

NOTES:

- 1. THE VAULT STRUCTURE SHALL HAVE A MINIMUM 4-HOUR FIRE RATING WITH 6" SILLS AT ALL OPENINGS. VAULT DESIGN TO MEET ALL THE REQUIREMENTS OF THE GOVERNING FIRE MARSHAL AND THE NATIONAL ELECTRICAL CODE LATEST REVISION. NO FIRE SUPPRESSION SYSTEM SHALL BE INSTALLED IN THE VAULT.
- 2. DIMENSIONS H&W REFLECT A CLEAR AREA NECESSARY TO INSTALL OR REMOVE TRANSFORMER.
- 3. VAULT LIGHTING AND RECEPTICAL SYSTEM SHALL BE SERVED FROM THE BUILDING'S EMERGENCY POWER SYSTEM.
- 4. ACCESS DOORS TO BE 3'-O" X 6'-8". A MINIMUM OF TWO (2) PERSONNEL ACCESS DOORS, ONE ON EACH END OF THE VAULT IS REQUIRED. DOORS SHALL SWING OUTWARD AND BE EQUIPPED WITH PANIC BARS OR PRESSURE PLATES THAT ARE NORMALLY LATCHED BUT OPEN UNDER SIMPLE PRESSURE, EACH DOOR SHALL BE LABELED CLASS "A" 3-HOUR FIRE RATING. ENTRANCE DOOR LOCKSET REQUIREMENTS: COMMERCIAL GRADE HEAVY DUTY CYLINDRICAL STAINLESS STEEL, REMOVABLE CORE CYLINDER AN "GA" KEYWAY-YALE SECURITY PRODUCT SERIES NO. 5405. OWNER TO REMOVE CORE CYLINDER AND HAVE KEYED FOR TEC SUBSTATION MASTER KEY, COORDINATE THROUGH TEC SECURITY DEPARTMENT.
- 5. FLOURESCENT LIGHTING (WET/DAMP) FIXTURES SHALL HAVE A MINIMUM ILLUMINATION OF 30 FT-CANDLES AT THE OPERATING SIDE OF THE TRANSFORMER. A MULTIWAY SWITCH TO CONTROL THE LIGHT SHALL BE INSTALLED AT EACH DOOR AND ONE CONVENIENCE OUTLET PER VAULT. USE RIGID GALVANIZED ELBOWS (2") OR FIBERGLASS ELBOWS (4" OR GREATER) (PVC_NOT_ACCEPTABLE) ON EXPOSED INSTALLATIONS.
- 6. PULLING-IN-IRONS SHALL BE INSTALLED ABOVE EACH CONDUIT ENTRANCE AND WELDED TO REBAR IN VAULT CEILING AS SHOWN. PULLING-IN-IRONS TO BE A.B. CHANCE CO. CATALOG NO. 8120 OR EQUIVALENT, WITH A 20,000 LB. ULTIMATE TENSILE STRENGTH.
- 7. NATURAL VENTILATION SCREENED LOUVERS WITH A ROLLING STEEL FIRE DOOR LABELED CLASS "A" 3-HOUR FIRE RATED. ALL VAULT VENTILATION EQUIPMENT SHALL BE INSTALLED OUTSIDE OF THE VAULT.
- 8. ALL CONDUIT TO EXTEND 6" ABOVE FLOOR SLAB (RIGID GALVANIZED) W/ INSULATED GROUNDING BUSHING BONDED BY #4 BARE COPPER. ALL CONDUIT TO BE SEALED BY THE OWNER WITH GOVERNING FIRE MARSHAL APPROVED FIRE SEALS.
- 9. ISOLATED GROUND GRID CONSTRUCTED OF 1/2 INCH DIAMETER COPPER BONDED ROD(S) INSTALLED BELOW THE LOWEST FLOOR SLAB. EACH GROUND ROD SHALL BE MEGGERED TO 25 OHMS OR LESS. THE GROUND RODS IN THE GRID SHALL BE CONNECTED TOGETHER BY A CONTINUOUS CONDUCTOR OF 4/0 AWG STRANDED COPPER. ALL CONNECTIONS SHALL BE BONDED TOGETHER THROUGH AN EXOTHERMIC PROCESS, THIS CONNECTION SYSTEM SHALL BE INSTALLED PRIOR TO POURING THE FLOOR, COMPLETED ISOLATED GRID SHALL MEGGER TO 5 OHMS OR LESS.
- 10. FLOOR SHALL BE SLOPED AT A RATE OF 0.25" (1/4") PER FOOT TO OIL DRAIN DRAIN SHALL BE CONNECTED TO THE EMERGENCY OIL RETENTION RESERVOIR. SEE SPECIFICATION 13-19 FOR DETAILS
- 11. 1-1/4" METERING CONDUIT FOR CT'S AND 1" CONDUIT FOR TEMPERATURE ALARM. (SEE 13-29).
- 12. NO PIPING OR DUCT SYSTEMS FOREIGN TO THE ELECTRICAL VAULT INSTALLATION SHALL ENTER OR PASS THROUGH A TRANSFORMER VAULT (PER NEC 450-47).

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| DENOTES LATEST REVISION | | | NO. | CK.D | DATE | F | REVISION |
| | I SPACE AMMABLE TRANSFO | LIQUID | F | ILL | ED | | MGR: STD'S APPR. DATE SUPERSEDES 13-17/2-19-98 |
| TAMPA ELECTRIC CO. | STANDARDS | GENERAL RULES | | | | | 13-17 |
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MINIMUM REQUIREMENTS ONLY

CONTRACTUAL AGREEMENTS AND EASEMENTS OUTLINING THE RESPONSIBILITIES OF TAMPA ELECTRIC COMPANY AND THE OWNER WILL ALWAYS BE REQUIRED. IN NO WAY SHALL THIS REQUIREMENT BE CONSTRUED AS AN APPROVED VAULT CONSTRUCTION DESIGN REQUIREMENT UNLESS PRESENTED IN THE FORM OF A CONTRACTUAL AGREEMENT BETWEEN TAMPA ELECTRIC COMPANY AND THE OWNER. TAMPA ELECTRIC COMPANY ASSUMES NO LIABILITY FOR STRUCTUAL DESIGN SPECIFICATIONS OF ANY VAULT.



