPPORT DESIGNED BY MANUFACTURER, A THE END FARTHEST FROM TANK WALL WITHOUT INTERFERRING WITH USE OF ANY OF THE TEN (10) HOLES.

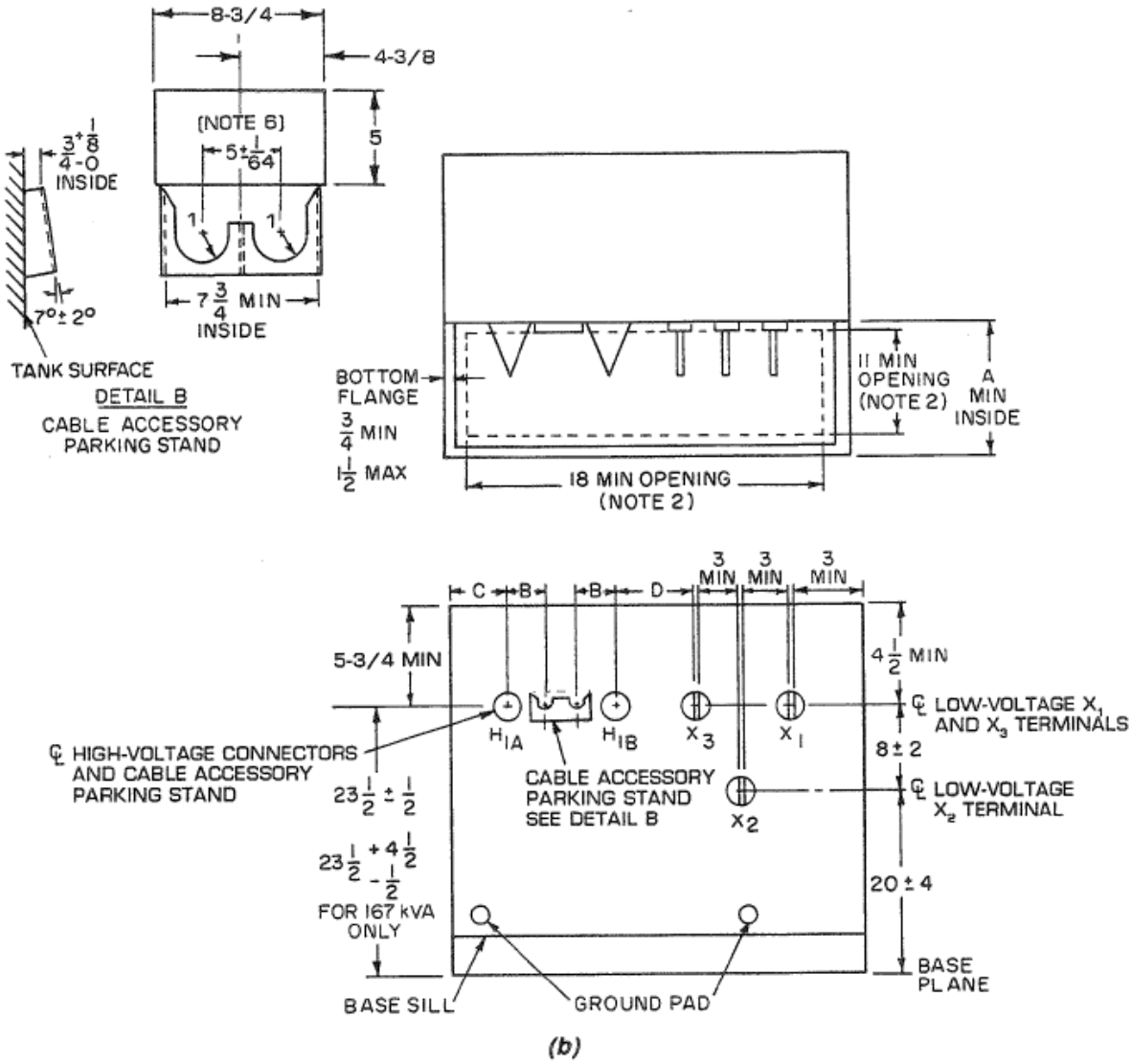
2. GREATER THICKNESS MAY BE REQUIRED TO PROVIDE ADEQUATE AMPACITY.

CITY OF GRAND ISLAND UTILITIES DEPARTMENT	DATE: 4/28/2016 DRAWN BY: K.J.M. CHECKED BY: T.W.B.	LOW-VOLTAGE TERMINALS SPECIFICATIONS	PLAN PMT-3-4

(REVISED: 11/27/17)

5.5 DRAWING NO. 5

ANSI C57.12.25-1990



(b)

NOTES

1 All dimensions are in inches unless otherwise specified.

2 This minimum opening in the bottom of the compartment is provided for cable entrance.

3 When a loop feed is not required, omit one high-voltage connector.

4 The low-voltage is shown for additive polarity transformers. The location of X_1 and X_3 is reversed for subtractive polarity.

5 The location of H_{1A} and H_{1B} shall be such that the separable connectors can be operated with the base still in place.

6 Minimum clear space, excluding area required for H_{1A} and H_{1B}, required for installing accessory devices in parking stand.

7 These dimensions are required for certain separable insulated connectors.

Figure 1 (*continued*)

5.6 DRAWING NO. 6

H.V.: 13200/22860Y 125 BIL 2BU CSP CONV

L.V.: 277/480Y 2LV BU 30BIL

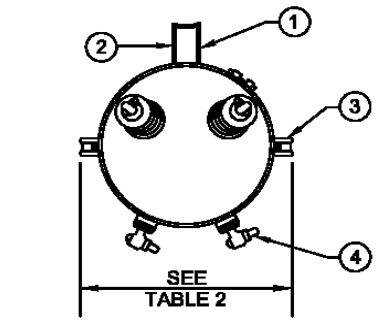
TAPS: 2 TAPS 2.5% ABOVE AND BELOW

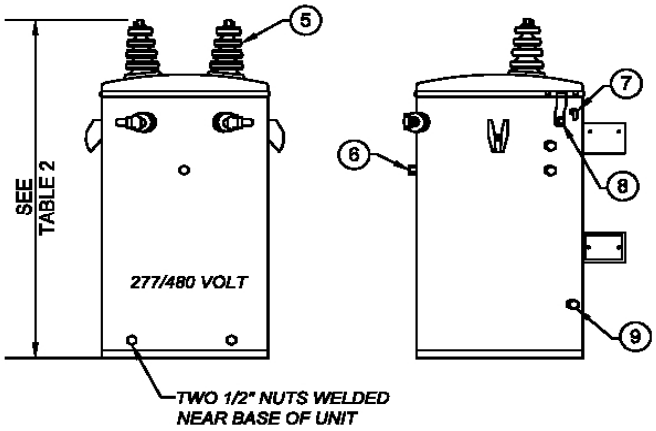
PART	DESCRIPTION	QUANTITY
1	HANGER BRACKET TYPE: A	1 SET
2	NAMEPLATE (ON LOWER BRACKET) TYPE: STAINLESS STEEL NAMEPLATE	1
3	LIFTING LUGS	2
4	LOW VOLTAGE BUSHINGS TYPE: STD. POLYMER LVBU WITH EYEBOLTS	2
5	HIGH VOLTAGE BUSHINGS TYPE: STANDARD HV BUSHING	2
6	GROUNDING PROVISION	1
7	P.R.V.: GENERIC .25 10PSI35SCFM(-01 OR -30)	1
8	COVER GROUND STRAP	1
9	TANK GROUNDING PROVISION: W/GROUND LUGS	

ADDITION FEATURES

PCB DECAL: "NON PCB" 1X2(ERMCO STD)WHT/BLU7-15

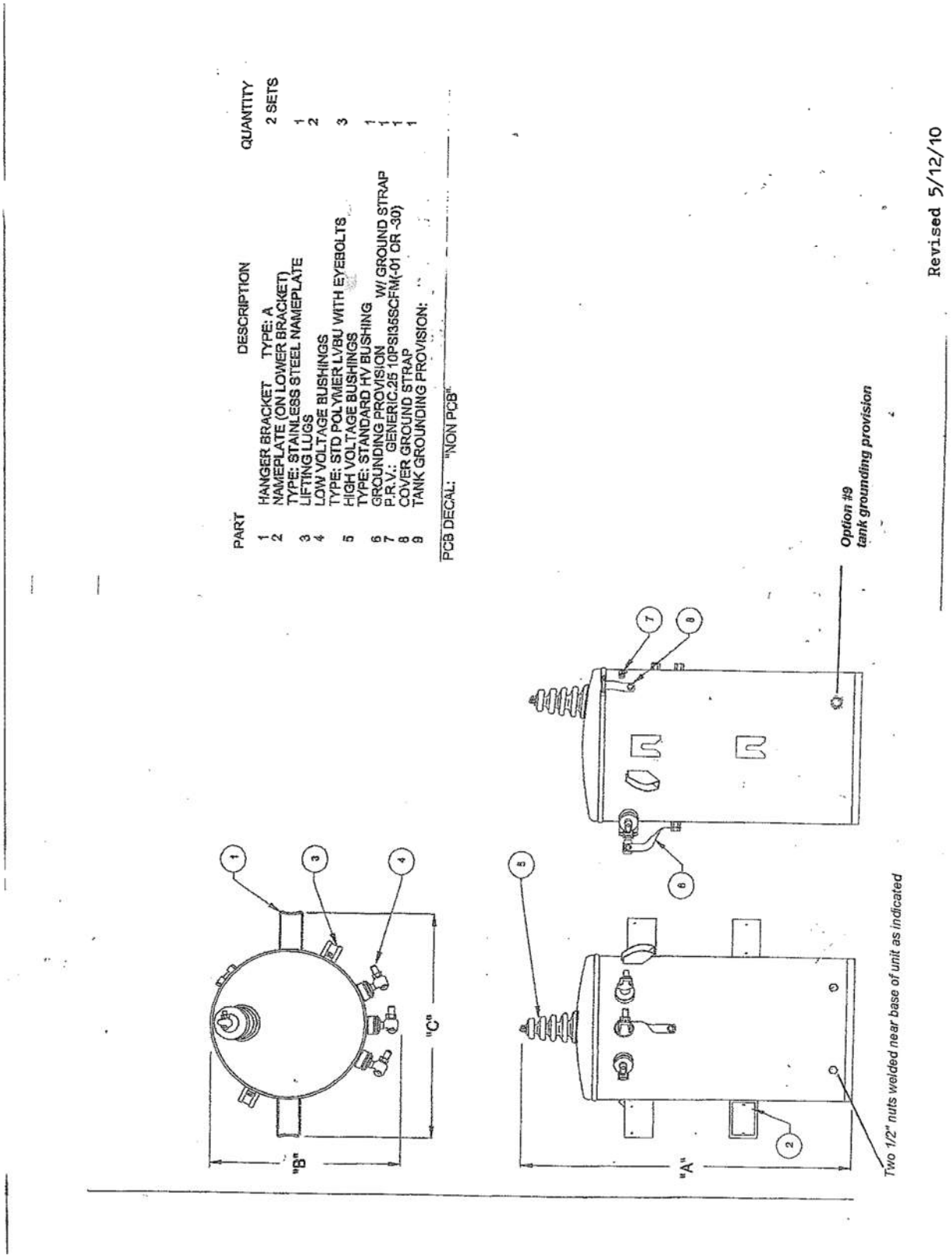
OIL TYPE: STD TX MINERAL OIL





CITY OF GRAND ISLAND UTILITIES DEPARTMENT	DRAWN BY: K.J.M. DATE: 8/3/2016 CHECKED BY: B.F.	TYPICAL DISTRIBUTION TRANSFORMER	DRAWING NO.: 277/480V

5.7 DRAWING NO. 7



6 INDEX SHEETS

6.1 COMPANY INDEX PRICING

COMPANY INDEX PRICING – THREE PHASE PAD-MOUNTED TRANSFORMERS			
Commodity	Base Commodity Cost or Index	Weighting Factor (% of Price)	Reference Website for Future Index Verification
	Total	0%	

COMPANY INDEX PRICING – SINGLE PHASE PAD-MOUNTED TRANSFORMERS			
Commodity	Base Commodity Cost or Index	Weighting Factor (% of Price)	Reference Website for Future Index Verification
	Total	0%	

COMPANY INDEX PRICING – SINGLE PHASE POLE-MOUNTED TRANSFORMERS			
Commodity	Base Commodity Cost or Index	Weighting Factor (% of Price)	Reference Website for Future Index Verification
	Total	0%	

6.2 BLS INDEX PRICING

BLS Index Pricing	
Bureau of Labor and Statistics Base Index (Electric Power and Specialty Transformer Manufacturing: Power and Distribution Transformers, Except Parts - PCU3353113353111)	Reference Website for Future Index Verification

7 BID SHEETS

7.1 THREE PHASE PAD-MOUNTED TRANSFORMER BID SHEET

	(A)	(B)	(C)	(D)	(E)	(F)
3 Phase Padmount Transformer Type	KVA	Average No. Used Per year (4 Year Average)	Price (each)	Guaranteed No-Load Losses (watts)	Guaranteed Full-Load Losses (watts)	Total Price = B*(C + ($8.41*D) + ($2.69*E))
13.2/480Y/277	45	0.25				
13.2/208Y/120	45	0.25				
13.2/480Y/277	75	0.75				
13.2/208Y/120	75	1.75				
13.2/480Y/277	112.5	0.25				
13.2/208Y/120	112.5	0.25				
13.2/480Y/277	150	0.25				
13.2/208Y/120	150	4.00				
13.2/480Y/277	225	0.75				
13.2/208Y/120	225	1.75				
13.2/480Y/277	300	0.50				
13.2/208Y/120	300	0.75				
13.2/480Y/277	500	1.75				
13.2/208Y/120	500	1.00				
13.2/480Y/277	750	1.50				
13.2/208Y/120	750	1.75				
13.2/480Y/277	1000	1.50				
13.2/208Y/120	1000	0.50				
13.2/480Y/277	1500	0.75				
13.2/208Y/120	1500	0.25				
13.2/480Y/277	2000	0.25				
13.2/480Y/277	2500	0.75				
					Total (Sum Column F)	

7.2 SINGLE PHASE PAD-MOUNTED TRANSFORMER BID SHEET

	(A)	(B)	(C)	(D)	(E)	(F)
Single Phase Padmount Transformer Type	**kVA**	**Average** No. Used **Per** year (4 Year **Ave**rage)	Price (each)	Guaranteed No-Load Losses (watts)	Guaranteed Full-Load Losses (watts)	Total Price = B*(C + ($8.41*D) + ($2.69*E))
13.2/7620/240/120 (Maxi-Pak)	10	1.25				
13.2/7620/240/120 (Maxi-Pak)	15	0.25				
13.2/7620/240/120 (Maxi-Pak)	25	22.25				
13.2/7620/240/120 (Maxi-Pak)	37.5	25.50				
13.2/7620/240/120 (Maxi-Pak)	50	5.50				
13.2/7620/240/120 (Maxi-Pak)	75	0.75				
13.2/7620/240/120 (Maxi-Pak)	100	1.00				
13.2/7620/240/120 (Maxi-Pak)	167	0.25				
					Total (Sum Column F)	

7.3 SINGLE PHASE POLE-MOUNTED TRANSFORMER BID SHEET

	(A)	(B)	(C)	(D)	(E)	(F)
Single Phase Polemount Transformer Type	KVA	Average No. Used Per year (4 Year Average)	Price (each)	Guaranteed No-Load Losses (watts)	Guaranteed Full-Load Losses (watts)	Total Price = B*(C + ($8.41*D) + ($2.69*E))
13.2/22860/277/480	10	3.00				
13.2/7620/120/240	10	8.25				
13.2/22860/120/208	10	0.25				
13.2/22860/277/480	15	2.25				
13.2/7620/120/240	15	23.25				
13.2/22860/120/208	15	0.25				
13.2/22860/277/480	25	5.50				
13.2/7620/120/240	25	34.25				
13.2/22860/120/208	25	3.75				
13.2/22860/277/480	37.5	0.25				
13.2/7620/120/240	37.5	14.50				
13.2/22860/120/208	37.5	0.25				
13.2/22860/277/480	50	0.75				
13.2/7620/120/240	50	8.50				
13.2/22860/120/208	50	6.00				
13.2/22860/277/480	75	0.25				
13.2/7620/120/240	75	0.25				
13.2/22860/120/208	75	0.25				
13.2/22860/277/480	100	0.75				
13.2/7620/120/240	100	0.25				
13.2/22860/120/208	100	0.25				
					Total (Sum Column F)	

8 INFORMATION SHEETS

8.1 THREE PHASE PAD-MOUNTED TRANSFORMER INFORMATION SHEET

3 Phase Padmount Transformer Type	KVA	Guaranteed Lead Time (weeks)	Average Lead Time (weeks)	XFMR Weight (lb)	Dimensions L X W X H (inches)
13.2/480/277	45				
13.2/208/120	45				
13.2/480/277	75				
13.2/208/120	75				
13.2/480/277	112.5				
13.2/208/120	112.5				
13.2/480/277	150				
13.2/208/120	150				
13.2/480/277	225				
13.2/208/120	225				
13.2/480/277	300				
13.2/208/120	300				
13.2/480/277	500				
13.2/208/120	500				
13.2/480/277	750				
13.2/208/120	750				
13.2/480/277	1000				
13.2/208/120	1000				
13.2/480/277	1500				
13.2/208/120	1500				
13.2/480/277	2000				
13.2/480/277	2500				

8.2 SINGLE PHASE PAD-MOUNTED TRANSFORMER INFORMATION SHEET

Single Phase Padmount Transformer Type	KVA	Guaranteed Lead Time (weeks)	Average Lead Time (weeks)	XFMR Weight (lb)	Dimensions L X W X H (inches)
13.2/7620/240/120 (Maxi-Pak)	10				
13.2/7620/240/120 (Maxi-Pak)	15				
13.2/7620/240/120 (Maxi-Pak)	25				
13.2/7620/240/120 (Maxi-Pak)	37.5				
13.2/7620/240/120 (Maxi-Pak)	50				
13.2/7620/240/120 (Maxi-Pak)	75				
13.2/7620/240/120 (Maxi-Pak)	100				
13.2/7620/240/120 (Maxi-Pak)	167				

8.3 SINGLE PHASE POLE-MOUNTED TRANSF. INFORMATION SHEET

Single Phase Polemount Transformer Type	KVA	Guaranteed Lead Time (weeks)	Average Lead Time (weeks)	XFMR Weight (lb)	Dimensions H x W (inches)
13.2/22860/277/480	10				
13.2/7620/120/240	10				
13.2/22860/120/208	10				
13.2/22860/277/480	15				
13.2/7620/120/240	15				
13.2/22860/120/208	15				
13.2/22860/277/480	25				
13.2/7620/120/240	25				
13.2/22860/120/208	25				
13.2/22860/277/480	37.5				
13.2/7620/120/240	37.5				
13.2/22860/120/208	37.5				
13.2/22860/277/480	50				
13.2/7620/120/240	50				
13.2/22860/120/208	50				
13.2/22860/277/480	75				
13.2/7620/120/240	75				
13.2/22860/120/208	75				
13.2/22860/277/480	100				
13.2/7620/120/240	100				
13.2/22860/120/208	100				

MINIMUM INSURANCE REQUIREMENTS

DISTRIBUTION TRANSFORMERS

CITY OF GRAND ISLAND, NEBRASKA

You are urged to include in your Proposal compliance with the City's minimum insurance requirements; however, any non-compliance must be detailed in the Exceptions Section of the Proposal. Compliance with the specified owner's and Contractor's Protection coverage is mandatory.

The Bidder shall take out, throughout the duration of the Contract, insurance of such types and in such amounts as may be necessary to protect himself and the interests of the City against all hazards or risks of loss as hereinafter specified. This insurance shall cover all aspects of the Bidder's operations to the fullest extent possible and provide no exclusions relative to any aspect of the work being performed for the City. The form and limits of such insurance, together with the underwriter thereof in each case, shall be approved by the City but regardless of such approval, it shall be the responsibility of the Bidder to maintain adequate insurance coverage at all times. Failure of the Bidder to maintain adequate coverage shall not relieve him of any contractual responsibility or obligation.

1. <u>WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY</u>

This insurance shall protect the Bidder against all claims under applicable State worker's compensation laws. The Bidder shall also be protected against claims for injury, disease or death of employees which, for any reason, may not fall within the provisions of a workers' compensation law. This policy shall include an "all states" endorsement. The liability limits shall not be less than the following:

Workers' Compensation	Statutory
Employer's Liability	$100,000 each person
	$100,000 per disease
	$500,000 policy limit

2. <u>BUSINESS AUTOMOBILE LIABILITY</u>

This insurance shall be written in comprehensive form and shall protect the Bidder against all claims for injuries to members of the public and damage to property of others arising out of any act or omission of the Bidder, their agents, employees or subcontractors. The liability limits shall not be less than the following:

Bodily Injury & Property Damage	$ 500,000 combined single limit each

3. <u>COMPREHENSIVE GENERAL LIABILITY</u>

This insurance shall protect the Bidder against claims in excess of the limits provided under employer's liability, comprehensive automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits. The liability limits shall not be less than the following:

Bodily Injury & Property Damage	$ 500,000 each occurrence
	$1,000,000 aggregate

4. OWNER'S PROTECTIVE LIABILITY AND PROPERTY DAMAGE

The Bidder shall purchase and maintain owner's protective liability and property damage insurance issued in the name of the City, which shall protect the latter against any and all claims which might arise as a result of the operations of the Bidder or their subcontractors or the City and its agents and employees in fulfilling this Contract during the life of the Contract. The minimum amounts and coverage of such insurance shall be the same as required for comprehensive general liability.

5. UMBRELLA LIABILITY INSURANCE

This insurance shall protect the Bidder against claims in excess of the limits provided under workers' compensation and employer's liability, comprehensive automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits. The liability limits shall not be less than the following:

Bodily Injury & Property Damage	$1,000,000 each occurrence $1,000,000 general aggregate

6. ADDITIONAL REQUIREMENTS

The City may require insurance covering a Bidder or subcontractor in character and more or less than the standard requirements set forth herein depending upon the character and extent of the work to be performed by such Bidder or subcontractor.

Insurance as herein required shall be maintained in force until the City releases the Bidder of all obligations under the Contract.

The Bidder shall provide and carry any additional insurance as may be required by special provisions of these specifications.

7. PROOF OF CARRIAGE OF INSURANCE

Satisfactory certificates of insurance shall be filed with the City prior to starting any construction work on this Contract. **The certificates shall show the City as "Additionally Insured" for all coverages except Workers' Compensation. The certificate shall state that thirty (30) days written notice shall be given to the City before any policy covered thereby is changed or canceled (strike the "endeavor to" wording often shown on certificate forms)**. If the Bidder cannot have the "endeavor to" language stricken, the Bidder may elect to provide a new certificate of insurance every thirty 30 days during the contract. Bidder shall immediately notify the City if there is any reduction of coverage because or revised limits or claims paid which affect the aggregate of any policy.