**ATTACHMENT J02**

# Walter Reed Army Medical Center: Forest Glen Annex Electrical Distribution System

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# J02 Walter Reed Army Medical Center Forest Glen Annex Electrical Distribution System

## J02.1 Walter Reed Army Medical Center Overview

The Walter Reed Army Medical Center (WRAMC) Forest Glen Annex is located in Silver Spring, MD, approximately one mile North of the Main Campus of Walter Reed Army Medical Center. The Main Campus is located in northern Washington, D.C., at 7100 Georgia Ave. N.W., between Rock Creek Park and Georgia Avenue near the Maryland - District of Columbia boundary. WRAMC is staffed by about 600 physicians, 535 registered nurses, and 600 licensed practical nurses.
The host command is the U.S. Army Medical Command. The WRAMC mission is multi-faceted, and includes:

(1) provision of advanced and sub-specialty health care and services to soldiers, their families, and a large community of military retirees.
(2) Medical education and training, which contribute to the Army medical department of tomorrow.
(3) Medical research for our soldiers and patients, to strengthen the armed forces of the future.

## J02.2 Electrical Distribution System Description

### J02.2.1 Electrical Distribution System Fixed Equipment Inventory

The Walter Reed Army Medical Center (WRAMC) Forest Glen Annex electric distribution systems consists of all appurtenance physically connected to the distribution systems, from the point in which the distribution system enters the Base, and/or Government ownership currently starts, to the point of demarcation defined by the real estate instruments. Generally, the point of demarcation will be the building footprint. The system may include, but is not limited to, substations, transformers, underground and overhead circuits, utility poles, switches, vaults, and lighting fixtures. The following description and inventory is included to provide the Offeror with a general understanding of the size and configuration of the distribution system. The inventory is assumed to be approximately 90 percent complete. The Offeror shall base the proposal on site inspections, information in the bidder library, other pertinent information, and to a lesser degree the following description. Under no circumstances shall the successful Contractor be entitled to any rate adjustments based on the accuracy of the following description and inventory.

#### J02.2.1.1 Description

The Forest Glen Annex purchases electrical power from Potomac Electric Power Company (PEPCO).

Forest Glen Annex receives power at Building 192, the main switching station, from three PEPCO owned 13.2 kV feeders. There are four outgoing feeders from the substation, each of which is rated for approximately 5.5 MVA. There are also two bus-tie circuit breakers, operated normally open, which can be manually operated to transfer load among incoming feeders in case of loss of one of the

incoming feeders. One of the PEPCO feeders was installed within the last year to serve the new Walter Reed Army Institute of Research (WRAIR) facility through the two new government owned outgoing feeders. The two original PEPCO feeders to this switch station serve the remainder of the Forest Glen 13.2 kV distribution system through two outgoing feeders. There is one new spare circuit breakers on the original sub-station bus. Most buildings at Forest Glen, with the following exceptions, are fed from this sub-station. The buildings near the ball field are fed from a 4160-volt overhead distribution line from a step-down station in the historic area. The A500 series buildings accessed from Brookville road are fed from an underground feeder served from a PEPCO metering pole at Brookville Road. Buildings 513 and 516 are served from a PEPCO owned pole-mounted transformer behind Building 516. (Building 513 is served from Building 516). Building 173 is served directly from PEPCO, with a PEPCO meter on the outside back wall of the building.

There are approximately 1.3 miles of government owned 13.2 kV distribution cables at Forest Glen, installed in duct banks. There is some uncertainty about the exact length of 13.2 kV cables at Forest Glen because the new construction serving the WRAIR facility could not be verified. Manholes are installed in the duct banks at 200 to 300 foot intervals, depending on straightness of run and need for cable taps. There is also an 800-foot long government 4.16 kV distribution line, mentioned above, on the Forest Glen Annex. This line is connected to the 4.16 kV sub-station in Building 180 through a government owned feeder in the historic area.

Approximately seventeen government owned transformers at Forest Glen step-down the 13.2 kV or 4.16 kV distribution power to utilization voltages of 480/277v or 208/120v. Additional transformers are being installed to serve the WRAIR facility.

There are approximately 138 pole-mounted streetlights and pole mounted protective/floodlights on the WRAMC Forest Glen Annex which are included in the privatization action. There are additional security lights mounted on the buildings or otherwise fed from breaker panels/switchgear within the buildings, which are not included in the privatization action.

### J02.2.1.2 Inventory

**Table 1** provides a general listing of the major electrical system fixed assets for the Walter Reed Army Medical Center Forest Glen Annex electrical distribution system included in the purchase. The system will be sold in an “as is, where is” condition without any warrant, representation, or obligation on the part of the Government to make any alterations, repairs, or improvements. All ancillary equipment attached to and necessary for operating the system, though not specifically mentioned here in, is considered part of the purchased utility.

**TABLE 1**
Fixed Inventory
Electrical Distribution System Inventory, WRAMC Forest Glen Annex

| ITEM | SIZE | QTY. | UNIT | APPROXIMATE YEAR OF CONSTRUCTION |
|---|---|---|---|---|
| **POLE MOUNTED TRANSFORMERS** | | | | |
| 4160 pri 480/277 sec | 75KVA | 1 | ea | 1988 |
| **PAD MOUNTED TRANSFORMERS** | | | | |
| 13.2Kv pri 208/120 sec | 50KVA | 3 | ea | 1997 |
| 13.2Kv pri 208/120 sec | 75KVA | 2 | ea | 1988 |
| 13.2Kv pri 208/120 sec | 100KVA | 6 | ea | 1996 |
| 13.2Kv pri 208/120 sec | 112.5KVA | 1 | ea | 1990 |
| 13.2Kv pri 208/120 sec | 112.5KVA | 1 | ea | 1988 |
| 13.2Kv pri 208/120 sec | 150KVA | 4 | ea | 1990 |
| 4160 pri 208/120 sec | 300KVA | 1 | ea | 1990 |
| 13.2Kv pri 208/120 sec | 300KVA | 1 | ea | 1996 |
| 13.2Kv pri 208/120 sec | 300KVA | 1 | ea | 1990 |
| 13.2Kv pri 208/120 sec | 300KVA | 1 | ea | 1980 |
| 13.2Kv pri 208/120 sec | 500KVA | 2 | ea | 1980 |
| 13.2Kv pri 480/277 sec | 750KVA | 1 | ea | 1997 |
| 13.2Kv pri 208/120 sec | 750KVA | 2 | ea | 1995 |
| 13.2Kv pri 480/277 sec | 750KVA | 1 | ea | 1987 |
| 13.2Kv pri 480/277 sec | 750KVA | 1 | ea | 1980 |
| 13.2Kv pri 480/277 sec | 1000KVA | 1 | ea | 1988 |
| 13.2Kv pri 480/277 sec | 1500KVA | 1 | ea | 1988 |
| **DISTRIBUTION POLES** | | unknown | | |
| **UNDERGROUND DISTRIBUTION SYSTEM CONDUCTORS** | | | | |
| | 3 #3/0 AWG | 6,700 | LF | 1998 |

**SWITCHGEAR** ----------See paragraph J02.2.1.1 for description----------

**Notes:**

ea = each
LF = linear feet
Note 1:There are approximately 138 pole mounted streetlights/floodlights/protective lights fed from sources external to the buildings. Lights are of various configurations, capacities, and ages. (There are additional lights, fed from sources within the buildings, that are not part of the privatization action).

## J02.2.2 Electrical Distribution System Non-Fixed Equipment and Specialized Tools Inventory

**Table 2** lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

**TABLE 2**
Spare Parts
Electrical Distribution System WRAMC Forest Glen Annex

| Qty | Item | Make/Model | Description | Remarks |
|---|---|---|---|---|
| None Identified | | | | |

**TABLE 3**
Specialized Equipment and Vehicles
Electrical Distribution System WRAMC Forest Glen Annex

| Description | Quantity | Location | Maker |
|---|---|---|---|
| None Identified | | | |

## J02.2.3 Electrical Distribution System Manuals, Drawings, and Records Inventory

**Table 4** lists the manuals, drawings, and records that will be transferred with the system.

**TABLE 4**
Manuals, Drawings, and Records
Electrical Distribution System WRAMC Forest Glen Annex

| Qty | Item | Description | Remarks |
|---|---|---|---|
| Miscellaneous | Manuals, Drawings, and Records, which are included in the Technical Library | | |

# J02.3 Specific Service Requirements

The service requirements for the Walter Reed Army Medical Center Forest Glen Annex electrical distribution system are as defined in Section C, *Description/Specifications/Work Statement.*

# J02.4 Current Service Arrangement

Currently, Potomac Electric Power Company supplies electric service to the Walter Reed Army Medical Center Forest Glen Annex. The annual consumption at the Forest Glen Annex in FY98 was approximately 18,503,271 kilowatt-hours (kWh). The peak demand for FY98 was approximately 1,909,877 kilowatt-hours (kWh), occurring in June 1998.

# J02.5 Secondary Metering

The Base may require secondary meters for internal billings of their reimbursable customers, utility usage management, and energy conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Paragraph C.3.

## J02.5.1 Existing Secondary Meters

**Table 5** provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings once a month for all secondary meters IAW Paragraph C.3 and J02.6 below.

**TABLE 5**
Existing Secondary Meters
Electrical Distribution System WRAMC Forest Glen Annex

| Meter Location | Meter Description |
|---|---|
| None identified | |

## J02.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in Table 6. New secondary meters shall be installed IAW Paragraph C.13, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraph C.3 and J02.6 below.

**TABLE 6**
New Secondary Meters
Electrical Distribution System WRAMC Forest Glen Annex

| Meter Location | Quantity | Meter Description |
|---|---|---|
| Bldg 511 | 1 | |
| Bldg 163 | 1 | |
| Bldg 500 | 1 | |
| Bldg 501 | 1 | |
| Bldg 161 | 1 | |

**TABLE 6** (cont'd)
New Secondary Meters
Electrical Distribution System WRAMC Forest Glen Annex

| Meter Location | Quantity | Meter Description |
|---|---|---|
| Bldg 606 | 1 | |
| Bldg 162 | 1 | |
| Bldg 512 | 1 | |
| Bldg 172 | 1 | |
| Bldg 508 | 1 | |
| Bldg 601 | 1 | |
| Bldg 156 | 1 | |
| Bldg 509 | 1 | |
| Bldg 503 | 3 | |
| Ballfield | 1 | Pole mounted |
| Bldg 178 | 1 | |
| Bldg 510 | 1 | |
| Bldg 164 | 1 | |
| Bldg 605 | 1 | |
| Bldg 506 | 1 | |
| Bldg 508 | 1 | |

# J02.6 Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW Paragraph G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to the person identified at time of contract award.

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to the person identified at time of contract award.

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all identified secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to the person identified at time of contract award.

# J02.7 Energy Savings Projects

IAW Paragraph C.3, Requirement, the following projects have been implemented on the distribution system by the Government for energy conservation purposes.

?? None

# J02.8 Service Area

IAW Clause C.4, Service Area, the service area is defined as all areas within the Forest Glen Annex boundary.

# J02.9 Off-Installation Sites

The Walter Reed Army Medical Center Main Campus is located in Washington, D.C.

# J02.10 Specific Transition Requirements

IAW Clause C.13, Transition Plan, **Table 7** lists service connections and disconnections required upon transfer of the Walter Reed Army Medical Center electrical distribution systems.

**TABLE 7**
Service Connections and Disconnection's
Electrical Distribution System WRAMC Forest Glen Annex

| Location | Description |
|---|---|
| None Identified | |

# J02.11 Government Recognized System Deficiencies

**Table 8** provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated

with the Walter Reed Army Medical Center Forest Glen Annex Electrical Distribution System. If the utility system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewal and Replacement Plan process and will be recovered through Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AC.

**TABLE 8**
System Deficiencies
Electrical Distribution System WRAMC Forest Glen Annex

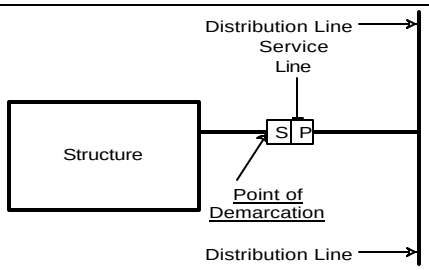
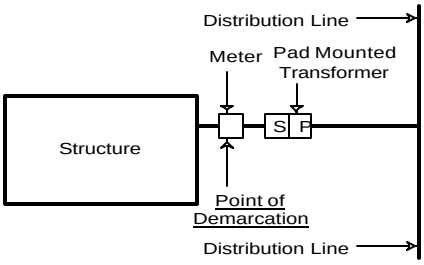
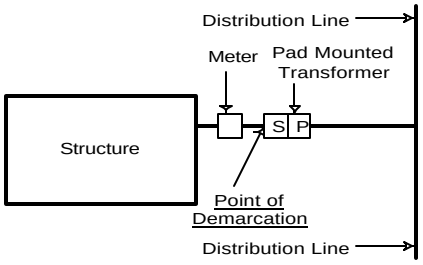
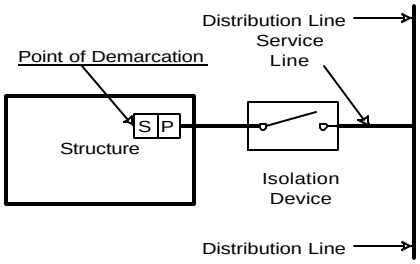
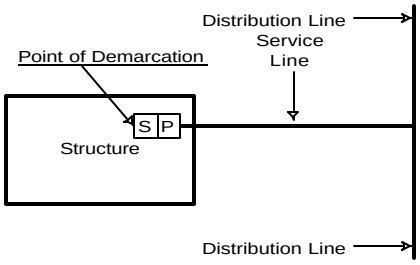
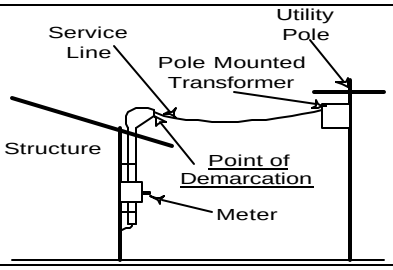
| Project Location | Project Description |
|---|---|
| None Identified | |

# J02.12 Electric Distribution System Points of Demarcation

The point of demarcation is defined as the point on the distribution system where ownership changes from the Grantee to the building owner. This point of demarcation will typically be at the point the utility enters a building structure or the load side of a transformer within a building structure. **Table 9** identifies the type and general location of the point of demarcation with respect to the building for each scenario. **Table 10** lists anomalous points of demarcation that do not fit any of the scenarios of Table 9. **Table 11** includes any parcels of land that the Grantee will need to be granted exclusive use under the right-of-way.

**TABLE 9**
Points of Demarcation
Electrical Distribution System WRAMC Forest Glen Annex

| Point of Demarcation | Applicable Scenario | Sketch |
|---|---|---|

| Point of Demarcation | Applicable Scenario | Sketch |
|---|---|---|
| Point of demarcation is the transformer secondary terminal spade. | Pad Mounted Transformer located outside of structure with underground service to the structure and no meter exists. |  |
| Down current side of the meter | Residential service (less than 200 amps and 240V 1-Phase), and three phase self contained meter installations. Electric Meter exists within five feet of the exterior of the building on an underground secondary line. |  |
| Point of demarcation is the transformer secondary terminal spade. | Three Phase CT metered service. |  |
| Secondary terminal of the transformer inside of the structure | Transformer located inside of structure and an isolation device is in place with or without a meter<br><br>Note: Utility Owner must be granted 24-hour access to transformer room. |  |
| Secondary terminal of the transformer inside of the structure | Transformer located inside of structure with no isolation device in place.<br><br>Note: Utility Owner must be granted 24-hour access to transformer room. |  |
| Point of demarcation is the point where the overhead conductor is connected to the weatherhead. | Electric meter is connected to the exterior of the building on an overhead secondary line. |  |

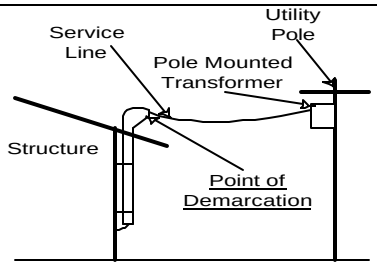
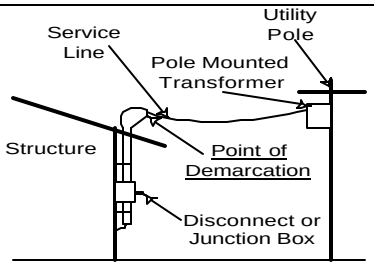
| Point of Demarcation | Applicable Scenario | Sketch |
|---|---|---|
| Point of demarcation is the point where the overhead conductor is connected to the weatherhead. | Pole Mounted Transformer located outside of structure with secondary attached to outside of structure with no meter. |  |
| Point of demarcation is the point where the overhead conductor is connected to the weatherhead. | Service may be overhead or underground. A disconnect switch or junction box is mounted to the exterior of the structure with no meter. |  |

**TABLE 10**
Anomalous Points of Demarcation
Electrical Distribution System WRAMC Forest Glen Annex

| Building No. | Point of Demarcation Description |
|---|---|
| None | |

**TABLE 11**
Plants
Electrical Distribution System WRAMC Forest Glen Annex

| Description | Facility # | State Coordinates | Other Information |
|---|---|---|---|
| None | | | |