## Electric Guidelines for new homes and service upgrades: Village of Dwight (rev. 10/2004)

Art. #1

Minimum 200 Amp service entrance for all new homes. Existing homes may upgrade to 100 amp or 200 amp. 100 amp Services shall not contain more than 20 circuits. All outside wiring shall be in conduit. Meter socket must be CECHA approved Art #2

Service ground rod must be of 5/8" X 8' copper with #4 AWG bare copper wire attached and terminated at the meter ground lug. An approved ground clamp shall be visible above grade level. The top of the rod shall be no more than 4" above grade.

Art. #3

If the main service panel is more than five (5) feet from the meter socket, a main disconnect switch (either fuse or circuit breaker) must be installed at the meter socket. (note) where aluminum wire is used for service entrance conductors, a non oxidizing coating shall be put on cables at all lug locations.

Art. #4

All outside wiring shall be in conduit.

Art. #5

All receptacle circuits in kitchens, dining areas, garages and basements shall be #12 AWG wire protected by 20 amp over current protection (fuse or circuit breaker)

Art. #6

#14 AWG wire will be allowed on lighting circuits, bedrooms corridors and other areas not covered by the above 20 amp paragraph, when protected by maximum 15 amp over current protection (fuse or circuit breaker)

Art. #7

All metal boxes shall be grounded and shall be large enough to accommodate the number of wires installed. Where plastic boxes are used, ground wires will be attached to the yoke of the installed devices, (switches, receptacles lighting fixtures or other device)

Art. #8

Each of the following shall have a designated circuit: Refrigerator, Microwave, Dishwasher, Garbage disposal, Garage door opener, and/or anything requiring a motor circuit.

Art. #9

Kitchen counter areas shall have at least two 20 amp circuits and protected by GFCI in addition to Art. #8

Art. #10

Outdoor receptacles shall be GFCI protected

Art. #11

All garage receptacles shall be a minimum of 18 inches from floor and GFCI protected.

Art. #12

<u>Smoke Detectors</u> shall be placed in each bedroom, stairwells and basement area. They shall be 120 volt detectors with battery backup, and wired so that any tripped alarm will sound all alarms. <u>Separate circuit required</u>. 14/3G AWG. minimum Art. #13

No wiring or boxes will be allowed in any plenum (return air) except in conduit or MC cable.

Art. #14

Closet lights shall be totally enclosed-no bare bulbs. Incandescent surface mounted fixtures, fluorescent or recessed fixtures are allowed

Surface mounted fixtures will be placed a minimum of 12 inches horizontally and vertically from shelves and/or rods.

Art. #15

<u>Basement wiring</u>. All exposed basement wiring on concrete or cement block walls shall be in conduit. All receptacles in unfinished basement areas shall be GFCI protected.

Art. #16

<u>Underground wiring</u> between principle residence and any out buildings or between out buildings shall be protected with metal or PVC conduit where entering or leaving building.

Art. #17

Hot tubs and/or swimming pools will be wired in strict accordance with the latest National Electric Code requirements

Art. #18 Arc fault circuit interrupters (AFCI) will be required for all 15 and/or 20 amp bedroom receptacles.

NOTE: A. Receptacle and switch boxes where GFCI's or dimmers are installed require deeper boxes.

B. Any question or wiring circumstance not covered here-in, shall be referred to the latest edition of the National Electric Code.

THESE REQUIREMENTS ARE TAKEN FROM THE 2002 NATIONAL ELECTRIC CODE, BOCA(national building code) AND/OR

MINIMUM VILLAGE REQUIREMENTS.