APPENDIX G

SWIMMING POOLS, SPAS AND HOT TUBS

(The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.)

SECTION AG101
GENERAL

AG101.1 General. The provisions of this appendix shall control the design and construction of swimming pools, spas and hot tubs installed in or on the *lot* of a one- or two-family dwelling.

AG101.2 Pools in flood hazard areas. Pools that are located in flood hazard areas established by Table R301.2(1), including above-ground pools, on-ground pools and in-ground pools that involve placement of fill, shall comply with Sections AG101.2.1 or AG101.2.2.

Exception: Pools located in riverine flood hazard areas which are outside of designated floodways.

AG101.2.1 Pools located in designated floodways. Where pools are located in designated floodways, documentation shall be submitted to the *building official*, which demonstrates that the construction of the pool will not increase the design flood elevation at any point within the *jurisdiction*.

AG101.2.2 Pools located where floodways have not been designated. Where pools are located where design flood elevations are specified but floodways have not been designated, the applicant shall provide a floodway analysis that demonstrates that the proposed pool will not increase the design flood elevation more than 1 foot (305 mm) at any point within the *jurisdiction*.

SECTION AG102
DEFINITIONS

AG102.1 General. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

ABOVE-GROUND/ON-GROUND POOL. See "Swimming pool."

BARRIER. A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

HOT TUB. See "Swimming pool."

IN-GROUND POOL. See "Swimming pool."

RESIDENTIAL. That which is situated on the premises of a detached one- or two-family dwelling or a one-family *townhouse* not more than three stories in height.

SPA, NONPORTABLE. See "Swimming pool."

SPA, PORTABLE. A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating *equipment* are an integral part of the product.

SWIMMING POOL. Any structure intended for swimming or recreational bathing that contains water over 24 inches (610 mm) deep. This includes in-ground, above-ground and on-ground swimming pools, hot tubs and spas.

SWIMMING POOL, INDOOR. A swimming pool which is totally contained within a structure and surrounded on all four sides by the walls of the enclosing structure.

SWIMMING POOL, OUTDOOR. Any swimming pool which is not an indoor pool.

SECTION AG103
SWIMMING POOLS

AG103.1 In-ground pools. In-ground pools shall be designed and constructed in conformance with ANSI/NSPI-5 as listed in Section AG108.

AG103.2 Above-ground and on-ground pools. Above-ground and on-ground pools shall be designed and constructed in conformance with ANSI/NSPI-4 as listed in Section AG108.

AG103.3 Pools in flood hazard areas. In flood hazard areas established by Table R301.2(1), pools in coastal high hazard areas shall be designed and constructed in conformance with ASCE 24.

SECTION AG104
SPAS AND HOT TUBS

AG104.1 Permanently installed spas and hot tubs. Permanently installed spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-3 as listed in Section AG108.

AG104.2 Portable spas and hot tubs. Portable spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-6 as listed in Section AG108.

SECTION AG105
BARRIER REQUIREMENTS

AG105.1 Application. The provisions of this chapter shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.

AG105.2 Outdoor swimming pool. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219 mm) above *grade* measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of

the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).

2. Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.
3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed $1^3/_4$ inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed $1^3/_4$ inches (44 mm) in width.
5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed $1^3/_4$ inches (44 mm) in width.
6. Maximum mesh size for chain link fences shall be a $2^1/_4$-inch (57 mm) square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than $1^3/_4$ inches (44 mm).
7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than $1^3/_4$ inches (44 mm).
8. Access gates shall comply with the requirements of Section AG105.2, Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:
   8.1. The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate; and
   8.2. The gate and barrier shall have no opening larger than $^1/_2$ inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.
9. Where a wall of a *dwelling* serves as part of the barrier, one of the following conditions shall be met:
   9.1. The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346; or
   9.2. Doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed and *labeled* in accordance with UL 2017. The deactivation switch(es) shall be located at least 54 inches (1372 mm) above the threshold of the door; or
   9.3. Other means of protection, such as self-closing doors with self-latching devices, which are *approved* by the governing body, shall be acceptable as long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described above.
10. Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps:
   10.1. The ladder or steps shall be capable of being secured, locked or removed to prevent access; or
   10.2. The ladder or steps shall be surrounded by a barrier which meets the requirements of Section AG105.2, Items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

AG105.3 Indoor swimming pool. Walls surrounding an indoor swimming pool shall comply with Section AG105.2, Item 9.

AG105.4 Prohibited locations. Barriers shall be located to prohibit permanent structures, *equipment* or similar objects from being used to climb them.

AG105.5 Barrier exceptions. Spas or hot tubs with a safety cover which complies with ASTM F 1346, as listed in Section AG107, shall be exempt from the provisions of this appendix.

SECTION AG106
ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS

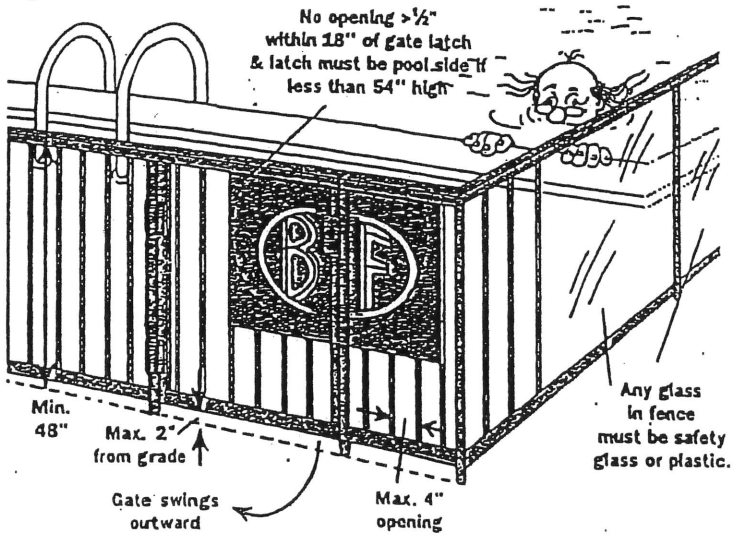
AG106.1 General. Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

Swimming Pool Barriers

The Consumer Product Safety Commission has reported that drowning is the leading cause of accidental death in and around the home for children under the age of 5 years in California, Arizona, and Florida. Seventy five percent of the children involved in swimming pool submersion or drowning accidents are between 1 and 3 years old. Victims had been missing for five minutes or less when they were found in the pool drowned or submerged. Other bodies of water, such as fish ponds and fountains, have the same potential drowning hazards as pools.

General	IRC	UBC
☐ Applies to all pools or spas >24in deep	[AG102.1]	(420)
☐ Fence min 48in high	F80 [AG105.2]	(421.1#1)
☐ Gap under fence max 2in above grade (4in if concrete)	F80 [AG105.2]	(421.1#1)
☐ Bottom max 4in above pool structure when mounted on top of pool	[AG105.2]	(421.1#1)
☐ Max opening size must prevent passage of 4in sphere	F80 [AG105.2]	(421.1#1)
☐ Difficult to climb over (no ladder type rails)	F80 [AG105.2]	(421.1#1)
☐ Chain link max 1¼sq.in mesh unless filled with slats	[AG105.2]	(n/a)
☐ Gate lockable, self-closing, open away from pool	F80 [AG105.2]	(421.1#4)
☐ If latch <54in high: Must be poolside & min 3in below top	F80 [AG105.2]	(421.1#4)
☐ No openings >½in within 18in of latch	[AG105.2]	(421.1#4)
☐ Doors & screens with direct pool access req. alarm audible for 30 seconds throughout house	[AG105.2]	(421.1#5X)
☐ Alarm control min 54in high, must reset automatically EXC	[AG105.2]	(421.1#5X)
Doors from interior w/self close and release ≥54in above floor	[AG105.2]	(421.1#5X)
☐ If above ground pool ladder or steps must be lockable or barrier	[AG105.2]	(421.1#6)
☐ Safety glazing req'd for glass enclosing pool	F80 [308.4]	(2406.4)

Fig. 80 • Pool Barriers



General Habitability Requirements

☐ Heat req'd in habitable rooms 68° (70°) 3ft above floor	[303.8]	(310.11)
☐ Min one room ≥120sq ft	[304.1]	(310.6.2)
☐ Habitable rooms exc kitchens min 70sq ft & min dimension 7ft	[304.2,3]	(310.6.2,3)
☐ Ceiling height habitable spaces min 7ft (7ft 6in)	[305.1]	(310.6.1)
☐ Kitchens, baths, & hallways min ceiling height 7ft EXC	[305.1]	(310.6.1)
6ft 8in OK in baths over fixture & front clearance area	[305.1]	(Ø)
☐ Ceiling height unfinished basements min 6ft 8in	[305.1]	(n/a)

Smoke Detectors

The building codes provide occupants with minimum require from fire. Included in these requirements is installation of Smoke detectors should be tested often to check proper op

☐ Hard wired power req'd plus battery backup		[313
☐ Req'd in each sleeping room & adjoining area	F81	[313
☐ Min one detector each story & basement	F81	[313
☐ Must be interconnected & audible from sleeping rooms		[313
☐ Battery powered OK for remodel		[313
☐ Compliance req'd for work (>$1,000) requiring permit or when alterations create an additional bedroom		[313.1

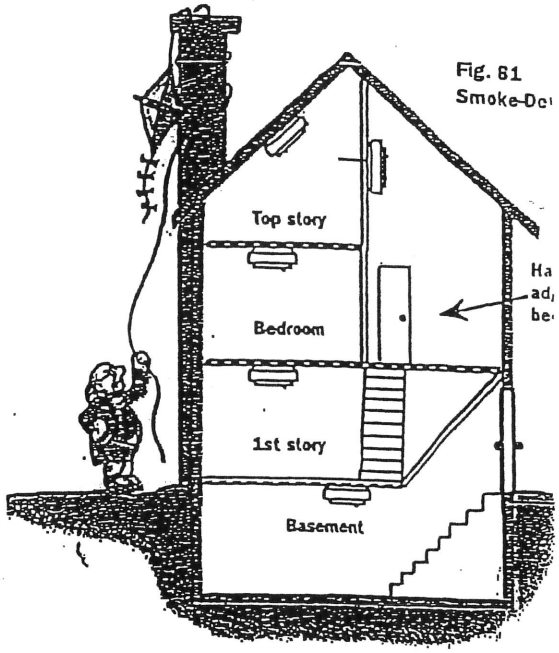


Fig. 81
Smoke-De

Final Inspection

☐ Paperwork—special inspection reports on file	[109
☐ Floor finishes that affect stairs or landings must be complete	[109.1
☐ Appliances and fixtures must be in place	[109.1
☐ Exterior pipe penetrations must be caulked	[2606
☐ Wood siding and trim min 6in from earth	[323.
☐ Smoke detectors installed and operational	F81 [313
☐ Exterior doors and windows must be weather tight	[1102.1.1
☐ Building address numbers legible from street	[321

Table 22.3 Special Inspection Reports

S.I. reports due before final inspection	Required
Concrete [1910.5]	
Pilings, drilled piers & caissons	
Structural masonry	
Bolts in concrete	
Shotcrete, Welding, Post Moment frames	
Glu-Lam certificate	
Shear walls [2107]	
High-strength bolting	
Prestressed concrete [1909.17] windows	
EIFS	

Municipality: Maidencreek Township County: Berks Permit No: _____

ZONING PERMIT APPLICATION

A. LOCATION AND OWNERSHIP OF PROPOSED WORK OR IMPROVEMENT

Street and Number: _____

Deed Owner(s)Name&Address _____

Applicant(s)Name&Address _____

Phone Number _____ Cell Phone Number _____

Zoning District (as shown on Zoning Map): _____

Present Tenant: _____

B. PRESENT USE OF LAND ___Residential ___Commercial

Present use of structure: _____

Number of Families: _____

Present Building (Description):_____

Present Use of Land:_____

Is any portion of the property located in a FEMA Flood Plain? ___Yes ___No

Is the site located within a Historic District? ___Yes ___No

C. PROPOSED WORK OR IMPROVEMENT (check one)

___New Construction ___Addition ___Interior Alteration ___Exterior Alteration

___Fence ___Accessory Structure ___ Deck Cost of Construction $ _____

___Sign (Drawing of sign must be submitted with this application)

___Change in Use Present Use_____Proposed Use_____

Describe proposed work: _____

_____

Is the proposed structure or use located in FEMA designated flood plain __Yes __No

D. PROJECT DIMENSIONS

PLOT DIMENSIONS	SETBACKS	DIMENSIONS
Frontage _____ ft.	Front _____ ft.	Width_____ ft.
Depth _____ ft.	Side A_____ ft.	Depth_____ ft.
Area _____ sq. ft.	Side B_____ ft.	Height_____ ft.
Irregular plot _____	Rear _____ ft.	Stories_____

SIGNAGE:

Type: _____

Number: _____ Size: _____ sq. ft.

E. APPLICATION

Application is hereby made for a permit to erect or alter a structure which shall be located as shown on diagram on reverse side of this sheet and/or to use the premises for the purposes described herewith. The information which follows, together with local diagram, is made part of this application by the undersigned. It is understood and agreed by this applicant that any error, misstatement or misrepresentation of material fact, either with or without intention on the part of this applicant, may cause refusal of this application, or any change in the location, size or use of structure or land made subsequent to the issuance of this permit, without the approval of the Zoning Officer, shall constitute sufficient grounds for the revocation of permit.

Applicant's Signature _____ Date_____

Owner, Lessee or authorized agent for owner of subject property

F. PLOT PLAN SKETCH

Note: The property owner and applicant assumes the responsibility of locating all property lines, easements, rights-of-way, flood areas, etc. Property owner and applicant shall not construct or erect structures or encroach into the Municipality's right-of-ways.

G. APPLICATION AND DATES OF ACTION TAKEN (OFFICIAL USE ONLY)

Application approved: ___Yes No.___ _____ _____
Zoning Official Signature Date

If denied, Reason for Denial of Application:_____

_____

NOTE: The applicant has the right to appeal the denial of this application to the Municipality's Zoning Hearing Board within 30 days from the date of denial pursuant to procedures set forth in the Pennsylvania Municipalities Planning Code, as amended.

Applied to Zoning Hearing Board:_____Date:_____Appeal___Yes ___No

Board's Decision: ___Granted ___Denied Date: _____

Order: _____

_____

Please note: all applications are to be submitted to and all inspections are to be called into Maidencreek Township Office at the address and phone number listed below.

Maidencreek Township
1 Quarry Road
P.O. Box 319
Blandon, PA 19510
Phone (610) 926-4920
Fax (610) 926-6314

Great Valley Consultants
75 Commerce Drive
Wyomissing, PA 19610
Phone 610-375-8822
Fax 610-375-8977

Municipality: _____ County: _____ Permit No.: _____

BUILDING CODE PERMIT APPLICATION

A. LOCATION OF PROPOSED WORK OR IMPROVEMENT

Site Address: _____ Tax Parcel #: _____
Lot No.: _____ Sub-Division: _____ Phase: _____ Section: _____

Owner: _____ Phone #: _____ Fax #: _____
Mailing Address: _____ E-Mail: _____

Contractor: _____ Phone #: _____ Fax #: _____
Mailing Address: _____ E-Mail: _____

Contractor Registration Number: _____
Architect: _____ Phone #: _____ Fax #: _____
Mailing Address: _____ E-Mail: _____

B. TYPE OF WORK OR IMPROVEMENT (*Check One*)

☐ New Construction ☐ Addition ☐ Alteration ☐ Repair
☐ Demolition ☐ Relocation ☐ Foundation Only
☐ Plumbing ☐ Electrical ☐ Mechanical

Describe proposed work: _____
_____

C. DESCRIPTION OF BUILDING USE

RESIDENTIAL

☐ One-Family Dwelling ☐ Two-Family Dwelling ☐ Townhouse
☐ Accessory Structure ☐ Carport ☐ Deck
☐ Other – *Specify*: _____
_____

NON-RESIDENTIAL

Specific Use: _____ Use Group: _____
Change in Use: ☐ Yes ☐ No If yes, indicate former use.: _____
Maximum Occupancy Load: _____ Maximum Live Load: _____

D. ESTIMATED COST OF CONSTRUCTION (*reasonable fair market value*):

Building: $_____
Improvement: $_____
Plumbing: $_____
Electrical: $_____
HVAC $_____
TOTAL: $_____

E. BUILDING DIMENSIONS

Existing Building Area: _____sq. ft. Number of Stories: _____
Proposed Building Area: _____sq. ft. Height of Structure Above Grade: _____ft.
Total Building Area: _____sq. ft. Area of Largest Floor: _____sq. ft.

F. BUILDING/SITE CHARACTERISTICS

Number of Residential Dwelling Units: _____Existing, _____Proposed
Number of Additional Bedrooms: _____
Mechanical: Indicate Type of Heating/Ventilating/Air Conditioning (*i.e. electric, gas, oil, etc.*): _____
Water Service (*Check one*): ☐ Public ☐ Private
Sewer Service (*Check one*): ☐ Public ☐ Private (*Septic Permit #*_____)
Distance from Project: ☐ To Well ☐ To Septic Tank ☐ To Drain Field
Fireplace(s): Quantity _____ Type of Fuel _____ Type of Vent _____
Elevators/Escalators/Lifts/Moving walks (*Check one*): ☐ Yes ☐ No
Sprinkler System: ☐ Yes ☐ No
Pressure Vessels (e.g. water heater): ☐ Yes ☐ No
Refrigeration Systems (e.g. air conditioning): ☐ Yes ☐ No

Municipality: _____ County: _____ Permit No.: _____

G. HISTORIC DISTRICT

Is the site located within a Historic District? ☐ Yes ☐ No

If construction is proposed within a Historic District, the Municipality may require a certificate of appropriateness

H. FLOOD PLAIN

Is the site located within an identified flood hazard area? (*Check one*): ☐ Yes ☐ No ☐ N/A

Will any portion of the flood hazard area be developed? (*Check one*): ☐ Yes ☐ No ☐ N/A

Owner/Agent shall verify that any proposed construction and/or development activity complies with the requirements of the National Flood Insurance Program and the Pennsylvania Flood Plain Management Act (Act 166-1978), specifically Section 60.3.

Lowest Floor Level: _____

I. CONSTRUCTION PLANS AND SPECIFICATIONS (3-Copies Required)

Construction plans and specifications must be attached illustrating elevations, floorplans, electrical, plumbing, mechanical layouts, energy code compliance data, design loads and calculations, window and door schedule, typical cross sections, typical footer and foundation details.

J. SITE PLAN

Site plans must be attached, showing the size and location of the new construction and existing structures on the site and the structure's distance from the property lines.

K. WORKER'S COMPENSATION INSURANCE COVERAGE

All applicants are required to submit evidence of Worker's Compensation Insurance Coverage as directed by PA ACT 44.

L. CERTIFICATION AND/OR ACKNOWLEDGMENT

Application for a permit shall be made by the *owner* or lessee of the building or structure, or *agent* of either, or by the *registered design professional* employed in connection with the proposed work.

The applicant certifies that all information on this application is correct and the work will be completed in accordance with the "approved" construction documents and PA Act 45 (Uniform Construction Code) and any additional approved building code requirements adopted by the Municipality. **Issuance of a permit and approval of construction documents shall not be construed as authority to violate, cancel or set aside any provisions of the codes or ordinances or the Municipality or any other governing body.** The applicant certifies he/she understands all the applicable codes, ordinances and regulations.

The property owner and applicant assumes the responsibility of locating all property lines, setback lines, easements, rights-of-way, flood areas, etc. Property owner and applicant shall not construct or erect structures or encroach into the Municipality's right-of-ways.

Authorized Agent Acknowledgment – I hereby certify that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as an authorized agent and agree to conform to all applicable regulations set forth by PA ACT 45.

I certify that the code administrator or the code administrator's authorized representative shall have the authority to enter areas covered by such permit at any reasonable hour to enforce the provisions of the code(s) applicable to such permit.

_____ _____

Signature of Owner or Authorized Agent Print Name of Owner or Authorized Agent

_____ _____

Address Date

OFFICIAL USE ONLY

BUILDING Permit Approval: _____ _____

Code Enforcement Officer Date

***Please note: all applications are to be submitted to and all inspections are to be called into Maidencreek Township Office, 1 Quarry Road, PO Box 319, Blandon, Pa 19510 610-926-4920.**

Maidencreek Township
1 Quarry Road
PO Box 319
Blandon , Pa 19510
Phone (610)926-4920
Fax (610)926-6314

Great Valley Consultants
75 Commerce Drive
Wyomissing, PA 19610
Phone 610-375-8822
Fax 610-375-8977

PERMIT NO. _____

ELECTRICAL PERMIT APPLICATION

Property Owner _____ Phone No. _____

Address _____

Property Location _____

Subdivision/Development _____

Electrical Contractor _____ Registration No. _____

Address _____ Phone No. _____

NEW ☐ ALTERATION ☐ ADDITION ☐ REPAIR ☐

Use of Property: Residential ☐ Commercial ☐ Industrial ☐

TYPE OF EQUIPMENT		NUMBER
Receptacle	Total Outlets	
Switch		
Lighting Fixtures	Total Fixtures	
Ranges		
Clothes Dryer		
Water Heater		
Garbage Disposal		
Sta. Cook Top		
Dishwasher		
Clothes Washer		
Space Heater		
Sta. Appl. ½ H.P. Max		
Motors:	HP	
Signs:	No. Trans.	
	No. Lamps	
Temp. Power ☐ Pole ☐ Undgd.		
Service	0-200A	
	201-400A	
☐ New	401-600A	
☐ Change	Over 600A	
Permit Issuing Fee		
Total Fee		

NOTE: This permit is issued contingent upon all work being in compliance with the 2009 IRC or the 2008 NEC including all supplements and other applicable Township regulations.

Applicant certifies that all information given is correct and that all Township ordinances will be complied with in performing the work for which this permit is issued.

_____
Signature of Applicant

_____
Cost of Improvement

_____
Application Date

Approved _____

Denied _____

WORKER'S COMPENSATION INSURANCE COVERAGE INFORMATION

A. Is the applicant a contractor within the meaning of the Pennsylvania Worker's Compensation Law?

☐ Yes ☐ No

If the answer is "yes", complete Sections B, C, D and E below as appropriate.
If the answer is "no", complete Section E.

B. INSURANCE INFORMATION

Name of Applicant: _____

Federal or State Employer Identification Number: _____

Applicant is a qualified self-insurer for worker's compensation.
☐ Check if Certificate is attached.

Name of Worker's Compensation Insurer: _____

Worker's Compensation Insurance Policy Number: _____
☐ Check if Certificate is attached.

Policy Expiration Date: _____

C. Is the applicant using any subcontractor(s) on this project? ☐ Yes ☐ No

If the answer is "yes", the applicant hereby certifies that any and all subcontractors have presented proof to the applicant of insurance under the Pennsylvania Worker's Compensation Act.

D. EXEMPTION: Complete Section D if the applicant is a contractor claiming exemption from providing worker's compensation insurance.

The undersigned swears or affirms that he/she is not required to provide worker's compensation insurance under the provisions of the Pennsylvania Worker's Compensation Law for one of the following reasons, as indicated:

☐ Contractor with no employees. Contractor prohibited by law from employing any individual to perform work pursuant to this building permit unless contractor provides proof of insurance to the Municipality.

☐ Religious exemption under the Worker's Compensation Law.

Subscribed and sworn to before me this _____ day of _____, 20__

_____
Signature of Notary Public

My commission expires _____

(Seal)

E. SIGNATURE REQUIRED FOR ALL APPLICANTS.

Signature of Applicant _____

Address _____

_____

County _____ Municipality of _____

Great Valley Consultants
75 Commerce Drive
Wyomissing, PA 19610
Phone: 610-375-8822
Fax: 610-375-8977