

BERKELEY COUNTY SUBDIVISION & LAND DEVELOPMENT ORDINANCE

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Appendices

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ARTICLE 1 - TITLE, AUTHORITY, AND PURPOSE

Section 101. Title

An Ordinance establishing rules, regulations and standards governing the subdivision and development of land; setting forth the procedures to be followed in administering these regulations; and establishing the penalties for violations.

Section 102. Short Title

This Ordinance shall be known as and may be cited as “The Berkeley County Subdivision & Land Development Ordinance.”

Section 103. Legislative Authority

These subdivision regulations are established in pursuant to West Virginia Code § 8A-4-1 *et seq.*

Section 104. Statement of Purpose

The County Commission of Berkeley County, West Virginia, adopts these subdivision and land development regulations for the following purposes:

1. To govern land development according to the Goals, Policies and Recommendations stated in the Berkeley County Comprehensive Plan;
2. To assist in orderly and efficient land development;
3. To provide for the coordination of existing streets and public utilities with new streets and utilities;
4. To provide for efficient and orderly extension of community services and facilities at minimum cost and maximum convenience;
5. To ensure that proper provisions are made for drainage, water supply, sewage, and other needed improvements;
6. To promote the health and safety of the residents of Berkeley County; and
7. To ensure equitable processing of all subdivision and land development plats and plans by providing uniform procedures and standards for observance by both Subdividers/Developers and the Berkeley County Planning Commission.

Section 105. Jurisdiction

The provisions of this Ordinance shall apply to all lands within Berkeley County, West Virginia, except for lands that are within [incorporated areas](#).

Section 106. Interpretation

The provisions of this Ordinance shall be the minimum requirements to meet the objectives presented in Chapter 8A of West Virginia Code, and are the minimum requirements necessary for the promotion and protection of public health, safety and welfare. Where this Ordinance is more restrictive than any other Ordinance, regulation, or applicable land development agreement, this Ordinance shall be controlling. Where the provisions of any state statute, regulation, other County Ordinance or applicable land development agreement impose greater restrictions upon land development than this Ordinance, the provisions of the more restrictive authority shall be controlling.

All subjective decisions required by this Ordinance shall be made by majority vote of Planning Commission members present at a public meeting and the Planning Commission shall consider Planning Commission Staff, County Engineer, and any other evidence presented at the public meeting prior to making any decisions.

Section 107. Repeal of Conflicting Ordinances

All Ordinances or parts of Ordinances in conflict with this Ordinance, or inconsistent with the provisions of this Ordinance, are hereby repealed to the extent necessary to give this Ordinance full force and effect.

Section 108. Severability

If a court of competent jurisdiction declares any provisions of this Ordinance to be invalid, the effect of such decision shall be limited to those provisions, which are expressly invalidated by the decision, and all other provisions of this Ordinance shall remain in effect.

Section 109. Subdivision of Record

Any plat of a subdivision on record in the Office of the County Clerk prior to the effective date of this Ordinance shall be recognized as a legal subdivision, if it meets all legal requirements that were in place at the time the subdivision was created and recorded. However, the re-platting of a prior recorded plat or any material changes on the prior recorded plat shall be subject to this Ordinance. The prior recording of a plat of a portion of a larger tract shall not exempt the rest of the unplatted tract from the provisions of this Ordinance.

Section 110. Applicability of New versus Prior Ordinance

For purposes of this section, reference to the “prior Ordinance” shall mean the 2009 Berkeley County Subdivision Ordinance, as amended prior to adoption of this Ordinance.

Any project that has been submitted prior to the adoption of this Ordinance may proceed under the terms of the prior Ordinance.

Following the adoption of this Ordinance by the County Commission, a grace period of 90 days will be allowed during which the applicant may choose whether their submission will be subject to the prior Ordinance or this Ordinance. The decision to proceed under the prior Ordinance or this Ordinance is left to the discretion of the applicant in such cases.

If there are areas of a parcel proposed for development that are identified only as “future phases,” wherein proposed lot sizes and layouts, as well as road systems, utility provisions, etc. are not specified, these areas shall not be eligible for Planning Commission review and approval under the prior Ordinance.

ARTICLE 2 - DEFINITIONS

Active Recreation: Structured individual or team recreation activity that requires the use of special facilities, courses, fields, or equipment.

Administrative Subdivision: The subdivision of a parent tract into no more than 3 lots, in addition to the residual lot, which does not require the creation of any roads, does not require stormwater management, and does not require the expansion of any off-tract infrastructure.

Agent: Any person authorized by another to act for him or her.

Alley: A public way which is a narrow passage, usually smaller than a street, which is not designed for general travel but is used primarily as a means of access to the rear of residences and business establishments and which generally affords only a secondary means of access to an abutting property along its length.

Applicant: Any person who submits to the Planning Commission a Land Development Plan for the purpose of obtaining approval thereof.

As-Built: Revised set of drawings submitted by an engineer at the end of construction of a project which reflect all changes made during the construction process and show the exact dimensions, geometry, and location of all elements of the work completed under the approved plans.

Average Daily Trip (ADT): The average number of vehicles two-way passing a specific point in a 24-hour period. . In lieu of a TIS, the following shall apply:

- Single Family Houses (per unit): 10 trips per day, 1 per peak hour
- Apartments/Condos/Townhouses (per unit): 7 trips per day, 0.7 per peak hour
- Office (per 1,000-SF): 10 trips per day, 1.5 per peak hour
- Retail (per 1,000-SF): 38 trips per day, 4.2 per peak hour
- Industrial (per 1,000-SF): 5 trips per day, 0.9 per peak hour

Base Flood (100-year Flood): A flood having a one (1) percent chance of being equaled or exceeded in any given year based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), or by an engineering study. The national standard used by the National Flood Insurance Program and all Federal agencies for the purposes of requiring flood insurance.

Bond: [See Surety.](#)

Boundary Line Adjustment: An administrative procedure that allows changes in boundary lines between adjoining lots, parcels, or tracts, subject to certain conditions, resulting in an exchange of property between the affected lots. Boundary Line

Adjustments may also be used to consolidate existing, contiguous lots. Boundary Line Adjustments do not create additional lots, tracts or building sites.

Bridge: A structure that allows people or vehicles to cross an obstacle such as a river, road, canal, or railway.

Buffer: A strip of land, fence, border of trees, etc., between one land use and another, designed to set apart one use from another.

Building: A structure that is designated and suitable for the habitation or shelter of human beings or animals, the shelter or storage of property, or for the use and occupation of some purpose of trade or manufacture.

Building Restriction Line (BRL): [See Setback Line.](#)

Campground: Any area, place, parcel, or tract or land on which two (2) or more campsites or spaces are offered to the public for payments, occupied or intended for occupancy by camping units for temporary periods, but not for permanent residential use. A campground shall include, but not be limited to, any travel trailer camp, recreational camp, church camp, or family campground. A campground is so defined whether the campsite and facilities are granted free of charge, by rental fee, or by lease.

Camping Unit: Any device or vehicular-type structure used for the purpose of temporary living or shelter during periods of recreation, vacation, leisure time, or travel. Camping units shall include tents, tent-trailers, travel trailers, pick-up campers, motor homes, recreational vehicles, tiny homes on wheels, and mobile homes on wheels.

Campsite: A designated site or plot of ground within a campground that is used or intended for temporary occupation by a camping unit.

Cartway: [See Roadway.](#)

Cash in Escrow (cash surety): [See Surety.](#)

Cemetery: An area of land used as a burial ground.

Clearing: The cutting and/or removing of trees or vegetation without land disturbance.

Clear Sight Triangle: An area of unobstructed vision at street intersections defined by lines of sight between points at a given distance from the intersection of the centerline of streets.

Commercial Development: Any wholesale, retail, or service business established to carry on a trade for profit or non-profit organizations, including places of worship & residential rental communities.

Common Area/Ground: Property held in common by mutual ownership or by an association of property owners within a development or held in corporate ownership for the benefit of each owner within a development. Such property is privately held and not intended for public use.

Community Facilities: Existing, planned or proposed parks, playgrounds, schools, and other public lands and buildings of the County.

Community Water System: A well or wells created to serve a proposed development. A community well is subject to the jurisdiction of the West Virginia Public Service Commission, as set forth in W. Va. Code §16-13a-1, et. seq. and §24-1-1, et. seq.

Comprehensive Plan: The plan for the development of the area within the jurisdiction of the Berkeley County Planning Commission, adopted by the Planning Commission and the County Commission. [See website for the text of the Comprehensive Plan.](#)

Concept Plan: An initial map, drawing, or chart indicating existing features of a parcel or tract of land and its surroundings and the general layout of the proposed land development in sufficient detail to allow discussion and comment at a public hearing, but not to be presented for final or binding approval.

Conservation Easement: A non-possessory interest of a holder in real property imposing limitations or affirmative obligations for purposes which may include, but are not limited to, retaining or protecting the natural, scenic, or open space values of real property; assuring its availability for agricultural, forest, recreational, or open space use; or protecting its natural resources or wildlife. Government entities, charitable conservation agencies, or Farmland Protection boards may only hold conservation easements. [See W. Va. Code § 20-12-2.](#)

Corner Lot: A lot at the junction of streets abutting on two or more intersecting streets. The interior angle at the intersection must be less than 135 degrees to be designated a corner lot.

County Attorney: The County Commission's Legal Director or Deputy Legal Director.

County Commission: The County Commission of Berkeley County, West Virginia.

County Engineer: The engineer carrying out the duties and responsibilities under the Berkeley County Subdivision Regulations, including the County Engineer, engineering staff of the County Engineer, or engineering staff of the Planning Commission.

Covenant: An agreement, restriction, or condition placed on a parcel of land, which remains attached to the land and which entitles successive landowners to its benefits and/or obligations.

Day: A calendar day.

Dedication: The deliberate setting aside and appropriation of land by its owner for any general or public uses, reserving to himself no other rights than those compatible with the full exercise and enjoyment of the public uses to which the property has been devoted.

Developer: Any individual, firm, association, syndicate, partnership, corporation, trust, or any other legal entity or agent thereof proceeding under this Ordinance to affect a land development for himself or another. The term developer is intended to include the term “subdivider” and is frequently referred to as “applicant”.

Double Frontage Lot: A lot whose property lines abut on streets on more than one side.

Drainage: Any ditch, gutter, pipe, culvert, stormwater management facility, storm sewer, or other structure for diverting diffused waters from or carrying surface waters off streets, public rights-of-way, parks, lots, recreational areas, or any part of any land development or contiguous land areas.

Drainage Plan: A plan showing the proposed and existing drainage conditions as described by grades, contours, and topography with proposed methods and facilities to collect, control, and convey said drainage.

Driveway: A minor vehicular access providing ingress/egress between a street and parking area or garage within a lot or property.

Duplex: Two attached structures on one lot or on separate lots with a common party wall separating each unit.

Dwelling: Any building which contains one or more “dwelling units” used, intended, or designed to be built, used, rented, leased, let, or hired out to be occupied for living purposes.

Dwelling Units: Living quarters consisting of one or more rooms arranged for the use of one or more individuals living as an independent housekeeping unit, with cooking, living, sleeping, and sanitary facilities.

Easement: An interest in land owned by another person consisting in the right to use or control the land, or an area above or below it, for a specific limited purpose.

Encumbered Common Ground: [Common Area/Ground](#) that is encumbered by an above-grade improvement, enabling the area to be utilized as Open Space.

Emergency Access: An all-weather surface cartway capable of conveying standard fire and ambulance vehicles to access with a State maintained roadway in accordance with NFPA.

Engineer of Record (EOR): A professional engineer who seals the drawings, reports, or papers for a project. The seal signifies that an EOR developed, coordinated, or prepared drawings, reports, etc., for a project under the supervision of a professional engineer.

Erosion: The wearing away of topsoil and surface materials by the action of natural elements or by conditions imposed by human activities such as cutting, clearing, or grading.

Existing Manmade Features: Additions to or changes to the land created by people that may influence the design of the subdivision. Examples include but are not limited to power transmission towers or power lines, historic areas or features, sewers, water mains, culverts, utility lines, fire hydrants and cemeteries.

Existing Natural Features: Naturally occurring aspects of the land, including, but not limited to, forested areas, wetlands, water features, tree groves, swamps, outstanding topographic features, and sinkholes or depressions.

Factory Built Homes: Homes built in a factory and designed for long-term residential use such as:

Manufactured Homes: Built in a factory, transported to site and installed; See [Manufactured Homes](#)

Modular Homes: Built to federal, state, local, or regional code where the home will be located. Transported to site and installed.

Panelized Homes: Homes in which panels, whole walls with windows, doors, wiring, and outside siding, are transported to the site and assembled.

Pre-Cut Homes: Materials are factory-cut to design specifications, transported to the site and assembled. Includes kit, log, and dome homes.

Factory Built/Manufactured Home Rental Community: A parcel of land under single or common ownership upon which three or more factory-built homes are located on a continual, non-recreational basis together with any structure, equipment, road or facility intended for use incidental to the occupancy of the factory-built homes. This does not include premises used solely for storage or display or uninhabited factory-built homes, or premises occupied solely by a landowner and members of his family.

Family Transfer: The subdivision of land solely for transfer to a member or members of the immediate family of the owner of the lot.

Final Plan: A multi-page drawing signed and sealed by an engineer that includes all the technical details as required for the proposed subdivision and/or land development.

Final Plat: A complete subdivision plat for recordation signed and sealed by a surveyor, including all required supplementary data, which defines property lines, proposed streets and other improvements, and easements or a plan of private streets to be dedicated to public use.

Financing Lot Plat: A plat for recordation signed and sealed by a surveyor, used for the purpose of creating a parcel to be used as collateral when seeking construction funding for a project.

Floodplain: Any land area susceptible to inundation by water from any source. A general and temporary condition of partial or complete inundation of normally dry land areas from: 1) the overflow of inland or tidal waters and 2) the unusual and rapid accumulation or runoff of surface waters from any source.

Formal Application: An application is formal when the Planning Commission is assured that all plats, plans, and attendant documents are in proper form, content, and number required by these regulations.

Frontage: The horizontal or curvilinear distance measured along the street right-of-way line upon which the line abuts.

Grading: [See Land Disturbance.](#)

Grading Surety: [See Land Disturbance Surety.](#)

Gross Area: All area within a Land Development Plat, including those areas intended for residential, commercial, or industrial use. Gross area shall also include severe slopes, streets and alleys, off-street parking spaces, and recreational sites. Areas dedicated to county schools or highways shall be excluded from the gross area calculation.

Gross Density: The number of residential dwelling units divided by the gross area of the tract of land (in acres) within a development. This would include all nonresidential land uses and private streets of the development.

Gross Floor Area: The floor area within the inside perimeter of the exterior walls of the building, exclusive of vent shafts and courts, without deduction for corridors, stairways, closets, the thickness of the interior wall, columns, or other features.

Groundwater Protection Plan (GPP): A mandatory document required by the WV Department of Environmental Protection (WVDEP) Groundwater Program.

Groundwater Table, Seasonal: The upper level of an underground surface in which the soil or rocks become saturated with water frequently enough to exhibit inundation in the soil horizon.

Guest Residence: A single-family detached residence, in addition to the primary residence, which is under common ownership and on the same lot with the primary residence.

Habitable Square Footage: The sum of the floor areas of a dwelling unit as measured to the outside surfaces of exterior walls and including all rooms used for habitation, such as living room, dining room, kitchen, bedroom, bathroom, closets, hallways, stairways, but not including cellars, attics, or service rooms or areas, such as utility rooms, nor unheated areas such as enclosed porches.

Holder: As defined by W. Va. Code § 20-12-3, a holder is:

- a. a governmental body empowered to hold an interest in real estate; or
- b. a charitable corporation, association, or trust exempt from taxation pursuant to §501(c) of the Internal Revenue Code, the purposes or powers of which include protecting the natural, scenic, agricultural, or open space values of real property, assuring its availability for agricultural, forest, recreational, or open space use, or protecting its natural resources or wildlife.

Hydrogeologic Testing: An evaluation of groundwater quantity and quality and the potential effects that a proposed land development may have on water resources. The evaluation is based on both on-site hydrogeologic testing and existing background information.

Immediate Family: The following relations of a person only: grandparents, parents, spouses, children (natural or adopted), grandchildren, and siblings.

Improvements: Any additions to the natural state of the land, which increase its value or utility. Improvements include, but are not limited to pavements, curbs, gutters, sidewalks, crosswalks, water mains, sanitary and storm sewers, landscaping, and other appropriate facilities or plantings.

Impervious Surface: A surface that prevents or significantly impedes the infiltration of water into the underlying soil. Impervious surfaces include, but are not limited to: roads, driveways, parking area and other areas created using non-porous material; buildings, rooftops, structure, artificial turf, managed turf, and compacted gravel or soil.

Incorporated Areas: Areas within Berkeley County that are governed by municipal corporations under Chapter 8 of the West Virginia State Code.

Industrial Development: Any development of a use which would include but not be limited to, any manufacturing process, material processing, warehousing, research and testing laboratories, product distribution centers, woodworking shops, furniture assembly, machine shops, recycling centers, and uses of a similar nature.

Intermittent Stream: A stream which has flowing water during certain times of the year, but may have no flowing water at other times. .

Karst: A type of topography that forms as a result of solutional weathering of limestone, dolostone, and/or gypsum. Karst is characterized by soils of highly variable thickness, bedrock exposure, caves, sinkholes, sinking streams, large springs, and rapid groundwater movement.

Land Development: The development of one or more lots, tracts, or parcels of land by any means and for any purpose. Exclusions only apply with appropriate supporting documentation.

Land Disturbance: Any change of land surface that may result in soil erosion, including, but not limited to, removing stumps and root systems, excavation, filling, grading, and the construction of any structure.

Land Disturbance Surety: [Surety](#) required to obtain Land Disturbance Permit.

Letter of Credit: [See Surety](#).

Location Map: A drawing at a 1:600 scale that legibly shows, by dimension and/or other means, enough area beyond the bounds of the proposed land development to locate and orient the land development in Berkeley County and the relationship of the site to the community facilities that serve or influence the property. These community facilities include public road systems, public schools, retail and commercial areas, County and State parks, and any other public or private amenities of note.

Lot: A portion of a subdivision or other parcel of land legally described or delineated as a unit.

Lot Area: The area of a lot bounded by the front, side and rear lot lines, excluding any area within a street right-of-way, future street right-of-way, or floodplain, but including the area of any easement.

Lot Depth: The average distance from the street line to the rear lot line or, in the case of a triangular lot, the intersection of two side lot lines.

Lot Line: A line dividing one lot from another or from a street or other public place.

Lot Width: The horizontal distance between the side lines of a lot measured at right angles to its depth at the minimum required building setback line.

Lot Width Minimum: The required minimum lot width at the front building setback line.

Major Plan: The division of a lot, tract, or parcel of land or part thereof into four or more lots, tracts, or parcels of land, including the residue, for the purpose of lease, sale, transfer of ownership, or development, whether immediate or future, that requires improvements.

Managed Turf: Grassed soil that no longer functions in its natural hydrological state due to disturbance, compaction, or excessive management; Land disturbed and/or graded for eventual use as managed turf; Portions of residential yards that are graded or disturbed, including yard areas, septic fields, residential utility connections; Roadway rights-of-way that will be mowed and maintained as turf; Turf areas intended to be mowed and maintained as turf within residential, commercial, industrial, and institutional settings. Managed turf must be accounted for when calculating the type and capacity of the runoff reduction stormwater practices, to meet the one-inch capture performance standard in WVDEP's MS4 general permit. .

Manufactured Home: A structure, transportable in one or more sections, which in the traveling mode is 8-feet or more in width or 40-feet or more in length or, when erected on site, is 320 or more square feet. The structure is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, including the plumbing, heating, air-conditioning and electrical systems contained in the structure.

Manufactured Home Community: Any individual site, area, tract, or parcel of land upon which four or more manufactured homes used or occupied for dwelling purposes are parked either free of charge or for monetary consideration and shall include any roadway, building, structure, installation, enclosure, or vehicle used or intended for use as a part of the facilities of the manufactured home community.

Metes and Bounds: A method of describing the boundaries of land by courses and distances.

Minor Plan: A plan resulting in a minor plat.

Minor Plat: A plat showing a boundary line adjustment, judicial partition, financing lot, administrative subdivision, testamentary transfer, easement, or family transfer.

Monument: A marker placed in the ground for the purpose of delineating the survey of a subdivision, the boundaries of a political subdivision, or to facilitate a geographic information system.

Multi-Family Dwelling: A building designed, occupied, or used by three or more families living independently of each other, wherein each dwelling unit shall contain private bath and kitchen facilities; includes apartment houses.

NPDES Permit (Construction and Stormwater Management Generated): The National Pollutant Discharge Elimination System Permit, part of the Federal Clean Water Act, 33 U.S.C. 1251, et seq. and West Virginia Code Chapter 22, Articles 11 and 12. This permit is administered by the West Virginia Department of Environmental Protection and is required when land disturbance from grading, excavating or construction exceeds the acreage specified under state law.

Official Submission Date: The date on which all application materials have been received by the Planning Department including, but not limited to, a fully executed application, requisite copies of the plan/plat, a completed Checklist, and appropriate fees.

Open Space: Property used in order to preserve natural features or scenic qualities, or as developed for recreational use. Such property may be held privately accruing to the benefit of the property owner(s); or may be held by the County or agency of the County for public use, such as parks or other passive/active recreation areas. Property subject to a conservation easement held by the Berkeley County Farmland Protection Board shall be considered privately held open space unless a fee simple interest in the property has been acquired or donated to such Board. Encumbered common ground (link to the definition) does not count as open space.

Owner: Any person having sufficient proprietary interest in the land sought to be subdivided or developed to commence and to maintain proceedings to subdivide or develop the same under these regulations.

Panhandle Lots: A lot set behind a row of lots along a roadway with access to the roadway via a narrow access strip which is included as part of the lot, giving the lot the appearance of a “panhandle” or “flagpole”.

Parcel: A piece of land, which can be owned, sold, and developed. Parcels have legal descriptions, which not only describe their boundaries but also contain information concerning rights and interests.

Park: A public or private area of land, with or without buildings, intended for outdoor recreational uses.

Passive Recreation: Recreational activities that require no active land management or prepared facilities.

Peak Hour Generation: The trips generated during the peak travel hours as established by current ITE.

Perennial Stream: A stream with flowing water during a typical year.

Performance Surety: [See Surety](#)

Person: Any individual, firm, association, syndicate, partnership, corporation, trust, or other legal entity recognized by law as subject to rights and duties set forth in this Ordinance.

Phase: Process of staging a Site Development or a Section of that development.

Plan: A description for the development of land containing written and graphical information.

Planned Unit Development: A planned unit development for purposes of this Ordinance shall be defined as a mixed-use community, which utilizes two or more of the below housing options, in combination with one Commercial amenity and one Recreational amenity.

1. Single-family detached housing
2. Single-family attached housing
3. Multi-family housing
4. Commercial
5. Recreational amenities, such as golf courses, swimming pools, tennis courts, or other major recreational facilities, but not including small neighborhood play areas.

Planning Commission: The Planning Commission of Berkeley County, West Virginia.

Plat: The map, drawing, or chart on which the developer's plan or layout of a land development is shown, indicating the location and boundaries of individual properties that is submitted to the Planning Commission for approval as part of a land development plan.

Plat of Correction: Records minor corrections to an existing plat, such as correcting a surveying mistake.

Private Access Easement: A privately held easement allowing one or more persons to travel across another's land to get to a nearby location, such as a road. Private access easements for the purposes of this Ordinance shall all be held appurtenant to the land.

Private Recreational Facilities: Parks, playgrounds, or other passive/active recreational areas or facilities operated by a person for use by either the general public or private individuals, on either a profit or non-profit basis.

Public Recreational Facilities: Parks, playgrounds and other public lands and buildings of the County or land or improvements intended for ownership and use in common by members of the homeowners association of a given residential subdivision development.

Public Sewer: A physical, water carrying system of pipes, pumps and tanks designed to collect, convey and/or treat human waste as approved by the Berkeley County Public Service Sewer District or City of Martinsburg.

Public Water: Any water system, which regularly supplies or offers to supply piped water as approved by the Berkeley County Public Service Water District. A private well, supplying two or fewer dwelling units, is not considered public water for the purpose of this Ordinance or City of Martinsburg.

Quadruplex: One building, arranged or designed as four dwellings, located on common party walls without openings and with each building having a separate lot, with minimum dimensions required by district regulations.

Replat: The process of changing the boundaries of a recorded plat/parcel, based on the approval of a plan change.

Residual Lot: The remaining portion of the parent tract of the subdivided land.

Right-of-Way: A type of easement granted over the land of another held by a public entity for transportation purposes, such as highways, canals, public footpaths, etc. A right-of-way may be reserved for the purposes of maintenance or expansion of existing services with the right-of-way.

Roadway: The portion of a street right-of-way, which is paved, improved, designated or intended for vehicular traffic.

Scale: The ratio between the size of features on the map and the size of the same features on the ground. May take the form of a graphic scale or word statement.

Screening: A method of visually shielding or obscuring an abutting or nearby use or structure from another by fencing, walls, berms, and/or densely planted vegetation.

Section: The staging of development, each section to be a separate submission of engineering and supporting materials.

Sensitive Areas: Areas requiring special attention when being developed due to characteristics such as, but not limited to, severe slope, floodplain area, wetlands, significant Karst features, historical sites, or cemeteries.

Setback Line: The line within a property defining the required minimum distance between any structure and an adjacent right-of-way or property line, also known as building setback line. For the purposes of this definition, structure does not include fences, sidewalks, driveways, curbs, hydrants, and mailboxes.

Sewage Facility: Any sewer, sewage system, sewage treatment works or part thereof, for the collection, conveyance, treatment, or disposal of waste, including industrial waste.

Severe Slopes: Slopes that are greater than 1 ½' horizontal to 1' vertical.

Shared Parking: Where compatible occupancies within mixed-use buildings and development projects allow sharing of parking stalls, to allow for a reduction in impervious area and "hot-spots".

Single Family Attached Dwelling: A duplex, triplex, quadruplex, or townhouse dwelling unit separated by a common party wall.

Single Family Detached Dwelling: A residential dwelling unit designed for and occupied by one family only and not structurally connected or attached to any other dwelling.

Sinkhole or Sink: A depression in the land surface formed by solution or collapse of the earth below that directs surface runoff into the subsurface or to an underground drainage flow. For the purpose of this Ordinance, the dimension of a sinkhole or sink shall include the last closed contour line based on a 2-foot contour interval, as shown on the Initial Plan.

State Plane Coordinate System (SPCS): A projected coordinate system used in the United States that divides each state into one or more zones to minimize distortion and to maintain accuracy of one part in 10,000. West Virginia State Plane, also known as the West Virginia Coordinate System of 1983 (referenced to NAD 1983 Datum), is based on the Lambert Conformal Conic projection. West Virginia State Plane is divided into two zones, the North Zone and South Zone.

Stormwater Management Ordinance: the Stormwater Management and Sediment and Erosion Control Ordinance of Berkeley County.

Stream: Any waters of the US or State or blue lined watercourse found of the USGS Quad Maps or as determined by the appropriate agency (USFWS or WVDEP) in certain circumstances.

Stream Activity Permit: All activities in a stream; issued by WV DNR.

Street: A public road or way for vehicular traffic, whether named a street or any other synonym.

Street Classifications: See Appendix A of this Ordinance.

Structure: Anything constructed, the use of which requires permanent location on the ground or which is attached to something having a permanent location on the ground.

Subdivide: To divide tract of land into lots.

Subdivider: [See Developer](#)

Surety: A written instrument with a clause binding an applicant to pay a certain penalty (or portion thereof) to the County Commission conditioned, however, with a statement that the payment of the penalty may be avoided upon satisfactory construction and completion of improvements required within a Land Development Plan. A surety is secured by a bond, cash in escrow, or by a letter of credit that is satisfactory to the Planning Commission.

Temporary: As it relates to campgrounds, any shelter which is not permanent and/or placed on footers.

Testamentary Transfer: A division of real estate by will.

Townhouse: A single-family dwelling unit constructed in a group of three or more attached units in which each unit extends from foundation to roof and with a yard or public way on not less than two sides separated from each other by continuous vertical common party wall(s) without openings for human passage or visibility from foundation to roof, with no dwelling unit directly above another, and each unit is open to the exterior on at least two sides and independent egress to the exterior. No townhouse shall exceed three stories in height above grade.

Triangular Lot: A lot having three (3) lot lines, but which does not qualify as a corner lot.

Triplex: One of three (3) buildings, arranged or designed as dwellings, separated by a common party wall without openings and with each building having a separate lot.

Underground Injection Control (UIC) Permit: A permit issued by West Virginia Department of Environmental Protection that regulates the subsurface emplacement of fluids.

Utility: Services consumed by the public such as electric, natural gas, water, sewer, telephone, stormwater, etc.

Vested Property Right: A vested property right is a right to undertake and complete the land development. [See W.Va. Code § 8A-5-12.](#)

Vicinity Map: A drawing at a 1:2,000 scale that legibly shows, by dimension and/or other means, enough area beyond the bounds of the proposed land development to locate and orient the land development in Berkeley County and the relationship of the site to the community facilities that serve or influence the property. These community facilities include public road systems, public schools, retail and commercial areas, County and State parks, and any other public or private amenities of note.

Villa: Two single family attached dwellings, located on individual parcels, but which share a common wall.

Waiver: The negation of compliance with part or all of a provision or provisions of the Berkeley County Subdivision Regulations by a majority vote of the Planning Commission in accordance with the procedures established in Article 12.

Watercourse: A stream of water, river, brook, creek, or channel or ditch for water whether natural or manmade.

Wetlands: Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas.

List of Abbreviations

Abbreviation	Explanation
ADA	Americans with Disabilities Act of 1990
ADT	Average Daily Traffic
ANSI	American National Standards Institute
AASHTO	American Association of State Highway and Transportation Officials
BCHD	Berkeley County Health Department
BCHLC	Berkeley County Historic Landmark Commission
BCPSSD	Berkeley County Public Service Sewer District
BCPSWD	Berkeley County Public Service Water District
BMP	Best Management Practices
BRL	Building Restriction Line
DHHR	West Virginia Department of Health and Human Resources
DSP	Detailed Site Plan
EOR	Engineer of Record
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GPP	Groundwater Protection Plan
HARP	Home Access Road Program
HEPMPO	Hagerstown/Eastern Panhandle Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
NFPA	National Fire Protection Association
NPDES	National Pollutant Discharge Elimination System
NRCS	U.S. National Resources Conservation Service
PUD	Planned Unit Development
ROW or R/W	right-of-way
SPCS	State Plane Coordinate System
SFHA	Special Flood Hazard Area
SWM	Stormwater Management
TIS	Traffic Impact Study
UIC	Underground Injection Control
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
WVDEP	West Virginia Department of Environmental Protection
WVDNR	West Virginia Division of Natural Resources
WVDOH	West Virginia Division of Highways

ARTICLE 3 - PROCESSING PROCEDURES

Section 301. General

1. The procedures set forth in this Article apply to all applications and project submissions.
2. Each revision of the same plan or plat shall be deemed a separate submission to the Planning Commission.
3. All project submissions will be crosschecked against overlay maps and districts in effect at the time of submission to determine if risks or restrictions are present.
4. All local, state and federal requirements must be met in all cases, and the property owner is responsible for ensuring such compliance. All other agency permits, agreements, and reviews may be requested for review and comment by the Planning and Engineering departments.
5. All approved plats must be recorded in the County Clerk's Office within 90 days of approval.
6. All plats and plans must be submitted through the Planning Commission electronic online portal, and the appropriate fees must accompany all submissions. The fee schedule can be found in Appendix G.

Section 302. Types of Minor Plans

1. Administrative Subdivisions
2. Boundary Line Adjustments & Merger Plats
3. Family Transfer
4. Financing Lots
5. Judicial Partitions
6. Testamentary Transfers
7. Plats of Correction
8. Easement Plats

Section 302.1. Requirements for Minor Plans

A. General Requirements

To be treated as a Minor Plan, a subdivision must meet the following minimum requirements:

1. The subdivision results in the creation of no more than three lots plus the [residual lot](#) which all meet the minimum lot size required by this Ordinance;

2. No stormwater management is required; and
3. The subdivision will not require the development of new off-tract water or sewer infrastructure.
4. Once subdivided, [administrative subdivision](#) plats, except [family transfers](#), shall not be further subdivided except through the Major Plan process.
5. Parcels may be subdivided for commercial or industrial purposes through this process, but the land development must proceed through the detailed site plan process.

B. Administrative Subdivisions

This Ordinance grants Planning Commission Staff authority to approve an administrative subdivision provided the general requirements are met.

C. Boundary Line Adjustments & Merger Plats

The adjustment of boundary lines or the merger of lots or portions of lots qualify for review, provided access is not changed, no new parcel is created, and the [residual lot](#) remains a buildable lot under the provisions of this Ordinance.

D. Family Transfer

1. [Family transfers](#) are permitted only if the lots created can be accessed via a single easement, having a minimum 50 foot width, from the family transfer lot to a WVDOH right-of-way.
2. Only one lot can be conveyed to any one [immediate family](#) member or group of immediate family members per individual parcel of property and the lot conveyed cannot be sold for five years from the date of recordation.

Section 303. Procedure, Minor Plans

1. The Minor Plat and any subsequent revisions shall be submitted to the Planning Department through the electronic online portal.
2. Within ten days after receiving a complete plat submission, Planning Commission Staff shall review and either approve or deny the plat.
 - a. If Planning Commission Staff **approves** the plat, Staff shall affix the Planning Commission seal on the plat.
 - b. If Planning Commission Staff **denies** the plat, Staff shall notify the applicant in writing of the reasons for the denial.
3. Each resubmission of revised Minor Plats constitutes a separate submission and restarts the ten-day review period.

4. After approval, the applicant shall provide four original, signed copies of the plat and one Mylar, if required by the County Clerk.
5. The applicant shall record one copy of the approved Minor Plat and Mylar, if applicable, with the County Clerk within 90 days of approval or the approval is void.

Section 304. Other Types of Land Development Plans

1. Major Plan
 - a. Concept Plan
 - b. Detailed Site Plan (DSP)
 - c. Final Plat
 - d. Major/Administrative Plan Change

Section 305. General Platting Requirements for Major Plans

A. Platting and Recordation Required

1. No person shall subdivide land without recording a plat that has been prepared by a land surveyor and that complies with all applicable provisions of this Ordinance.
2. No plat of any subdivision shall be recorded unless it has been approved by the appropriate county agencies.
3. No lot in any subdivision shall be sold or conveyed before the plat has been approved and recorded.
4. No building permit shall be issued for any structure on a lot in a subdivision that is in violation of any provisions of this Ordinance.
5. No Grading Permit shall be issued until the approval of the Detailed Site Plan from the Planning Commission.

B. Certification of Plats

Every plat shall contain the following statements:

1. Owner's Certification Block: A notarized statement signed by all owners, proprietors, and trustees stating that the platting, dedication, or assignment of lots of the property is with free consent and in accordance with the desire of the undersigned owners, proprietors, and trustees;
2. That there are no suits, actions at law, leases, liens, or easements affecting the property in this plan of land development except as shown; and

3. A statement signed by the surveyor setting forth the place of record of the last instrument in the chain of title, giving the deed book and page number of all tracts involved.
4. (Where applicable) Highway Reserve Certification: A certificate for roadway widening reservation as follows: “I hereby certify that areas shown hereon reserved for future roadway widening shall be conveyed to WV Division of Highways at the time of roadway widening without any compensation. This agreement shall be binding upon all my assignees or heirs.

Developer

Date

Section 306. Procedure, Major Plans

General Procedure

During the course of the major process, the applicant shall:

1. Submit a [Concept Plan](#); For review and approval by Staff
2. Participate in a public hearing before the Planning Commission to present the Concept Plan for approval;
3. Submit a Detailed Site Plan (DSP) for review and approval by Staff.
4. Participate in a public hearing before the Planning Commission to present the DSP for approval;
5. Respond to all comments from the public, staff, and the Planning Commission, as directed by staff;
6. If lots are created, prepare and submit a Final Plat for approval by Planning Commission Staff, if applicable.
7. If no lots are created by the DSP then prepare and submit an Easement Plat for all easements created on the parcel.

Section 307. Concept Plan Review and Comment

The preparation and submission of a [Concept Plan](#) and written supplementary information is required for all major land developments, including [Planned Unit Developments](#) (PUD's).

Section 307.1. Purpose of Concept Plan

The submission of a Concept Plan and the written supplementary information will assure the applicant:

1. That Planning Commission Staff has the proper visual concept of the proposed project;
2. That there is clear understanding of the proposed project, the site and its use;
3. That the proposed project provides sufficient information for an accurate evaluation, by not only the Planning Commission and its Staff, but also by the public.

Section 307.2. Concept Plan Submittal

1. The applicant shall submit the first Concept Plan, and any subsequent revisions to the Planning Department through the electronic online portal along with appropriate fees.
2. Within 14 days of the Concept Plan submittal, Planning Commission and Engineering Staff shall review the proposal, and notify the applicant in writing whether the application is complete and provide any comments or recommendations by staff.
3. Staff shall schedule a Concept Plan meeting after receipt of the Concept Plan application. (The applicant has the option to request a pre-application meeting prior to formal submission.) The purpose of this meeting is to discuss the engineer drawings previously submitted, including SWM, fire & law enforcement requirements.
4. Planning and Engineering Staff shall issue comment letters. The applicant shall address any comments in these letters in the revised Concept Plan.
5. When both the County Engineer and County Planner deem the plan to be in compliance, Staff will advertise the revised submittal and forward it to the Planning Commission for public hearing.

Section 307.3. Concept Plan: Public Hearing

1. Within 30 days after Planning and Engineering Staffs determine the Concept Plan is complete, a public hearing shall be held. The purpose of this public hearing is to receive staff comment, review the Concept Plan with any revisions, and to receive input from the developer and the general public. At the conclusion of the public hearing, the Planning Commission may remand the plan back to the applicant with comment. The Planning Commission shall officially notify the applicant in writing within 14 days of the hearing, confirming any comments or recommendations issued by the Planning Commission. The applicant shall address these comments and recommendations in the subsequent Final submission of the Concept Plan.
2. The Planning Commission shall publish a public notice of the date, time and place of the public hearing in a local newspaper at least 14 days prior to the hearing. The Planning Department will notify the applicant/developer to pick up a public hearing sign. The applicant/developer shall post this sign at least 14 days prior to the public

hearing as close to the road as possible, in a location that is clearly visible. Once the sign has been posted, the applicant/developer shall furnish a photograph showing that the sign was posted and the date of the posting to the Planning Department. Staff will include the photograph of the sign and information on posting in the project file.

Section 308. Detailed Site Plan Review and Advancement

Submission of a DSP, together with other supplementary and supporting material (Reports, Calculations, Studies, and other outside Agency documentation and approvals), is required for all developments other than minor subdivisions.

Section 308.1. Purpose, Detailed Site Plan

The purpose of the DSP is to request review and approval from the Planning Commission of detailed engineering design, layout, and construction of all proposed [improvements](#).

Section 308.2. Detailed Site Plan Submittal

A. Applicant Procedure

1. The applicant shall prepare a DSP together with other supplementary material as specified in Section 404 of this Ordinance. If phasing of the DSP is proposed, each phase must encompass all necessary improvements to support the proposed lots within that phase.
2. The applicant shall submit the DSP to the Planning Commission through the same procedure used for Concept Plans through the [online portal](#).
3. Based on the type, size, and location of the proposed project, and other agencies' requirements, the Planning Commission shall require approvals from the agencies listed below as necessary:
 - a. Berkeley County Public Service Water District (BCPSWD)
 - b. Berkeley County Public Service Sewer District (BCPSSD)
 - c. Berkeley County Public Service Stormwater District (BCPSSWD)
 - d. US Army Corps of Engineers (USACE)
 - e. West Virginia Bureau of Health, Community Engineering Division
 - f. West Virginia Division of Highways (WVDOH)
 - g. West Virginia Public Service Commission
 - h. West Virginia Division of Natural Resources (WVDNR)
 - i. West Virginia Department of Environmental Protection (WVDEP)
 - j. West Virginia Fire Commission – State Fire Marshall's Office.
 - k. West Virginia Division of Homeland Security & Emergency Management
 - l. Berkeley County Health Department (BCHD)
 - m. Berkeley County Fire Department
 - n. Berkeley County Sheriff's Office
 - o. GIS/Addressing Road Name Approval
 - p. Federal Aviation Administration (FAA)

q. Others as required

B. Planning Commission Procedure and Public Hearing

1. At the time of project submission, Staff shall notify applicant if a submission is incomplete. No incomplete submission is considered an official submission.
2. Within 45 days of official submission and receipt of all approvals, including those from outside agencies, the Planning Commission and Engineering Staff shall review the plan and provide comments if necessary.
3. After County Planner & County Engineer have deemed the DSP complete and fully compliant, the DSP shall be scheduled on the next available Planning Commission agenda for completion determination.
4. At a meeting where the application is determined to be complete, the Planning Commission must set a date, time and place for a public hearing and a meeting to follow the public hearing to vote on the application.
5. The Planning Commission shall publish a public notice of the public hearing and meeting in a local newspaper of general circulation in the area at least 21 days prior to the public hearing. The applicant/developer shall post a sign at least 21 days prior to the public hearing as close to the road as possible, in a location that is clearly visible. Once the sign has been posted, the applicant/developer shall furnish a photograph showing that the sign was posted and the date of the posting to the Planning Department. Staff will include the photograph of the sign and information on posting in the project file.
6. Within 14 days after the public hearing or immediately following the hearing's conclusion, the Planning Commission shall approve, approve with conditions, deny, or hold the application.
7. In those instances in which an applicant cannot resolve a staff comment, the issue may be brought before the Planning Commission for review and resolution, at the applicant's discretion. See Section 1205 "Request for Consideration".

Section 309. Effect of DSP Approval

1. Approval of a DSP does not constitute approval of the Final Plat.

Upon DSP approval, the Final Plat may be submitted for approval.

- a. Upon DSP approval, the applicant may apply for a Land Disturbance Grading permit for the development.
- b. Upon DSP approval, the applicant may apply for grading permit. If a final plat is not required, the applicant may apply for building permits.

Section 309.1. DSP Advancement

1. The applicant has a vested property right to complete the land development for a period of five years after the DSP approval date. A land development project is only considered complete upon approval of the As-Builts by the County Engineer.
2. The applicant may submit, on or before the expiration date of such DSP approval, the whole or any part of said subdivision for Final Plat recordation in accordance with the provisions of this Ordinance.

Section 309.2. DSP Extensions

1. Extension requests may be approved subject to the following conditions:
 - a. The developer obtains or is the beneficiary of a significant affirmative governmental act which remains in effect allowing development of a specific project;
 - b. Developer relies in good faith on the significant affirmative governmental act; and
 - c. Developer incurs extensive obligations or substantial expense in diligent pursuit of the specific project in reliance on the significant affirmative governmental act.
2. An application for extension must be made to the Planning Commission and must contain the following:
 - a. Application for DSP Extension
 - b. Detailed narrative justifying the extension including, but not limited to, anticipated completion date, expenditures to date, approximate total cost of project, summary of progress to date, and requested length of extension.
 - c. Corresponding fees as outlined in Appendix G.
3. The length of any extension shall be negotiated between the Planning Commission and the applicant.
4. All extension requests must be filed prior to the expiration date of the approved DSP. If an approved DSP expires and no extension has been approved, the DSP shall be deemed invalid and a resubmission of the DSP, compliant with current regulations, shall be required in order to proceed.
5. Subsequent changes to law, regulations or permitting requirements may require the DSP to be brought into compliance with those changes.
6. Submission of a Plan Change does not restart the vesting period.

Section 310. Plan Changes

1. An applicant requesting changes to the approved DSP must submit an application for a Plan Change through the online portal.

2. Any permits must be current or updated prior to Plan Change approval.
3. A Major Plan Change must be submitted for public hearing under the following circumstances:
 - a. An increase in the number of lots;
 - b. A change in lot sizes that alters the acreage of the subdivision;
 - c. A change in road way alignment, stormwater management areas, [open/common space](#) areas or percentages, conservation/set-aside areas, , or parking lot areas;
 - d. Any increase of [impervious surfaces](#);
 - e. A change in the total acreage of the subdivision;
 - f. A change in the number of entrances to a public way;
 - g. Change of use in the structure or property.
4. The public hearing process is detailed in [Section 308.2, subsection B, paragraph 5](#).
5. An Administrative Plan Change not requiring a public hearing must be submitted under the following circumstances:
 - a. A reduction in the number of lots;
 - b. A boundary line adjustment that does not result in a change in the total acreage of the subdivision;
 - c. Road names changes;
 - d. Decreases in impervious surfaces;
 - e. The addition of SWM Quality (MS-4) BMP's to developments with only quantity control SWM devices.

Section 311. Final Plat Review and Approval

The preparation and submission of a Final Plat is required for all major subdivisions, including planned development units.

Section 311.1. Purpose, Final Plat

The purpose of the Final Plat is to establish legal/buildable lots for real property transfer and require formal approval by Planning Commission Staff before all plats of major subdivisions are recorded in the Office of the Berkeley County Clerk and prior to the construction of improvements.

Section 311.2. Final Plat Submittal

A. General Procedure

1. The Final Plat shall conform substantially to the approved DSP. The applicant may submit the Final Plat by phase or in its entirety. If submitted in phases, the applicant shall provide staff a Phasing Plan for the entire development with estimated timeframes for each proposed phase of development. This shall be provided with the

first phase submitted and shall be provided on all subsequent phases and remain updated.

B. Applicant Procedure

1. The applicant shall submit a written request for review through the same procedure used for Concept Plans and DSP using the [online portal](#).
2. Any permits must be current or updated prior to Final Plat approval. Expired permits must be renewed prior to Final Plat Approval.
3. Upon Final Plat Approval by the County Engineer and County Planner, four original, signed copies of the plat and a Mylar shall be submitted to the Planning Commission for approval signature.

C. Planning Staff Procedure

1. Same procedure as DSP found in [Section 308.2, subsection B., paragraph 2](#).
2. The Final Plat shall be deemed approved by the County Engineer and County Planner when all requirements have been met.

Section 312. Replat Review and Approval

A Replat is required to make changes to an approved Final Plat. A Major or Administrative Plan Change, as appropriate shall always precede a Replat of an approved Final Plat. See [Section 310](#) for Plan Change guidelines.

Section 312.1. Replats of Approved Final Plats

A. General Procedure

1. A Replat of an approved Final Plat shall conform substantially to the requisite Plan Change as previously approved by the Planning Commission. If substantial changes have been made as adjudged by the County Engineer and County Planner, the Replat shall be considered a revised Final Survey Plan, which must be re-advanced, by the Planning Commission and the participating agencies through the Plan Change process. All permits shall be renewed or updated. The County Engineer for a recommendation to the Planning Commission shall review the current or existing surety.
2. The applicant may submit the Replat by phase or in its entirety. If the Replat is being submitted in phases, the applicant shall provide staff a Phasing Plan for the entire development with estimated timeframes for each proposed phase of development. This shall be provided with the first phase submitted and shall be provided on all subsequent phases and remain updated.
3. A Replat of an approved Final Plat shall be submitted to the Planning Commission within five years after the approval of the requisite Plan Change.

B. Applicant Procedure

1. The applicant shall submit a written request for review using the procedure used for Concept Plans, DSP and Final Plat submission using the [online portal](#).
2. This process is subject to the same potential [approvals required for DSP](#).
3. Any permits must be current or updated prior to Replat approval. Any expired permits shall be renewed.
4. Upon Replat approval by the Planning Commission, four original, signed copies of the plat and a Mylar shall be submitted to the Planning Commission for approval signature.

C. Planning Commission Procedure

1. This procedure shall be the same as described in [Section 308.2, B., paragraph 2](#).
2. After County Engineer and County Planner have deemed the Replat to be in compliance with the Plan Change, the provisions of this Ordinance, and all conditional requirements have been met, the Replat shall be deemed approved by Planning Commission Staff.

Section 313. Recordation of Final Plats and Replats

1. After receiving plat approval by Planning Staff, the applicant shall file the signed plat in the Office of the Berkeley County Clerk within 90 days of the date of such approval. If signed plat is not recorded in 90-days, the plat will require submittal to, and approval by, the Planning Commission prior to be recorded with the County Clerk.
2. If the plat is not recorded within five years, it shall be considered withdrawn and any previous approval or modification of the plat shall be considered null and void.
3. If the development is located in more than one county, recordation shall be in the county of initial land development and subsequently in other counties where the development is located.
4. Receipt of recordation shall be provided to the Planning Commission during bond reduction and releases, and shall be provided as part of the supplemental plat process needed to issue use and occupancy permits.
5. Berkeley County shall not enforce or become involved in the enforcement of deed restrictions, [covenants](#), or any other private agreements.

Section 314. Supplemental Documentation and As-Builts

The purpose of Supplemental Plans and As-Builts is to provide original approved design drawings redlined with any field changes resulting from construction to ensure significant compliance with the approved DSP.

Section 314.1. Site Work Milestone Inspections

The Engineer of Record shall perform a minimum of three site inspections for the work shown on the DSP (30%, 60%, & 100% complete). Additional inspections, as determined by the Engineer of Record and the County Engineer, shall be included at DSP Approval and performed by the Engineer of Record for specialized items including retaining walls, engineered embankments, Sinkhole Remediation, SWM Facilities, In-Place Field Density Testing and Material Acceptance/Certification. These inspections shall be documented (Signature & Date) on the DSP by the Engineer of Record.

Prior to the submission of any Supplemental Plan, As-Built, or Surety Reduction, the Site Work Milestone Inspections and any third-party inspection and certificate reports must be submitted. The third-party inspections and reports shall include the project name, applicable section and phase and Planning Department case file number.

At a minimum site work Milestone Inspections and third-party Inspection and certificate reports shall include:

1. Roadway and/or parking lot subgrade proof roll prior to placing stone base.
2. Roadway and/or parking lot stone base depth check prior to placing asphalt base
3. Roadway and/or parking lot Asphalt Base and Surface Course thicknesses and types.
4. Water system and sanitary sewer system inspection and approval by public service district/utility prior to backfilling trenches.
5. Certification that all SWM Facilities (MS4 BMP's, embankments, core & cut-off trenches, pipe cradles, anti-seep collars, soil media and liners) are installed to the plans and specification on the DSP and the SWM system functions as approved in the supporting SWM Report approved with the DSP.
6. Final inspection including, but not limited to, seeding & mulching (70% stabilization), roadway & parking lot paving, shoulders or curb and gutters, sidewalks, storm drainage and stormwater management systems, traffic control & street signs and pavement markings, landscaping, site or street lights, etc.
7. No bond or surety shall be released without documentation that bonded improvements have been inspected and approved by the Engineer of Record as required above or the reports and certification from the third-party inspection and testing firm.
8. No bond or surety shall be released without certification that all property corners have been set for all lot/lots created, or the original boundary, from a licensed Land Surveyor in the State of West Virginia.
9. No bond or surety shall be released without the recorded transfer of all roadways, common areas, open space, SWM areas, and rights-of-ways to the HOA/POA.

10. No bond or surety shall be released without documentation from WVDEP that a Notice of termination or reduction in the Limit of Disturbance for the site has been completed. For area of disturbance less than one acre, the Engineer of Record shall provide a certification letter that all disturbed area are stabilized in accordance with WVDEP requirements.

Section 314.2. Supplemental Documentation and As-Builts Submittal

1. Within the earlier of 45 days of construction and infrastructure having been completed, or within 45 days of a Use & Occupancy Permit having been issued, the applicant shall submit the following to the Planning Department for review by the County Engineer using the on-line portal:
 - a. One copy of the red-lined Supplemental Documentation or As-Built based on the approved DSP, signed and sealed by a registered Professional Engineer or Professional Land Surveyor;
 - b. One copy of the approved SWM Report calculated with as-built conditions, or a certification letter that the SWM facility/facilities, as constructed, are operating in accordance with the conclusions and analysis in the SWM Report approved for the DSP signed and sealed by a registered Professional Engineer;
 - c. One third-party inspection, certification, and testing report as required in Section 315.1 signed and sealed by a registered Professional Engineer.
 - d. One copy of the recorded Deed of Transfer of all property (roadways, common areas, open space, SWM areas, and rights-of-ways) to the HOA/POA;
 - e. One Copy of the certification letter that all property corners for the boundary and created Lot/Lots have been set, signed and sealed by registered Land Surveyor;
 - f. One copy of all approval and acceptance letters for utilities (Water and Sewer) including any off-site extensions, treatment facilities, or pump/transmission stations from each approving authority;
 - g. One copy of the Notice of Termination or reduction of disturbance area for the SWPPP Plan from WVDEP.
2. The County Engineer will perform a review of the submission within 45 days of the submission deemed complete and all fees paid.
3. The County Engineer will issue a comment letter requesting revisions or an approval letter after review of the submission is completed in order to support a surety reduction or release application.
4. Reductions, modifications, and release of bonding obligations are addressed in Article 6 of this Ordinance.

ARTICLE 4 – PLAN REQUIREMENTS

Section 401. General Requirements

Section 401.1. Mandated Comprehensive Ordinance Compliance

Compliance with the following Ordinances, including any amendments thereto, is mandatory and is the responsibility of the Applicant:

1. The [Berkeley County Stormwater Management and Sediment and Erosion Control Ordinance](#) of Berkeley County;
2. The [Berkeley County Floodplain Ordinance](#);
3. The [Eastern West Virginia Regional Airport Height, Sound, & Protection Ordinance](#);
4. The [Salvage Yard Ordinance](#);
5. The [Tuscarora Community Zoning Ordinance](#);
6. The [Exotic Entertainment Ordinance](#); and
7. The [Windewald Neighborhood Zoning Ordinance](#).

The failure to comply with these Ordinances may result in the rejection of your application. This list is non-exclusive and does not preclude the need to comply with future Ordinances as enacted by the County Commission.

Section 401.2. Common Requirements

The following common requirements apply to all sections throughout this Article:

Naming Standards

Development names shall not duplicate or closely approximate the name of any other land development in the County. If the planning department determines the proposed name violates this principle, it will require the applicant to change the name.

Standards for Showing Measurements

All plat boundary and proposed lot lines labeled metes and bounds with length of courses to hundredths of a foot and bearings to the nearest second. The data for all curves shall be shown in detail at the curve or in a curve table containing the following: radius, arc length, tangent, chord, and chord bearing.

Special Flood Hazard Area (SFHA)

If any portion of a site lies within a SFHA, the 100-year, or, 1% chance annual flood must be delineated on any drawing. Additional requirements and review may be necessary to ensure compliance with the Berkeley County Floodplain Ordinance. A separate floodplain

review, to be conducted by the Floodplain Administrator, shall be conducted in cases for development of any parcels within (partially or otherwise) any floodplain.

County Flood Hazard Zones

Areas mapped in flood hazard zones as described in Stormwater Ordinance.

Section 401.3. Frequently Referenced Elements

The following elements shall be added to various plats as required in specific requirements sections below. They are listed here for improved readability of this Article.

Engineer's Certification: I hereby certify that these documents were prepared by me or under my direct charge as required under Chapter 30, Article 13 of the West Virginia Code. My/our Certificate of Authorization is COA#_____.

Flood zone statement: A statement identifying [flood zone](#) and applicable [Flood Insurance Rate Map](#) panel and year.

Inset map: Inset maps must be accompanied by a statement indicating that no [sensitive areas](#) exist or, if any are present, that a buildable area remains on the residue, which meets the lot requirements of this Ordinance.

Land disturbance/impervious area statement: "Land disturbance and impervious area shall comply with the [stormwater management ordinance](#) and shall be demonstrated in the building permit application packet."

Location map: Location map at a scale of no less than 600' to one inch indicating the location of the property with respect to surrounding property and streets. The map shall show all streets and property within 1000' of the applicant's property.

Private access easement statement: "Lot owners benefitting from the access afforded by the private easement created with this plat are responsible for the maintenance of said private easement equally."

Residues/Remainders Information: All [residual lots](#) five acres or less in size must be surveyed in their entirety. If an unsurveyed remainder greater than five acres exists, then show inset map of the entire property to be subdivided with sufficient detail to verify that the lot conforms to subdivision requirements and meets the following criteria:

- a. That the remainder meets minimum road frontage requirements,
- b. The approximate acreage of the remainder parcel,
- c. The delineation of any known existing and proposed easements,
- d. The location of known existing septic drain fields and reserve areas and private well locations, located by a licensed surveyor, and
- e. The location of existing buildings within 50' of any new boundary line.
- f. A note indicating that well and septic on residue have not been evaluated, if applicable.
- g. Contours lines showing 10' contours or as found on USGS maps.

Highway Reserve Certification: A certificate for roadway widening reservation as follows: “I hereby certify that areas shown hereon reserved for future roadway widening shall be conveyed to WV Division of Highways at the time of roadway widening without any compensation. This agreement shall be binding upon all my assignees or heirs.

Owner

Date

Soil statement: “The soil survey of Berkeley County, WV indicates a seasonal high water table to be less than five feet below the surface on the following lots:_____. Basement construction is not permitted for these lots unless applicant provides system designed by a geotech engineer.”

Well and Septic Reserve Area Information: The locations of existing and proposed well and septic reserve areas. Well areas shall be at least 100-feet (200-feet for Class 2 Septic Systems) from septic reserve areas, 25-feet from structures, and 10’ from property lines.

Section 402. Minor Plat Requirements

The Minor Plat shall be submitted by the applicant to the Planning Department through the electronic online portal. The drawing size shall be large enough to clearly show all required information.

All Minor Plats shall adhere to Section 401 of this ordinance and shall show:

1. Plat Title (include plat type and owner reference).
2. Owner name, tax district, map and parcel number, deed book and page reference of subject parcel(s).
3. Name, address, license number, seal and signature of the surveyor.
4. The map scale, plat date and north arrow with source and date.
5. A description of all property corners, referencing the monument type and whether the monument was found or set.
6. The accurate location and type of material of all existing and proposed permanent reference monuments. The plat shall be tied to the West Virginia State Plane Coordinate System (SPCS), and provide a minimum of two (2) interior northings and eastings markers based on NAD83 and NAVD88. If the original boundary is not in the SPCS, then the boundary may be in a magnetic declination.
7. A 2”x3” approval block for Berkeley County Planning Commission signature, including a space for the Berkeley County File Number and date of approval.

8. Notarized signature(s) of the property owner(s).
9. A legend illustrating and describing each component of the plat if not already labeled including but not limited to vacated lines, created lines, fences, power lines and waterways.
10. All easement boundary lines, proposed easement lines, plat boundary lines, proposed lot lines, and data for all curves shown according to the [standards in Section 401](#).
11. Sheet number and total sheet count labeled on each page.

Section 402.1. Creation of Easement Plat

In addition to the requirements of Section 401 and Section 402, Creation of Easement Plats shall include the [Private easement statement](#) if a private easement is created.

Section 402.2. Financing Lot Plat

In addition to the requirements of Section 401 and Section 402, [Financing Lot Plats](#) shall include:

1. A Plat Purpose Note stating: “The purpose of this plat is to create a parcel that can be used as collateral when seeking construction funding for this project. This plat substantially conforms to the preliminary plat and plans previously advanced by the Berkeley County Planning Commission on *[Date of Advancement]*. This plat shall be replatted in the future to create individual building lots and establish other plat components such as utility rights of way, [open space](#) areas, stormwater management areas, and other encumbrances normally and customarily associated with a Final Plat for a residential development. This parcel shall be bound by the requirements as committed to in File # _____ Plan for *[Name of Project, Phase and Section]*. All design, improvement, and construction methods and details should reference this plan.”
2. A list of previously platted and recorded phases and sections of the project.
3. All plat boundary, proposed lot lines and the data for all curves shall be shown according to the [standards in Section 401](#).
4. The lot number and areas of the lots to the nearest square foot (or acreage to at least three decimal places) for each lot/parcel.
5. All adjacent properties including current owners, tax map and parcel number, and deed book and page reference.
6. All setbacks as prescribed in Article 5.
7. Existing street names, route numbers, and right-of-way widths.

Section 402.3. Boundary Line Adjustment/Merger Plat

In addition to the requirements of Section 401 and Section 402, Boundary Line Adjustments shall include:

1. If a consolidation of lots is proposed, the plat shall contain the following statement
 “The _ acre tract shall be merged into one property with the adjoining tract, tax map, and parcel, for the exclusive purpose of increasing the area of the said lot(s). The merged properties shall not be used or sold individually without compliance with prevailing Berkeley County laws and regulations.”
2. [Roadway Widening Reservation Certificate](#).
3. [Well and Septic Reserve Area Information](#).
4. Boundary Line Adjustment Plats moving buildable lot orientations and/or locations shall provide the locations of existing and proposed entrances for all parcels involved.
5. Applicants submitting Boundary Line Adjustment Plats which move buildable lot orientations and/or locations shall provide the following outside agency approvals, as applicable:
 - a. WV Division of Highways Entrance Permit
 - b. Berkeley County Health Department (well and septic)
 - c. Berkeley County Public Service District (public water and public sewer)
6. Owner’s Certification Block signed by all owners, as well as a notary signature.

Section 402.4. Family Transfers/Testamentary Plats

In addition to the requirements of Section 401 and Section 402, [Family Transfer](#) Plats shall include the following note: “The intent of the owner is to transfer the land only to a member of the [immediate family](#). A lot, which is created via a Family Transfer Exception, may not be reconveyed for a period of five years from the date of recording of the plat of record. Any further subdivision activity will comply with all applicable Berkeley County Regulations.”

Family Transfer Plats shall include a draft deed with the above statement in the deed.

Family Transfers/Testamentary Plats shall include:

1. All soils on the site shall be labeled and a soil boundary shall be provided.
2. Plats creating common access easements must include the [Private easement statement](#).
3. [Roadway Widening Reservation Certificate](#).
4. [Well and Septic Reserve Information](#).

5. All proposed access easements shall be at least 50' in width, extending from a recorded, existing easement. Panhandle lots may be a minimum of 25' in width and a maximum of 400' in length.
6. The following outside agency approvals, as applicable:
 - a. WV Division of Highways Entrance Permit
 - b. Berkeley County Health Department (well and septic)
 - c. Berkeley County Public Service District (public water and public sewer)
7. All plat boundary, proposed lot lines and data for all curves shall be shown according to the [standards in Section 401](#).
8. The lot number and areas of the lots to the nearest square foot (or acreage to at least three decimal places) for each lot/parcel.
9. All adjacent properties including current owners, tax map and parcel number, and deed book and page reference.
10. All setbacks as prescribed in Article 5. If no setbacks exist due to the lot having been created prior to the requirement of setbacks, provide a statement indicating such.
11. Compliance with minimum lot size requirements outlined in Article 5.
12. Existing street names, route numbers, and right-of-way widths.
13. Fully executed road maintenance agreement signed by all affected parties if subdivision results in the creation of a new entrance along a privately maintained road.
14. [Flood zone statement](#). [See also SFHA information](#).
15. [Land disturbance statement](#).
16. Existing conditions.
17. [Soil Statement](#).
18. [Residues/Remainders Information](#).
19. [Inset maps](#).
20. Topography at 10' contour intervals and conditions including soil types, floodplain lines, [wetlands](#) and other natural features as shown on the USGS Quadrangle maps or other mapping products for the site and 100' from the site boundary.

Section 402.5. Administrative Subdivision Plats

Administrative Subdivisions shall be submitted by the applicant to the Planning Department through the electronic online portal. In addition to the requirements of Section 401 and Section 402 Minor Plat Requirements, Administrative Subdivisions shall include:

1. Location of all drainage easements, utility easements, sewer lines, water lines, gas lines, power lines, manholes, and fire hydrants.
2. Location map.
3. Square footage (or acreage to at least three decimal places) of total area to be subdivided.
4. The proposed use of each parcel.
5. Provide deed book/plat reference and right-of-way widths for all existing access easements used to connect to a public street.
6. Compliance with minimum lot size requirements outlined in Article 5.
7. Roadway Widening Reservation Certificate.
8. Fully executed road maintenance agreement signed by all affected parties if subdivision results in the creation of a new entrance along a privately maintained road.
9. Owner's Certification Block signed by all owners, as well as a notary signature.
10. All plat boundary, proposed lot lines and data for all curves shall be shown according to the standards in Section 401.
11. The lot number and areas of the lots to the nearest square foot (or acreage to at least three decimal places) for each lot/parcel.
12. All adjacent properties including current owners, tax map and parcel number, and deed book and page reference.
13. All setbacks as prescribed in Article 5.
14. Existing street names, route numbers, and right-of-way widths.
15. Flood zone statement. See also additional flood area requirements.
16. Land disturbance statement.
17. Existing conditions.

18. [Soil Statement](#).
19. [Residues/Remainders Information](#).
20. [Inset maps](#).
21. Topography at 2-foot contour intervals and conditions including soil types, floodplain lines, wetlands and other natural features as shown on the USFWS Wetlands Inventory Map, USGS Quadrangle maps or other mapping products for the site and 150-feet from the site boundary.

Section 403. Concept Plan

The Applicant shall prepare a [Concept Plan](#) and written supplementary information for review. All Concept Plans shall adhere to Section 401 in addition to the requirements set forth below.

Section 403.1. General Information

The Applicant shall provide general information, in narrative form, which describes the overall purpose of the proposed development and its specific uses and its consistency with the County Comprehensive Plan, to supplement the information provided on the [Concept Plan](#) drawings. This information shall include data on soil types, geological information, [community facilities](#), traffic, and utilities.

The Applicant may propose a phasing plan, with estimated timeframes for each proposed phase of development, but in every case shall estimate the ultimate build-out date. The Phasing Plan shall be provided on all subsequent submissions (DSP & Final Plat) and remain updated throughout. The Concept Plan shall also provide information on provisions for parking, including the number of required and proposed parking spaces. In addition, for all development, information on proposed road types, total acreage of the site and the amount of acreage to be developed as lots, as [open space](#) and as streets, and information on the historic use of the site, especially if previous land uses may tend to impact the site's development potential, is required. Information on the amount of proposed impervious area shall also be included. One PDF of the proposed plan is required.

Section 403.2. Concept Plan Requirements

The Concept Plan shall include the following:

1. Narrative statement as described in "General Information".
2. The name of the proposed development.
3. Proposed layout of streets with projected ADT

4. Existing streets with ROW and pavement width, pavement type, and existing and projected ADT's.
5. Total number of lots, configuration of lots and lot sizes.
6. Name and location of any adjacent subdivisions whether approved or in progress, and Berkeley County Planning Commission File Numbers for each.
7. Tax map information, current land use and property owners for all adjacent properties.
8. A description of all property corners, referencing the monument type and whether the monument was found or set (based on NAD83 and NAVD88).
9. The accurate location and type of material of all existing and proposed permanent reference monuments. The plan shall be tied to the West Virginia State Plane Coordinate System (SPCS), and provide a minimum of two (2) interior northings and eastings markers.
10. [Location map](#).
11. Location of proposed stormwater management facilities and type of facility.
12. Types of utilities proposed
13. Name and address of preparer.
14. Topography at 2-foot contour intervals within 150-feet of the site boundary.
15. USDA soil types.
16. FEMA floodplain limits and boundaries to within 150-feet of the site boundary.
17. [Wetlands](#), springs, streams, ponds, caves, sinkholes, historical sites, cemeteries, and other natural features as shown on the USGS Quadrangle maps or other mapping products for the site and 150-feet from the site boundary.
18. Location and description of any proposed recreational or open space uses.
19. Existing [sensitive areas](#), which may impact the site's development potential (endangered species, contamination or RCRA/CERCLA sites).
20. Existing built features, infrastructure, and their proposed eventual disposition (i.e. to be razed, removed, maintained, converted to other use) within 150-feet of the site boundary or as required by the county engineer.

21. Location, type, and size of all existing utilities and their easements on-site and within 150-feet of the site boundary including but not limited to, water, sewer, wells, SRA's, gas, electric, data/telephone, dry-hydrants, traffic signals, and railroad infrastructure.
22. Initial calculations of impervious coverage, density, area of non-residential uses, parking requirements and traffic impacts.
23. Average Daily Traffic (ADT) estimates, and peak hour trips, at each proposed point of access to a public way.
24. Prospective street layout providing access to the remainder of the property when the land development covers only part of the owner's entire holdings.
25. [Flood zone statement](#). [See also SFHA information](#).
26. [Residues/Remainders Information](#).
27. [Inset maps](#).
28. A completed Environmental Impact Checklist. See Appendix C.
29. A signed and dated copy of the Owner Information Form; a template is provided by Planning Commission Staff.
30. Developments that propose more than fifteen (15) dwelling units, shall submit a completed a "Planning Commission Public School Impact Form".

[Section 403.3. Environmental Considerations](#)

The Concept Plan shall identify all environmental features, such as wetlands, perennial and [intermittent streams](#), forested areas, sinkholes, caves, springs, [severe slopes](#), soil types and the general location of any other significant geological or other feature.

If development is proposed on a site that was previously used for an activity that may pose a potential public health risk due to the presence of residual toxins, chemical contaminants or heavy metals, then the Concept Plan shall state that the development of the site will comply with all applicable guidelines and standards for the reuse and redevelopment of environmentally compromised sites, as established by the West Virginia Department of Environmental Protection, the federal Environmental Protection Agency or any other governing state or federal authority.

Any property having an agricultural history is subject to enhanced scrutiny of its environmental suitability for residential or commercial redevelopment. The Applicant is required to exercise all due diligence in researching land use history of property proposed for redevelopment, and "due diligence" shall be interpreted to mean the compilation of information relating to past uses of a property as far back in time as possible.

Section 404. Detailed Site Plan

The Detailed Site Plan (“DSP”) shall be submitted by the applicant to the Planning Department through the electronic online portal. The scale shall be 50-feet or less to the inch. Upon approval, a full-size paper copy shall be submitted. When more than one sheet is required, an index sheet of the same size shall be submitted showing the entire subdivision drawn to scale. The DSP shall be labeled “Detailed Site Plan” in large letters. The DSP shall adhere to Section 401 in addition to the requirements set forth below.

Section 404.1. Detailed Site Plan Requirements

The DSP shall show or be accompanied by the following information:

1. All items required for the concept plan in addition to the items listed below.
2. [Location map](#).
3. North arrow, bar scale, and date.
4. A description of all property corners, referencing the monument type and whether the monument was found or set.
5. The accurate location and type of material of all existing and proposed permanent reference monuments. The plan shall be tied to the West Virginia State Plane Coordinate System (SPCS), and provide a minimum of two (2) interior northings and eastings markers.
6. The names of all adjoining property owners and current land uses with deed reference and tax map description and/or the names and locations of any adjacent residential subdivisions, current or proposed, with the Berkeley County Planning Commission File Number.
7. The proposed name of the land development.
8. The name and address of the owner or owners of the land to be subdivided or developed, and the name and address of the Applicant, if different from the owner.
9. The name and address of the registered engineer/ licensed in the State of West Virginia responsible for the preparation of the plans.
10. Title block with location of tract by tax district, map, parcel, deed book, and page number.
11. A surveyor’s certification block certifying to the exterior property lines of the property being developed.
12. [Engineer’s Certification block](#).

13. [Roadway Widening Reservation Certificate](#).
14. Computation of total area (acreage and square footage) of the land development proposed (including but not limited to all open space, [conservation easements](#), stormwater management areas, impervious, disturbed, residue, lot area(s), gross density per acre, and rights-of-way).
15. [Residues/Remainders Information](#).
16. [Inset maps](#).
17. [Soil Statement](#).
18. Date of plat preparation and dates of any subsequent revisions to the plat during the review process, if any.
19. Dates and applicable section numbers of any approved waivers on the Title Sheet.
20. Permit Summary Table listing all permits, agencies, permit number, and approval dates on the Title Sheet.
21. Completed Engineering DSP Checklist, as provided by the County Engineer and County Planner.
22. A 2"x3" approval block for Berkeley County Planning Commission signature, including a space for the Berkeley County File Number and date of approval on the Title Sheet.
23. A 2"x3" approval block for Berkeley County Engineer's signature on the Title Sheet,
24. Site Work Milestone Inspection Table on the Title Sheet.

[Section 404.2. Site Data](#)

Site Data shall include the following:

All information required for the Concept Plan including the items listed below.

1. Subdivision boundaries with metes and bounds, including entire area proposed to be subdivided or developed and remainder of the tract in the same ownership; all existing restrictive easements and the purpose for such easements; any parks, [conservation easements](#) or other public open spaces. These areas shall be included in the Area Tabulation Table.
2. An "Existing Features" sheet, which shows all [existing manmade features](#) and [existing natural features](#), extended a minimum of 150-feet beyond all parcel boundaries and

includes information as to their proposed final disposition. Property access easements and lot lines should be ghosted in the background.

3. Existing topography within two-foot contour intervals. Where the terrain is rugged and hilly and where existing grades are 50% or greater, 10' contour intervals will be permitted. Contours shall be extended a minimum of 150-feet beyond all parcel boundaries.
4. Location, ROW and pavement widths, and names of all existing streets or [alleys](#) on or within 150-feet of the site boundary.
5. Narrative statement as described in "General Information".
6. The name of the proposed development.
7. Existing and proposed streets with ROW and pavement width, pavement type, and existing and projected ADT's.
8. Total number of lots, configuration of lots and lot sizes.
9. Name and location of any adjacent subdivisions whether approved or in progress, and Berkeley County Planning Commission File Numbers for each.
10. Tax map information, current land use and property owners for all adjacent properties.
11. North arrow), scale, and date. Horizontal datum shall be based on NAD83. Vertical Datum shall be based on NAVD88.
12. Location of proposed stormwater management facilities and type of facility.
13. Types of utilities proposed.
14. Name and address of preparer.
15. Topography at 2-foot contour intervals.
16. USDA soil types.
17. FEMA floodplain limits and boundaries.
18. [Wetlands](#), springs, streams, ponds, caves, sinkholes, historical sites, cemeteries, and other natural features as shown on the USGS Quadrangle maps or other mapping products for the site and 150-feet from the site boundary.
19. Location and description of any proposed recreational or open space uses.

20. Existing [sensitive areas](#), which may impact the site's development potential (endangered species, contamination or RCRA/CERCLA sites).
21. Existing built features, infrastructure, and their proposed eventual disposition (i.e. to be razed, removed, maintained, converted to other use).
22. Location, type, and size of all existing utilities and their easements on-site and within 150-feet of the site boundary including but not limited to, water, sewer, wells, SRA's, gas, electric, data/telephone, dry-hydrants, traffic signals, and railroad infrastructure.
23. Initial calculations of impervious coverage, density, area of non-residential uses, parking requirements and traffic impacts.
24. Average Daily Traffic (ADT) estimates, and peak hour trips, at each proposed point of access to a public way.
25. Prospective street layout providing access to the remainder of the property when the land development covers only part of the owner's entire holdings.
26. [Flood zone statement](#). [See also SFHA information](#).
27. [Residues/Remainders Information](#).
28. [Inset maps](#).
29. A signed and dated copy of the Owner Information Form; a template is provided by Planning Commission Staff.

Section 404.3. Proposed Design and Improvements

1. The layout of all proposed and existing lots, with approximate dimensions and area in square feet for each lot; proposed uses of property.
2. Front, rear and side yard setbacks.
3. The location of proposed buildings, the first floor elevation and the building envelope. For residential structures, a composite footprint may be used.
4. Impervious coverage, gross density and parking calculations.
5. Existing and proposed entrances.
6. Existing and proposed driveway locations.

7. Driveways intersecting WVDOT roadways shall have a paved surface (asphalt/concrete) from the existing roadway edge to the ROW, reserve line, or the return radius, whichever is greater.
8. Site dimensions, including the number of linear feet which front on public highways. All proposed street names and locations of street, traffic regulatory signs and ADT shall be shown.
9. Location, width and grade of all proposed streets, typical cross sections including a description of the centerline with distances and curve data shall be shown. The WVDOT must approve any access point onto a public highway.
10. The approximate location, dimensions and area of all property proposed to be dedicated or temporarily reserved for public use, or to be reserved by a blanket [covenant](#) for use of all property owners in the development and conditions for such conveyance or reservation. The location, dimensions, area and purposes of any proposed conservation areas, open space, or restrictive easements shall be shown.
11. Proposed public improvements, streets or other major improvements, which have been planned by public bodies for future construction on or near the proposed land development unit, to the extent that the information is readily available, shall be shown on the plat or site plan.
12. Proposed location of street trees, sidewalks and street lighting standards (if required); all other proposed improvements.
13. Standard Berkeley County and review agency construction details shall be provided.
14. Proposed drainage systems showing the disposition of surface drainage with the following:
 - a. Typical cross sections of all proposed stormwater management ponds and ditches.
 - b. Drainage easements through onsite and offsite lots.
 - c. Road culvert profiles.
 - d. The location, size and invert elevations of storm sewers and appurtenances thereto shall also be shown.
15. A proposed plan for erosion and sediment control during and after the construction phase shall be required pursuant to the current Berkeley County Stormwater Management and Sediment and Erosion Control Ordinance.
16. Connections with an existing water supply or alternative means of supply. If connecting to an existing water supply, show location, size of main, pressure and flow available at the connecting point.
17. Connections with existing sanitary sewer system or other means of sewage collection, treatment and disposal shall be shown. If connecting to an existing system, show location, size, and invert elevations at connecting point.
18. If individual sewer systems are proposed, the location of the drain field, or alternate means of disposal, as approved by the Berkeley County Health Department, State

Health Department and WVDEP, if applicable, must be shown. This area shall include the required septic reserve areas. Approval documentation shall be submitted to the Planning Commission for all drain fields. If individual water supply systems are to be provided, the location of the well as being 100-feet distant from any septic system and ten feet distant from any property line is required.

19. The location of existing and proposed gas lines, fire hydrants, electric and telephone poles, streetlights, as well as the recommended and/or required future locations, or easements, of these services.
20. When the Plat and Plan covers only a part of the owner's entire adjacent holdings, a scaled drawing, with topography and the prospective future street system, which would provide access to the owner's adjacent holdings, shall be shown. The prospective future street system shall be shown for a minimum distance of 200' beyond the boundary of the proposed Land Development as indicated on the Plat and Plan.
21. Proposed utility or other rights-of-way or restrictive easements may not cross through any [conservation easement](#) protected property unless the Berkeley County Farmland Protection Board or other administering conservation agency has granted written approval.
22. All grading, including that for individual lots, shall be shown on the Plan with existing and proposed contours.
23. Location of existing and proposed monuments.
24. For applications that require a highway entry permit, the Applicant shall submit to the Planning & Engineering Departments which will review the application and make a recommendation to the WVDOH prior to WVDOH submittal. A traffic study shall be required by Berkeley County under the following conditions:
 - a. When the proposed development is projected to generate one hundred (100) or more trips during the peak generating time for the development.
 - b. For smaller developments, under one of the following three conditions:
 - i. When the proposed new approach is to, or directly affects, an intersection already operating at a LOS "D" or worse;
 - ii. When the developer is requesting a new traffic signal;
 - iii. When modification of an existing traffic signal or timings is being requested.
 - c. An older traffic impact study may need to be updated when the data is more than two years old or the above conditions are triggered.
24. A professional engineer in West Virginia must certify all traffic impact studies. The applicant shall include the County Engineer on all correspondence with WVDOH regarding the traffic study.

Section 404.4. Hydrogeologic Testing Requirements for Subdivisions

See Appendix E

[Hydrogeologic testing](#) and reports are required and specifically defined for residential subdivisions not served by public water with 15 or more lots. Each hydrogeologic test shall be performed by or under the direct supervision of a professional geologist. A report of the evaluation, the Hydrogeologic Report, shall be prepared and signed by the professional geologist and submitted to the County for review. Where not specifically defined in Appendix E, the methodology used for testing and evaluation shall follow generally accepted professional hydrologic and hydrogeologic practices and standards.

Section 404.5. Sensitive Areas

A. Identification of Sensitive Areas

All applications subject to this section shall include the following information on a scale drawing. The relationship between the following features and the proposed use or construction shall be clearly shown in addition to a Phase 1 Environmental Study:

1. Location of streams, sinkholes and springs.
2. The boundaries of any floodplain as defined in the [Berkeley County Floodplain Management Ordinance](#).
3. The boundaries of any wetlands.
4. Areas of severe slope, defined as greater than 1 ½' horizontal to 1' vertical (66.6%).
5. Location of current or proposed pedestrian trails, on or adjacent to the subject site.
6. Location of Registered State or National historic sites.
7. [Karst](#) features.
8. Impaired streams.
9. Areas that have been polluted, contaminated, or areas that pose a human health/safety risk.
10. Threatened or endangered species on the site.

B. Design Requirements

If any of the features listed above exist on the subject property, the following additional requirements shall apply:

[Contamination](#)

If known or suspected contaminated areas are identified, the applicant must show that the contamination will have no effect, currently or in the future, on the use requested.

Sinkholes and Karst

1. The location of all sinkholes shall be shown on the existing conditions scale drawing, included with the Initial plan submission. The edge of the sinkhole is to be considered the last closed contour based on two foot contour mapping. Sinkholes and other Karst features shall be shown and the northing and easting coordinates provided on the drawings.
2. All sinkholes identified prior to construction shall be either remediated or separated from construction by a minimum of 50' buffer.
3. Remediation shall be carried out under the direction of a qualified Professional Geologist or Geotechnical Engineer. Mitigation shall be carried out according to the WVDEP Sinkhole Management Guidance Document (August 2005 et. seq.), or other applicable standards as recommended by the PG or PE and approved by the County Engineer.
4. Any improvements planned to fall within 100' buffer of any sinkhole (remediated or not), shall require a thorough subsurface investigation conducted by a qualified PG or PE to ensure that the planned improvements do not present a threat to human health, safety, or the environment.
5. For any subsurface investigations requiring boreholes, such as air track drilling or rock coring, the boreholes must be grouted upon completion. All air track-drilling operations used to determine the depth of overburden and a PG or PE shall monitor continuity of bedrock full-time.
6. If there are underground utilities located within 100' buffer of a karst feature, then a dike of clay or other suitable material shall be placed across the trench at 20' intervals or less along the entire length which passes through the 100' radius, or as directed by a PG or PE. This feature shall be clearly shown on the plan and profile view of all utilities.

Stream/River Buffers

Where an application contains any portion of a perennial or intermittent stream, a buffer shall be established and shown on the plan. The width of the buffer shall be a minimum of 35', measured from and perpendicular to the top of the stream bank. The buffer shall be expanded to include any floodplain determined by the Floodplain Ordinance; any field verified non-tidal wetland areas and/or any area of severe slope.

Within the stream or river buffer, vegetative ground cover shall be maintained at all times. The U.S. National Resources Conservation Service (NRCS) may recommend planting species and methods when no ground cover exists in the buffer or additional planting to improve existing ground cover. No permanently affixed building shall be permitted within the stream buffer except those designed to improve water quality in the stream/river, or structures such as fences designed to limit access to the stream/river. No septic system

shall be constructed within the buffer nor shall any septic reserve area be established within the buffer.

Severe Slope

The applicant shall identify all severe slopes at the time of application.

Severe slopes are defined as all land which has a natural slope of 1 ½' horizontal to 1' vertical (66.6%) or greater. The natural slope of an area shall be determined by calculating the distance between field verified contours. The horizontal run shall be measured at right angles to the natural contours.

At the discretion of the County Engineer, areas characterized by steep slopes, rock outcrops, soil with severe limitations for building and development or other unsuitable physical features shall not be subdivided nor proposed for sites of Subdivisions and Land Development Unit projects unless adequate safeguards against potential hazards are provided and approved by the Planning Commission.

Where the applicant has provided a determination of the severe slope the County Engineer shall verify the accuracy of the boundary. The Planning Commission, upon recommendation by the County Engineer, may render adjustments to the boundary delineation in order to comply with this Ordinance.

Wetlands

At the time of applications, an Army Corps of Engineers representative shall verify wetlands through a Jurisdictional Determination, and all wetlands boundaries surveyed. If there are no wetlands present onsite, a letter stating such shall be submitted from a qualified third party.

Wetland boundaries shall be established as a buffer area of 35' along any delineated wetland and shall be based on a wetland investigation and a Jurisdictional Determination conducted by an Army Corps of Engineers representative.

Comprehensive Plan maps related to flood plains and other general soils and hydric soils information may be used as a reference for determining the general location of major wetland areas.

Wetland disturbance shall be permitted only if approved by the US Army Corps of Engineers.

In all applications, wetlands shall be shown on a drawing indicating their location and measurement in accordance with the above standards.

A conservation area covering the wetlands shall be provided on the plan, or approved mitigation plans shall be submitted.

Endangered Species

Where endangered species exist on a site or have been determined by a state or federal agency to exist in the area of the site, the applicant must demonstrate compliance with all applicable restrictions imposed by state or federal agencies.

Section 405. Plan Change Requirements

All Administrative and Major Plan Changes shall comply with the content requirements outlined in all other sections of this Article. The following additional requirements apply:

All Plan Changes shall include:

1. A brief narrative on the Cover Sheet indicating the reason for the Plan Change.
2. All relevant sheets that have changes and all added sheets must be listed and highlighted in the sheet index.
3. All changes to existing sheets shall be in red ink.
4. A calculation table showing all changes in site data from the initial Plan to the proposed Plan Change.
5. A chronological history of all phases of the project that have received Final Plat approval with deed book, page, and Berkeley County File Number, if different.

Section 406. Final Plat

The Final Plat shall be submitted by the applicant to the Planning Department through the electronic online portal. The scale shall be 100' or less to the inch. Upon approval, a full-size paper copy shall be submitted. When more than one sheet is required, an index sheet of the same size shall be submitted showing the entire subdivision drawn to scale. The Final Plat shall be labeled "FINAL PLAT" in large letters. The Final Plat shall adhere to all previous sections in addition to the requirements described below.

Section 406.1. Final Plat Requirements

The Final Plat shall show:

1. [Location map](#).
2. Vicinity map.
3. North arrow (with basis and source of north), scale, and date.
4. The names of all adjoining property owners and current land uses with deed reference and tax map description and/or the names and locations of any adjacent residential subdivisions, current or proposed, with the Berkeley County Planning Commission File Number.

5. Title block with location of tract by tax district, map, parcel, deed book, and page number.
6. The name and address of the owner or owners of the land to be subdivided or developed, and the name and address of the Applicant, if different from the owner.
7. The name and address of the registered engineer/land surveyor certified in the State of West Virginia responsible for the preparation of the plat, and the name and address of the registered engineer certified in the State of West Virginia responsible for the preparation of the plans for the required improvements.
8. The name, address and seal of the West Virginia registered professional surveyor responsible for the preparation of the plat, and certification that the plat represents a survey made by him and that all monuments shown thereon exist, and that their location, size and material are correctly shown.
9. All plat boundary and proposed lot lines labeled with length of courses to hundredths of a foot and bearings to the nearest second. The data for all curves shall be shown in detail at the curve or in a curve data table containing the following: radius, delta, arc, tangent, chord and chord bearing. Boundary lines shall be determined by an accurate field survey.
10. [Residues/Remainders Information.](#)
11. [Inset maps.](#)
12. If Final Platting is occurring according to an approved phasing plan, provide an inset map of the entirety of the subdivision on the Cover Sheet which shows the following:
 - a. The boundary lines of each proposed phase;
 - b. The locations of all existing or future stormwater management easements;
 - c. The locations of all existing or future open space, including acreage; and
 - d. The locations of all existing or future off-site parking, including number of spaces.
13. Provide site data including number of lots, gross density, impervious coverage, parking calculations and acreage of stormwater management areas and access to them and open space.
14. Bearings and distances of established street boundaries and easements.
15. A description of all property corners, referencing the monument type and whether the monument was found or set.
16. The accurate location and type of material of all existing and proposed permanent reference monuments. The plat shall be tied to the West Virginia State Plane

Coordinate System (SPCS), and provide a minimum of two (2) interior northings and eastings markers

17. The following statement shall be shown on all Final Plats: “This final plat substantially conforms to the Detailed Site Plan previously approved by the Berkeley County Planning Commission on (date)_____. All design, improvement, construction methods, and details are provided by that plat and plan.” If a Plan Change has been approved, the Plan Change takes the place of the approved DSP; reference its approval date in this statement, if applicable.

18. When the Final Plat under review is a Replat of a subdivision of record, there shall be shown the following statement on the Final Plat with the applicable entries made thereon:

This is a final/replat of _____ (name of subdivision) recorded on_____, in Plat Book # _____, (date of recordation) Page # _____, owned by (name) on_____time of recordation.

Signature of Present Owner

19. In the case of a Replat of a subdivision of record, dotted or dashed lines shall be used to show the features or locations to be abandoned and solid lines to show the currently proposed features or locations.

20. Plats shall include the following note: “New development or redevelopment that involves land disturbance activities of one acre or more; or creates 5,000 square feet of impervious cover and the impervious cover is: a) 40% or more of any one parcel, or b) in a hotspot area that has known stormwater issues such as flooding or stormwater pollution shall be subject to the Stormwater Management and Sediment and Erosion Control Ordinance of Berkeley County.”

21. All stormwater easements shall be recorded, with final plats, prior to submission of as-built plans.

22. The exact layout for the Land Development, including:

- a. Street and alley lines; their names, bearings, lengths and widths, including widths along the line of any obliquely intersecting street.
- b. All restrictive easements or rights-of-way, when provided for or owned by public utilities, with the limits of all easement areas shown and stated on the plat.
- c. A note referencing the current deed(s) in the chain of title including grantor(s) and grantee(s), date and recording reference(s).
- d. Show floodplains as depicted on current FEMA FIRM or as indicated by a flood plain study and, where applicable and available, bearings and distances of flood plain easements, and base flood elevations.

- e. If individual water supply systems are to be provided, the location of the well as being 100' distant from any septic system and 10' distant from any property line is required.
- f. If individual sewage disposal systems are to be provided, location of required septic reserve areas and the location and extent of area or areas suitable for septic tank filter fields as approved by the WV DHHR shall be shown.
- g. Lots shall be numbered in numerical order throughout the entire subdivision.
- h. Area of each lot to the nearest square foot.
- i. All building setback lines and any other setback lines or street lines established by public authority and those stipulated in the deed restrictions.
- j. Accurate outlines and acreages of any areas to be reserved or dedicated for common use by the residents of the Land Development, or for the general public use with the purposes indicated thereon.

23. [Soil Statement.](#)

24. Provide and sign Owner's Certification Block.

25. The remediated and un-remediated sinkholes and setbacks shall be shown.

26. [Roadway Widening Reservation Certificate.](#)

27. The fully executed Final Plat shall be accompanied by: Copies of the Declaration of Protective Covenants and Restrictions, pursuant to the provisions of Chapter 32B, West Virginia Code, as approved by the Planning Commission legal counsel, in a form appropriate for recordation, including covenants governing the maintenance of public spaces, common area or reservations, and copies of approved provisions for maintenance and operation of facilities, if applicable, including the stormwater management maintenance agreement and bonding estimates.

28. A 2"x3" approval block for Berkeley County Planning Commission signature, including a space for the Berkeley County File Number and date of approval.

Section 407. Replats

All Replats shall comply with the content requirements outlined in Section 406 and its subsections. In addition, the Cover Sheet shall include a brief narrative indicating the reason for the proposed Replat.

Section 408. Site Plan

All Site Plans shall comply with the content requirements outlined in all previous sections, and shall be clearly labeled as "COMMERCIAL (or) INDUSTRIAL SITE PLAN".

Section 409. Supplemental Plans for Non-residential Projects

Supplemental Plans shall be submitted by the applicant to the Planning Department through the electronic online portal. The scale shall be 100' or less to the inch. Upon approval, a full-size paper copy shall be submitted. The plans shall be labeled

“SUPPLEMENTAL PLAN” in lower right-hand corner of all pages. All information shall be shown on the plans that contain the County Engineer’s signature approving construction.

Section 409.1. General Content, Supplemental Plans

Supplemental Plans shall show and be accompanied by:

1. Certificates of Substantial Completion from Berkeley County Public Water and Public Sewer Districts, if applicable.
2. Letter of approval from Berkeley County Health Department, if applicable.
3. A certificate to be signed by the project engineer or surveyor which reads as follows, as may apply: I hereby certify that:
 - a. All drainage and stormwater management facilities shown hereon have been constructed to the approved plans and specifications.
 - b. All streets, utilities, and other pertinent features shown hereon have been constructed according to the approved plans and specifications.
 - c. The information shown hereon is indicative of an actual field survey made under my supervision.

Engineer/Surveyor

Date

4. The name, address, and telephone number of the owner(s)/developer.
5. The name, address, signature and seal of the professional engineer licensed in the State of West Virginia responsible for the preparation of the plan.

Section 410. As-Builts for Residential Projects

As-Builts shall be submitted by the applicant to the Planning Department through the electronic online portal along with the appropriate fees. The scale shall be 100’ or less to the inch. Upon approval, a full-size paper copy shall be submitted. The plans shall be labeled “AS-BUILTS” in lower right-hand corner of all pages. All information shall be shown on the plans, which contain the County Engineer’s signature approving construction.

Section 410.1. General Content, As-Builts

As-Builts shall show and be accompanied by:

1. All sheets of Supplemental Plans previously submitted shall be provided in full.
2. Certificates of Substantial Completion and as-built acceptance from Berkeley County Public Water and Public Sewer Districts, if applicable.
3. Letter of approval from Berkeley County Health Department, if applicable.

4. A certificate to be signed by the Engineer of Record which reads as follows, as may apply: I hereby certify that:
 - a. All final grading, drainage, and stormwater management facilities shown hereon have been constructed to the approved plans, specifications and SWM Report.
 - b. All streets, utilities, and other pertinent features shown hereon have been constructed according to the approved plans and specifications.
 - c. The information shown hereon is indicative of an actual field survey made under my supervision.

Engineer of Record

Date

5. The name, address, and telephone number of the owner(s)/developer.
6. The name, address, signature, and seal of the professional engineer licensed in the State of West Virginia responsible for the preparation of the plan.

Section 411. Construction Red-Line Requirements

Supplemental Plans and As-Builts shall show the following redlines:

1. A check mark beside design values if they were actually constructed values. For changed values, strikethrough the design value and enter the actual value.
2. Elevations to the nearest 0.1'.
3. Design and as-built improvements.
4. Landscaping, plantings, trees, shrubs and other woody vegetation as required by the Detailed Site Plan shown in green. Trees shall not be allowed within 15' of any portion of the embankment or within 25' of outlet structure.
5. Stormwater management easement area shown and labeled.
6. Stormwater management easement access. Access to be a minimum 10' wide, with a maximum cross slope of 4:1 and a maximum longitudinal slope of 15%. Maintenance access must reach control structure, pond bottom, and forebay area.
7. Stormwater management facility constructed within stormwater management easement area. No permanent structures shall be permitted within any storm drainage or stormwater management easement either shown or described on the Final Plat of subdivision of deed of easement.
8. Paved access entrance apron, if applicable.
9. Minimum 15' setback from stormwater management facility toe of fill or top of cut to nearest property lines. Minimum 25' setback from stormwater management facility outfall channel protection to nearest property line.

10. Outflow pipe(s), outlet protection, outfall channel(s) to stable outfall. Pipe diameter, material length, invert in and invert out, outfall channel length, width, thickness, material lining size and type labeled. Cross-section detail with dimensions required.
11. Emergency spillway with outlet channel shown and dimensioned with elevations labeled.
12. As-built easements for ponding and/or pond slopes on private property.
13. Identify all proposed non-structural credit areas and as-built slope and location (i.e. dry swales, wet swales, rain gardens, non-rooftop and rooftop disconnection credits, natural area and conservation credit).
14. Maintenance schedule (i.e. how often, minimum requirements, responsible party).
15. Location and detail for repair sink holes.
16. Show and label limits of pond forebay, forebay weir, forebay weir protection and reference detail.
17. Show and label principal spillway, control structure, limits of embankment fill stationed.
18. Limits of pond liner labeled.
19. For ponds with permanent pool, show and label under water safety bench and label elevation, slope, and width.
20. Flared end sections (or headwalls) on all pipes.
21. Pond embankments (fill) planted with grass only (or approved perennial alternative).
22. Ponds >8' deep (measured to 100-year WSEL) shall be benched within the ponding area 4' horizontally at 4' elevation intervals.
23. Ponds, which pass the 100-year storm through the principal spillway, shall include a token spillway 1' below top of dam, minimum 8' width, located entirely within cut soils. Show and label.
24. Label dam side slopes.
25. Top width shall meet MD-378. Top elevation labeled constructed and settled.
26. Minimum 1' cover over top of spillway pipe.

27. Principal spillway: Show and label dimensions, invert elevations in and out. Identify type of material, diameter, slope, and length.
28. All as-built dimensions for riser structure. Show and label.
29. Provide outfall protection dimensions: geometric shape, length, slope and lining material. Indicate median and maximum riprap class, size, and thickness.
30. Provide latitude and longitude coordinates of all stormwater BMP controls.
31. Changes to parking, ADA-access, lighting, and screening.

ARTICLE 5 - DESIGN STANDARDS

Section 501. General

Section 501.1. Application

1. The Planning Commission in evaluating plans and plats for proposed Land Developments will apply the principles, standards, and requirements contained in this article, or incorporated in this article by reference.
2. The standards and requirements outlined herein, or incorporated by reference, shall be minimum standards and requirements.
3. The Applicant may place legal restrictions on the development greater than those required in this article.

Section 501.2. General Standards

1. All major plan submissions shall be based on NAD-83 and NAVD-88.
2. All portions of a tract being subdivided shall be taken up in lots, streets, public lands, common area or other proposed uses so that landlocked areas or non-compliant parcels are not created.
3. Easements controlling access to lots, public lands or adjacent private lands are permitted.
4. Land being subdivided or developed shall be laid out and improved in reasonable conformity to existing topography in order to reduce grading and cut and fill.
5. The land shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood, subsidence or other menace.
6. Land Development projects for tracts of land subject to periodic flooding must be designed and planned to meet the current requirements of the Federal National Flood Insurance Program found in 42 U.S.C. § 4001 et seq. (1968); the federal regulations governing Floodplain Management and the Protection of Wetlands, found within 24 C.F.R. § 55 (1994); USDA Soils Inventory Maps; and the Berkeley County Floodplain Ordinance. All required, appropriate, Federal forms shall be completed and filed with the Planning Commission.
7. Developers are encouraged to preserve and design around trees, groves, scenic points, historic spots and other community assets and landmarks.
8. On-lot wastewater disposal systems shall be setback a minimum of 100' from known sinkholes or sinks. A septic reserve area of 10,000 square feet, or enhanced septic system (class 2 or greater) as determined and approved by the County Health Department, State Health Department or WVDEP, as applicable, is required and shall remain permanently available for such use.
9. Structures shall be setback a minimum of 100' from the outer perimeter of an existing or proposed cemetery, and 50' from any railroad right-of-way. If cemetery is located

on an adjoining property, a minimum 30' buffer measured from cemetery boundary shall be required.

Section 501.3. Engineer of Record

The engineer of record shall not be responsible for engineering work performed and sealed by other professional engineers, including independent consulting engineers who work under the coordination of the engineer of record.

If the engineer of record for the project changes, a letter shall be provided to the County Engineer identifying the new firm and engineer of record who will assume responsibility for the design.

Section 502. Guest Residence

1. No [guest residence](#) shall be established without first obtaining a building permit to ensure compliance with building code requirements.
2. The square footage of the guest residence shall not exceed 60% of the [habitable square footage](#) of the primary residence.
3. The parcel of land containing a guest residence shall remain in single ownership.
4. Under no circumstances, shall there be more than two dwelling units (primary and accessory) on any single parcel.
5. The guest residence may contain all aspects of a separate dwelling unit including kitchen, bathroom, and bedroom facilities.
6. The guest residence must be permitted to have its own electrical service meter if the structure meets the dwelling unit separation requirements of the West Virginia Statewide Building Code. The guest residence shall have approved utilities.
7. No guest residence shall be established without prior written approval from the Berkeley County Department of Health, indicating that the drain fields are adequate to serve both the main dwelling and the guest residence.
8. Conversion of an existing non-residential structure to a habitable residence shall comply with the current building codes and the previous conditions of this section.

Section 503. Streets, Roads and Parking Facilities

Article 8 and APPENDIX A contain the minimum design criteria and standards for construction of streets, roads and parking requirements for development within Berkeley County.

1. Minimum Standards for Subdivision Access

All phased or non-phased residential development which creates, initially or cumulatively, 100 dwelling units or greater, is required to have two points of access to a WVDOH right-of-way or other publicly maintained right-of-way, such as municipal streets or public roads in an adjacent state. Additional access points must meet all other applicable requirements of this ordinance, and must be approved by the WVDOH.

The Planning Commission may permit waivers to this section upon finding that an additional access point is not feasible, and the design will not unduly cause traffic or emergency response delays in the event of the single access point being closed.

2. Right-of-Way Requirements for Development on State Roads

All developments, which have frontage on a state road, shall reserve an area for future roadway widening or maintenance. The reserved area shall extend parallel & adjacent to existing road centerline. For all road rights-of-way less than 50' wide, a 25' reserve area shall be measured from the centerline, as required by the Division of Highways, per their present and future road expansion & improvement plans & requirements. A certificate reserving the road widening area for the Division of Highways & requiring conveyance with compensation at the time of roadway widening shall be placed & executed on the Final Plat.

Section 504. Setbacks

- If any property line is adjacent to Interstate 81, the Federal Highway dedication line must be delineated and a 100' setback measured from the edge of right-of-way dedication shall be required.

Where the subdivided area is intended to be used for **residential purposes**, the building setback lines identified in the table below shall be observed:

Table 5-1. Residential Setbacks

Residential Setbacks	
Minimum Setbacks	
Front	20'
Side	10'
Rear	20'

- If any [double frontage lot](#) or property line is adjacent to a road, a 20' setback applies to that property line.

Uncovered decks, including decks within a townhouse development, may extend up to a maximum of five feet into the required rear yard setback, but only when the rear yard abuts common [open space](#) as shown on the recorded plat.

Where the subdivided area is intended to be used for **non-residential purposes**, the building setback lines identified in the table below shall be observed:

Table 5-2. Non-residential Setbacks

Minimum Setbacks	Highway Classifications		
	Arterial	Collector	Local/Other(L1-L3 & Alley)
Front	50'	25'	10'
Side	15'	15'	10'
Rear	25'	25'	10'

- For all sides abutting a WVDOH road, a 50' setback is required.
- For non-residential purposes, signs, entrance markers, etc., shall be permitted within the setback line so long as they do not impede line of sight visibility and are approved by WV DOH.
- Blocks
 - a. The length, width, shape, and design of blocks shall be based on the site analysis and the intended use proposed for the site.
 - b. Blocks shall not exceed 800 feet in length and should generally have a perimeter of approximately 1800 feet.
 - c. Depth of a block shall equal the depth of two approved lots, which share the same rear lot line. However, the block depth may vary from the requirement in cases where parallel roads are utilized or where topographic limitations exist.

Section 505. Lots

1. Street frontage, major and administrative subdivisions: In administrative subdivisions and major subdivisions, all lots, including remainders, must abut on:
 - a. An existing public street;
 - b. A proposed public street;
 - c. A proposed private street, approved by the Planning Commission; or
 - d. A proposed private access easement at least 50' wide providing access from each lot to an existing public street.
2. Access to existing streets - The number of vehicular entrances onto existing streets shall be minimized. When several lots front on a street, the staff may require that adjoining lots share a single driveway. When several lots front on a street with an average daily traffic volume greater than 5,500 vehicles or projected to be greater than 5,500 vehicles, then the County or WV Division of Highways may require that an internal service street access the lots.
3. Double-frontage lots - Double-frontage, reversed-frontage and multi-frontage lots shall be avoided, except where necessary to provide separation of residential development from major streets or to overcome specific disadvantages of topography. Where such lots are permitted, access shall be limited to one street only.
4. Design and layout of lots:
 - a. All lots shall have frontage upon an existing or proposed street. Lots within a major residential subdivision development that are less than 60,000 square feet shall take access from an interior road system.
 - b. Access - No residential lot within a major subdivision shall have direct access to an arterial or collector road. Access shall be permitted from local

streets or roads to parking lots serving a minimum of any combination of eight dwelling units of [single family attached dwellings](#) or [multi-family dwellings](#). Access points shall be minimized, whenever possible. Common driveways and interconnecting parcels shall be utilized, whenever practicable. When more than three dwelling units utilize a common access, the access shall be designed to comply with Appendix A, and must be approved by the County Engineer. Where a drainage swale, perennial or annual stream separates the buildable area of a lot from the street upon which it takes access, provision shall be made for the installation of a culvert or other structure. The design of the culvert or other structure is subject to approval by the County Engineer and other appropriate state and federal agencies. At a minimum a Stream Disturbance Permit from WVDNR shall be approved. If wetlands are present A Mitigation Permit shall be provided from WVDEP. This is a required improvement and must go through the Major process.

- c. "Panhandle" lots are permitted providing that only one lot be situated between the main body of the panhandle lot and the access roadway. Panhandles shall be a minimum of 25' wide and a maximum of 400' in length for a single residence.
5. The minimum requirements for lots, subject to other conditions as noted in the Berkeley County Subdivision Ordinance, shall be as follows:

Table 5-3. Lots With Public Water & Public Sewer

CONDITION – With Public Water AND Public Sewer			
Development Type	Maximum Impervious Coverage	Minimum Lot Width	Minimum Lot Size
Single Family Residence	60%	75 Feet	7,500 Square Feet
Two-Lot Single Family Detached Residence	60%	42.5 Feet	4,500 Square Feet
Duplex Residence	60%	85 Feet Total Lot Width	9,000 Square Feet
Multi-Family Residence	60%	100 Feet	10,000 Square Feet plus 400 sq. ft. for each one-bedroom unit and 600 sq. ft. for each unit with two bedrooms or

Townhouse	60%	18 Feet	1,800 Square Feet with a maximum of 10 units per acre.
Commercial	80%	100 Feet	No minimum
Industrial	80%	150 Feet	40,000 Square Feet

Table 5-4. Lots With Public Water & Individual, On-Lot Sewage Disposal System

CONDITION – With Public Water AND Individual, On-Lot Sewage Disposal System			
Development Type	Maximum Impervious Coverage	Minimum Lot Width	Minimum Lot Size
Single Family Residence	40%	100 Feet	40,000 Square Feet
Duplex Residence	PROHIBITED		
Multi-Family Residence	PROHIBITED		
Townhouse	PROHIBITED		
Commercial	75%	100 Feet	1 Acre
Industrial	75%	150 Feet	1 Acre
Factory Built Home Community	PROHIBITED		

- Lots being served by a Community Well may have lots with a minimum lot size of 40,000 sq. ft. The minimum lot size is permitted, if the resulting density does not exceed the yield calculated by using a minimum lot size of 80,000 sq. ft.

Table 5-5. Lots With Approved Individual On-Lot Water Supply & Public Sewer

CONDITION – With Approved Individual On-Lot Water Supply AND Public Sewer			
Development Type	Maximum Impervious Coverage	Minimum Lot Width	Minimum Lot Size
Single Family Residence	40%	100 Feet	40,000 Square Feet
Duplex Residence	PROHIBITED		
Multi-Family Residence	PROHIBITED		
Townhouse	PROHIBITED		
Commercial	75%	150 Feet	1 Acre
Industrial	75%	150 Feet	1 Acre
Factory Built Home Community	PROHIBITED		

Table 5-6. Lots With Approved Individual On-Lot Water Supply & Individual, On-Lot Sewage Disposal System

CONDITION – With Approved Individual On-Lot Water Supply AND Individual, On-Lot Sewage Disposal System			
Development Type	Maximum Impervious Coverage	Minimum Lot Width	Minimum Lot Size
Single Family Residence	35%	125 Feet	60,000 Square Feet
Duplex Residence	PROHIBITED		
Multi-Family Residence	PROHIBITED		
Townhouse	PROHIBITED		
Commercial	75%	200 Feet	1 Acre
Industrial	75%	300 Feet	2 Acres
Factory Built Home Community	PROHIBITED		

Table 5-7. Lots With Community Well

CONDITION – With Community Well and Public Sewer or Community Sewer			
Development Type	Maximum Impervious Coverage	Minimum Lot Width	Minimum Lot Size
Single Family Residence	35%	75 Feet	7,500 Square Feet
Duplex Residence	PROHIBITED		
Multi-Family Residence	PROHIBITED		
Townhouse	PROHIBITED		
Commercial	PROHIBITED		
Industrial	PROHIBITED		
Factory Built Home Community	PROHIBITED		

1. The community wellhead must be within the boundary of the proposed development or within 1000' of the same.
2. This minimum lot size is permitted if resulting density does not exceed the yield calculated by using a minimum lot size of 50,000 sq. ft.

Section 506. Restrictive Easements

1. The following regulations shall govern the design and layout of easements:
 - a. Should utility easements be required along rear or side lot lines, to the fullest extent possible, the easements shall be centered on the lot line(s).
 - b. No structure shall be permitted to be placed, set or put within the area of an easement, unless the structure facilitates that easement.
 - c. The Planning Commission, upon recommendation from the County Engineer, may require perpetual unobstructed pedestrian easements and sidewalks or walkways.
 - d. Where topography or other conditions make impractical the inclusion of utilities or drainage facilities within street rights-of-way, perpetual unobstructed utility easements at least 20' wide shall be provided across property outside the street lines but with satisfactory access to the street. In no case shall easements for individual septic or water system or any easement or area designated as a septic reserve area encroach on any building lot other than the lot it serves. Septic system easements may be permitted in community open space areas.
2. Where a watercourse traverses a Land Development, a stream buffer easement shall be applied.

Section 507. Grading & Drainage

1. Blocks and lots shall be graded to secure proper drainage away from buildings and to prevent the pooling or collection of stormwater (a minimum of 5% grade away from all buildings for 10-feet), in accordance with the adopted International Building Code and International Residential Code.
2. All drainage provisions shall be designed to carry surface waters to the nearest practical and adequate street, storm drain, natural drainage way or watercourse and should be diverted away from any on-site sewage system reserve area, on-site sewage system, un-remediated sinkhole or water well. Drainage swales on residential lots shall not exceed a facial slope of four horizontal: one vertical in order to allow proper maintenance.
3. The land development shall be provided with drainage structures as are necessary to prevent erosion damage and to satisfactorily carry off surface waters.
4. No excavation shall be made with a face steeper than three feet horizontal: one foot vertical (3':1'), except under one or more of the following conditions:
 - a. The excavation is located so that a line having a slope of three feet horizontal: one foot vertical (3':1'), and passing through any portion of the cut face will be entirely inside the property lines of the property on which the excavation was made and a minimum of 10 feet from the property line.

- b. The material in which the excavation is made is sufficiently stable to sustain a slope of steeper than three feet horizontal to one foot vertical (3':1'). A geotechnical report to that effect from a professional engineer, registered in the State of West Virginia and experienced in erosion control, is submitted to and approved by the Berkeley County Engineer. The statement shall affirm that the site has been designed, inspected and sealed by a geotechnical engineer and that the deviation from the slope requirements will not result in injury to persons or damage to property.
 - c. A retaining wall constructed in accordance with approved standards is provided to support the face of the excavation.
- 5. No fill shall be made which creates any exposed surface steeper in slope greater than three feet horizontal to one foot vertical (3:1), except under one or more of the following conditions:
 - a. The fill is located so that settlement, sliding or erosion will not result in property damage; no sediment will enter or be deposited in watercourses or natural drainage channels; and no hazards to adjoining property, streets, [alleys](#) or buildings shall be created.
 - b. A geotechnical report with emphasis on slope stability from a professional engineer, registered in the State of West Virginia and experienced in erosion control, certifying that he has inspected the site and that the proposed deviation from the slope specified above will not endanger any property or result in property damage, nor will any sediment enter or be deposited in watercourses or natural drainage channels, is submitted to and approved by the County Engineer.
 - c. A retaining wall constructed in accordance with approved standards is provided to support the face of the fill.
- 6. Storm drains and appurtenances shall be constructed to take surface water from the bottom of vertical grades, to lead water away from springs and to avoid excessive use of cross gutters at street intersections and elsewhere.
- 7. Watercourses shall remain open and shall not be piped or incorporated into a stormwater system, unless approved by the County Engineer and all required state and federal agencies.
- 8. In the design of storm sewer systems, the future use of onsite undeveloped areas upstream shall be taken into account in calculating pipe size. All stormwater management and storm drain systems shall be compliant with the adopted stormwater management ordinance of the County.

Section 508. Stormwater Management & Erosion & Sediment Control

All applications must comply with the adopted Berkeley County Stormwater Management and Sediment and Erosion Control Ordinance.

Section 509. Water & Sewage Facilities

1. If the boundary of the subdivision lies within 200' of a public water or public sewer system, or is within the designated growth areas in the Berkeley County Comprehensive Plan, the subdivider shall verify approval for connection and make the necessary [improvements](#) to connect all lots to such systems; provided that any necessary easements can be secured either by the subdivider or the utility, and that the public utility has the capacity needed to serve the subdivision.
2. If the subdivider intends to provide a private water system or private sewer system, the subdivider shall submit construction plans and specifications thereof, and such shall be subject to the bond and other security provisions guaranteeing construction and maintenance provided elsewhere in this article. All construction plans must be approved by the appropriate agency prior to the approval of the preliminary plan.
3. If there are no plans to extend public sewer or approved private sewer to the subdivision, the Planning Commission shall not approve the final plat until the subdivider provides a written statement from the health department certifying the suitability of the subdivision for private on-site sewage disposal systems. The following types of lots are exempt from this requirement:
 - a. Remainders, meaning one lot of a subdivided property that is not to be offered for immediate sale 35 acres or larger [see Definitions].
 - b. Lots intended to contain only an existing structure with an existing approved septic system; and
 - c. Lots that are to be used only for special purposes that do not require human presence, such as power substations, radio towers, pump stations, etc. A note shall be included on the plat to specify the use of such a lot and to state that it is not approved for construction of any occupied structure.
4. When private on-site sewage disposal systems are used in major subdivisions, each private system shall be located either within the lot it intends to serve or within open space.
5. When private on-site sewage disposal systems are used in family or administrative subdivisions, each system shall be located within the lot it intends to serve.
6. Within flood prone areas, all public water systems and public sewer systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters. On-site waste disposal systems

shall be located to avoid impairment to them or contamination from them during flooding.

Section 510. Fire Protection

Section 510.1. Fire Hydrants

1. If a subdivider's water supply is adequate for fire hydrants, as determined by the Berkeley County Public Service Water District, the subdivider shall provide fire hydrants.
2. Fire hydrants shall conform to NFPA or Berkeley County Emergency Management Services standards.
3. Fire hydrants shall not be located at the terminus of streets if a more readily accessible location is available.
4. Fire hydrants shall be located no more than 12 feet from the road.
5. For detached one and two family dwellings hydrants shall be provided in accordance with both of the following:
The maximum distance to a fire hydrant from the closest point on the building shall not exceed 600 feet.
The maximum distance between hydrants shall not exceed 800 feet.
6. For all other buildings other than detached one and two family dwellings hydrants shall be provided in accordance with both of the following:
The maximum distance to a fire hydrant from the closest point on the building shall not exceed 400 feet.
The maximum distance between hydrants shall not exceed 500 feet.
7. No fire hydrant shall be placed or have parking between the travel lane and the placement location.
8. A 36-inch clear space shall be maintained around the circumference of fire hydrants except as otherwise required by Berkeley County Engineer or EMS.
9. A clear space of not less than 60 inches shall be provided in front of each hydrant connection with a diameter greater than 2.5 inches.
10. Fire hydrants shall be set no closer than 18 inches from existing or proposed sidewalks.
11. Standard bury depth for fire hydrants is 4 feet.
12. When possible fire hydrants should be set in line with lot division lines.
13. Fire hydrants shall be set a minimum of one (1) foot outside the turning radii of intersections.
14. Fire hydrants shall be set clear two (2) feet behind curbs, three (3) feet from the edge of road shoulders, or no closer than one (1) foot of the ROW line.
15. Where fire hydrants are not located within a public ROW Hydrants subject to vehicular damage shall be protected by curbs or bollards.

16. A fire hydrant coverage drawing for the subdivision shall be included in the plan set for review and approval.

Section 510.2. Water Supply Systems for Rural Firefighting

1. Subdivisions creating 4 or more lots, and not served by public water, shall provide a static fire water supply in the form of an underground or above-ground tank, cistern, or permanent fire pond served by a dry hydrant for approval by the County Engineer and Berkeley County EMS.
2. For existing subdivisions being expanded where the total number of lots (existing & proposed) is 4 or more, the installation of a Rural Fire Water Supply is required.
3. Rural fire protection water supply systems are for the sole purpose of firefighting and shall be designed, maintained, and operated in accordance with NFPA 1142 Standard on Water Supplies for Suburban and Rural Firefighting, and USDA NRCS Code 432 Dry Hydrant.
4. The water supply volume shall be maintained, accessible, and available on a year round basis by the HOA.
5. The minimum water supply volume available shall not be less than 7,000 gallons for underground or above ground tanks or cisterns.
6. A lined fire pond or impounded water supply with a dry hydrant shall provide a minimum of 30,000 gallons (250 gpm x 120 min) of capacity and be designed in accordance with NFPA 1142. The reliability of the source shall be based on a 50-year drought frequency by a Registered Professional Engineer.
7. The minimum water delivery rate shall not be less than 250 gallons per minute.
8. Underground tanks and fire ponds shall be centrally located within the development but also shall consider proximity to a WVDOT roadway such that the water source may also be used for wildfires or other residential fires. The location shall be at the discretion of the County Engineer and Emergency Management Services.
9. The staging lane for fire apparatus to access the dry hydrant shall be constructed of asphalt, designed for a loading of HS25, a minimum of 60 feet in length centered on the hydrant, exclusive of a 1:10 taper, and be a minimum of 10 feet wide.
10. Grades from the edge of the staging lane shall be a maximum of 1:12.
11. The center of the threaded connection for the dry hydrant shall be set at 24 inches from grade and ensure the surrounding area has a clear unobstructed space a minimum of 3 feet around the hydrant. In no case shall the top of the hydrant be greater than 30 inches from grade. The outlet of the hydrant shall be set perpendicular to the staging lane and offset 8 feet. The exposed piping shall be designed to resist all external loads and protected from traffic by bollards if required.
12. The end fitting (Fire Department Connection) on the dry hydrant shall consist of the following:
 - One 6" 90-degree elbow with 6-inch NH (NST) male outlet adaptor.
 - One adapter, 6-inch NH (female) by 4.5-inch (male) with rocker lugs.
 - One cap 4.5-inch NH with attaching cable.

13. Static lift is preferred not to exceed 10 feet but shall not exceed 15 feet, measured from the centerline of the pumper intake, assumed 3 feet above the pavement to the top of the underwater intake screen/strainer.
14. Calculations, including head loss, shall be provided demonstrating the fire water system can operate within the parameters of NFPA 1142. Head loss shall be minimized; however, it shall not exceed 20 feet.
15. Dry hydrants shall be capable of 1,000 GPM at draft.
16. Signage shall have a red background with white letters a minimum of 3 inches in height. Sign background and letters shall be reflective and be in accordance with the WVDOT Standards, Specifications, and Federal MUTCD Manual for materials. Each dry hydrant shall have an identification number assigned by Emergency Management Services.
17. Ponds, impoundments, or streams used for fire water supply shall have a separate report prepared demonstrating that the system provides adequate flow sustainability and recharge for firewater usage. Hydrologic studies shall be based on 50-year drought interval.
18. Fire ponds shall be exclusive of SWM quality (MS4 BMP's). All SWM quality treatment shall be done upstream from the fire pond.
19. Storage tanks shall be designed and selected in accordance with NFPA 22 Water Tanks for Private Fire Protection.
20. Coordinates (Latitude/Longitude) shall be provided on the plans and be in accordance with NAD83.
21. Easement shall be shown on the Final plat or Minor Easement Plat. The easement shall be a minimum of 20 feet wide and shall offset the limits of the facility a minimum of 20 feet and extend to the public (WVDOT) ROW for emergency equipment access.
22. Underground tanks shall have an above ground sight glass or gage that displays the water level inside the tank. Underground tanks shall also have separate piping access installed for replenishing the tank that is acceptable to Emergency Management Services. The tank shall be designed for buoyancy when empty and all underground piping shall have thrust blocking.
23. Fire ponds shall have a graduated water level indicator to determine the actual water level above the strainer in one-half foot increments. The water level indicator shall be easily read from the embankment of the pond or impoundment.
24. All systems where recharge is provided by a stream shall be permitted with US Army Corps of Engineers, WVDEP, and WVDNR.
25. Access roads to the impoundment or tank shall not have a maximum grade of 1:20, be constructed of an all-weather surface, and be a minimum of 10 feet wide with provisions for turning.
26. Underground tanks shall be protected from vehicles or other live loads with bollards spaced 8 feet on center around the extent of the tank.
27. All exposed piping shall be protected from corrosion and UV degradation through the use of coatings. The final color of all exposed conduit shall be white.
28. The rural water supply system shall be bonded with Berkeley County Commission as part of the improvement bond.

29. Rural water supply systems shall be constructed, tested, and accepted by Berkeley County EMS prior to the occupancy approval of the first residence.
30. All rural water fire supply systems shall be maintained by the HOA at full capacity. Maintenance, including landscaping (for the supply system) and access to the supply shall also be the responsibility of the HOA.
31. The water supply system shall be inspected and tested yearly by Berkeley County EMS. Any repairs shall be made promptly by the HOA.
32. Refilling or replenishing of the water supply after use by Berkeley County EMS will be the responsibility of Berkeley County EMS with 72-hours.

Section 511. Utilities

1. Utility easements at least 20' wide shall be provided for water, sewer, electric power, telephone lines, and other utilities. Easements shall be provided along all lot lines, including street right-of-way lines, unless the Planning Commission approves an alternate arrangement. Easements are not required on remainders.
2. Within flood-prone areas, all utilities shall be located and constructed to minimize or eliminate flood damage.

Section 512. National Register of Historic Places Review

All structures, other than single family detached houses, proposed within 1000' from any historic structure, landmark, or district listed on the National Register of Historic Places must first obtain a Certificate of Appropriateness from the Planning Commission. Prior to obtaining a certificate of appropriateness, the applicant must seek a recommendation from Berkeley County Historic Landmarks Commission (BCHLC) as to the certificate of appropriateness. Within 45 days of receipt of a proposed plan, BCHLC shall hold a public hearing on the proposed plan. The applicant shall also obtain an opinion letter from the State Historic Preservation Office (SHPO) as part of this process. Within 10 days of the public hearing, the BCHLC shall submit its recommendation to the Planning Commission. The Planning Commission shall certify the appropriateness of the structure(s), if the BCHLC recommends that the Planning Commission certify the project. If the BCHLC fails to recommend or opposes the certificate of appropriateness, the Planning Commission has plenary authority to issue a certificate of appropriateness upon finding the project does not negatively impact the historical, architectural, or cultural heritage of the historical structure, landmark, or district.

ARTICLE 6 - IMPROVEMENT AND SUBDIVISION GUARANTEES

Section 601. General: Improvement Guarantees

The Berkeley County Planning Commission shall condition its approval of all Final Land Development Plans upon the bonding of all required improvements. Failure to obtain and maintain sufficient surety for all required improvements until the completion of such, including the County Engineer's approval of the work performed, may result in revocation of all previously granted permits and issuance of stop work orders unless the problem is resolved in the time period and by the terms provided for in Section 608.

Section 602. Guarantee of Installation of Improvements

Upon receiving Planning Commission Final Approval and prior to the release of the signed Final Plan, the developer shall complete a Developer's Agreement (Template attached as Appendix B) and post a financial security as required by the Agreement with the County Commission. The bond shall provide satisfactory surety for 115% of the estimated construction cost of the ultimate installation and inflation costs of the public improvements at prevailing wage rates. The bond shall be subject to forfeiture to the County Commission for the sole purpose of installation or completion of required improvements. The County Engineer shall have the authority after 30 days' notice to the principal, to recommend to the County Commission an increase in the amount of the surety at any time, if in his/her judgment, such increase is appropriate. The County Engineer must justify such decision by a demonstrable increase in costs, which must be disclosed to the principal. The decision whether to adopt the increase is determined by vote of the County Commission.

Section 603. Installation of Improvements and Surety

The following shall apply with respect to the installation of improvements and the furnishing of surety:

1. The County Engineer upon notification to the County Commission may proportionately reduce the amount of any surety when portions of the required improvements have been completed. However, no surety amount shall be reduced for 30 days after Final Plan approval has been issued by the Planning Commission.
2. Within 45 days after completion of all required bonded improvements, the applicant shall notify the County Engineer in writing of said installation and provide a signed set of As-Built drawings.
 - a. The As-Built drawings shall consist of the original construction plans marked in red showing all differences between designed and constructed grades, dimensions and features, and shall meet the requirements of the Berkeley County Department of Engineering As-Built Checklist. The engineer's Stormwater Management Certification shall be of a form

approved by the County Engineer and shall verify the SWM and MS4 Control techniques, practices, and structural stormwater measures as constructed meet or exceed the requirements and specifications of the approved final Stormwater Management plan and SWM Report. The professional should be the Engineer of Record for the design drawings and by verifying the plan is accepting responsibility for the materials, construction, and inspection of the as-built information shown.

- b. A Certification Letter shall be provided that all boundary property corners and monuments for the development or site plan, including all lots, have been set. The letter shall be signed and sealed by a registered professional land surveyor in the state of West Virginia.
 - c. Documentation and recordation by the Berkeley County Clerk shall be provided that all common areas, roadways, SWM areas, and open spaces have been transferred to the HOA or POA.
 - d. Documentation that all permits issued by WVDOH, WVDEP, WVDNR have been satisfactory completed and closed or terminated shall be provided.
 - e. Third party testing and inspection reports, and other relevant information signed and sealed by a registered professional engineer in the state of West Virginia.
3. The County Engineer or his/her qualified [agent](#), shall at their discretion schedule an on-site inspection and prepare a report to be presented to County Commission in writing indicating approval, partial approval or rejection and giving the reasons in the case of partial approval or rejection. Said report shall also indicate the estimated cost of any improvements for which approval is withheld.
 4. On the basis of the report, the County Engineer, upon notification to the County Commission, shall approve or reject the improvements, grant partial approval, or withhold approval, and shall notify the applicant in writing of the contents of the report no later than 60 days after receipt of the completed submission detailed in (b) above. When partial approval is granted, the County Engineer may recommend to the County Commission a reduction in the surety of an amount equal to the estimated cost, less 5%, of such completed and approved improvements. In no case shall the surety be reduced below the amount deemed sufficient to secure the unapproved portion of the improvements or 15% of the total original surety.
 5. If the County Engineer rejects any portion of the required improvements, the applicant shall fix the problem and initiate the same procedure of notification as outlined in (b) above.

6. If the required improvements have not been installed in accordance with the Developer's Agreement, the applicant and surety issuer shall be liable to the County Commission and Planning Commission (collectively "the County") for the cost of required improvements not installed or improperly installed, or for the amount of surety, whichever is less. Upon receipt of the proceeds thereof, the County shall repair, install or cause to be installed such improvements.
7. In the event the County decides that it must apply for the proceeds of the surety, the County shall notify the Applicant in writing and, when possible, allow Applicant 45 days to correct the deficiencies. If the Applicant fails to make the improvements in that time, the County shall demand the surety proceeds.
8. When the surety is a Letter of Credit issued from a financial institution, the term thereof shall be indefinite or until completion of the improvements and approval by the County Engineer and notice to the County Commission. A Letter of Credit limited to a specific time can only serve as surety if the following additional conditions are met: the Letter of Credit shall provide that the financial institution issue to the County Commission a negotiable draft, in the amount designated, on the business day and immediately prior to the termination of the letter of Credit, unless:
 - a. Approval by the County Engineer, upon notification to the County Commission, for the improvements has been previously issued, or
 - b. Application has been made by the Applicant to the financial institution for extension of the terms of the Letter of Credit and a replacement Letter of Credit extending the termination date has been submitted to and approved by the County Engineer, no later than 30 days before the date of expiration, or
 - c. A revised Developer's Agreement has been negotiated with the County Planning Commission to both parties' satisfaction.
 - d. An applicant using a time-limited Letter of Credit as surety under these conditions bears the risk of failure to extend the time of coverage to complete the required work. If a Letter of Credit expires during a project without being extended or replaced, all permits will be revoked and stop work orders will be issued, unless the problem is resolved in the time and by the terms provided for in Section 608.

9. When the County Engineer's report indicates approval of all required improvements, the bond may be reduced to an amount not less than 15% of the original bond amount. 180 days after completion of the project, the County engineer shall conduct a performance inspection. If all is acceptable, the surety shall be released in full. Photos taken by staff at time of inspection will document items completed.

Section 604. Modification of Surety Obligation

A developer of a subdivision may request a modification of the applicable surety obligation for an approved project (development or phase) for which a surety has been posted prior to the start of construction. For the purposes of this Article only, "Start of Construction" shall mean the installation of any water, sewer, gas, electric, roads or stormwater management facilities. For any modification, the Planning Commission must find that such modification is in the best interest of the County, and the developer must enter into a binding agreement prepared by the County regarding surety obligations with the County (see Developer's Agreement Template). An approved request shall relieve the developer of the requirement for posting the surety until such a time as the development/phase starts construction of the infrastructure improvements. At such time, the developer shall post a new surety.

Section 605. General: Subdivision Fees

Reasonable fees for examining plats and other required material shall be proposed by the Engineering and Planning Departments and approved by the Berkeley County Commission. The amount of fees shall approximate, as closely as possible, the cost of performing the review work (Appendix D).

Section 606. Interpretation

Any and all actions taken by the County Engineer with regard to imposition of a financial security requirement, increase or decrease of such requirement, or release of such requirement shall be deemed to be merely the articulation of the details of the financial security requirements already imposed by the County Planning Commission and County Commission through the codification of Article 6.

Section 607. Bondable Items

1. The following is a list of items that will be held in the scope of a bond:
 - Subbase gravel, base and surface course asphalt
 - Sidewalks and trails
 - Curb and gutter or gravel road shoulders
 - All Erosion and Sediment Controls
 - Property corners to be set at Final Plat approval
 - On-lot Best Management Practices (BMP's)

- Water, sewer, storm drainage, including offsite extensions
 - SWM quality (MS4 BMPs) and SWM Quantity Facilities and Structures
 - HOA acceptance of Stormwater Management and common areas
 - Site restoration and stabilization – stockpiles and marshaling yards restored to hazardless and aesthetically stabilized
 - Landscaping/fencing for required buffers and screenings
 - Site amenity infrastructure, equipment, buildings, and appurtenances
 - Any other items at the discretion of the County Engineer that are required for the development
2. Items required for bond reductions and releases:
- a. A supplemental plat of the street and area being declared complete with the street sections highlighted:
 - i. Storm sewer plan and profile
 - ii. Road plan and profile
 - iii. Utilities and required structures
 - b. Letters from the Berkeley County Public Service Stormwater District
 - c. Grading items:
 - i. Road or street subgrade compaction testing /certification
 - ii. Certifications on the SWM/BMP embankment compaction including embankment seepage prevention (>3' ponded water for Class B/C; >6' for Class A)
 - iii. Basin-pond volume and analysis (if volume is less than design and/or outlet controls are not substantial per design)
 - iv. >70% stabilized (Vegetative Cover)
 - v. Erosion and Sediment Controls approved and removed by WVDEP or BCPSSD (<1 acre disturbance).

Section 608. Cure Provision

If a developer loses surety coverage through no fault of their own and provides documentation of such reason to the County Attorney, the Attorney shall allow a grace period of at least 14 days for the developer to obtain replacement surety. The County Attorney may allow the grace period to be extended to a total of 30 days, provided the developer demonstrates they have made reasonable efforts to obtain the replacement surety within the first 14 days.

Expiration of a letter of credit due to the failure of the developer to renew on time does not qualify for the grace period provided above. However, if the developer provides the Planning Department notice prior to expiration that they are in the process of renewing the previous surety or of obtaining an alternative source of surety, they shall receive a grace period of 5 days to provide sufficient surety.

At the end of any grace period provided under this section, if the project still lacks proper surety, the County Attorney may direct the Director of Community Development or their designee to issue stop work orders for the project at issue, or may take any other action provided for by this ordinance or other law.

ARTICLE 7 - REQUIRED IMPROVEMENTS

Section 701. General

Minimum improvements and construction standards required for all Land Development projects shall be as set forth in this Ordinance and in the applicable design standards of other public agencies.

Section 702. Monuments and Markers

1. Monuments shall be set at the intersection of all lines forming angles in the boundary of the Land Development.
2. All monuments shall be in accordance with 23 C.S.R. 5-7.3.e et seq.
3. Monumentation is required for all new or reestablished corners, or reference monument for inaccessible corners, and is encouraged at intervisible points between corners.
4. A minimum of two concrete or cut-stone monuments shall be placed within each block of a subdivision and shall be designated as control corners. The Planning Commission may require additional monuments at other points.
5. Monuments shall be placed so that the scored or marked point shall coincide exactly with the intersection of the lines to be marked, and shall be set so the top of the monument is level with the surface of the surrounding ground. Set monuments shall be made of durable material and set firmly in the ground.
6. Monuments may be of the following types:
 - a. Cut stone, 6" x 6" x 3' - 0 long with a drill hole in the center.
 - b. Reinforced concrete, 6" x 6" x 3' - 0 long with an obvious marking of the center,
 - c. Pipes, minimum inside diameter - 1", minimum length -30",
 - d. Rebars, minimum outside diameter of 5/8", minimum length -30",
7. Other markers shall have a minimum cross-sectional area of 1/2 square inch and shall be made of durable material, identifiable and unique. Natural objects chosen for corners shall be durable, unique and easily identifiable.
8. All monuments shall have caps or other means to identify the surveyor responsible for setting the monument. Natural monuments shall be excluded from this requirement.

9. The applicant shall bear the cost of replacing a disturbed monument or marker until construction of the Land Development is completed or the land in question changes ownership.

Section 703. Street Signs and Traffic Control Devices

1. The applicant shall erect at every street intersection a street sign or street signs bearing the names of the intersecting streets. At intersections where streets cross, there shall be at least two such street signs, and at the intersections where one street ends or joins with another street, there shall be at least one such street sign. Street signs shall be of a design approved by Central Dispatch.
2. Traffic control devices shall comply with size, color, location criteria and requirements for the installation of signs and/or signals as set forth by the West Virginia Division of Highways Manual on Uniform Traffic Control Devices.

Section 704. Street Improvements

1. All streets shall be constructed in conformance with the standards set forth by the WVDOH as modified by "The Manual of Street Standards, Berkeley County, West Virginia" attached as Appendix A. Street Improvements shall be reviewed by the Berkeley County Planning Commission and the Berkeley County Engineer. The following standards shall also apply:
 - a. The proposed plat shall provide for continuation of any existing roads or streets (constructed or recorded) in accordance with adopted highway plans, 911 mapping and WVDOH County Road maps.
 - b. Tracts intended for future subdivision rather than immediate development shall be divided to allow for future opening of streets and further logical subdivision.
 - c. Developers/landowners are encouraged to coordinate and negotiate with the adjoining developers/landowners to provide interconnectivity of roads between subdivisions. Internal traffic circulation should be designed to avoid excessive intersection with State Highways.
 - d. Local streets shall be designed to discourage speeding traffic.
 - e. When, in the opinion of the Planning Commission and with the agreement of the applicant, it is desirable to provide street access to adjoining property, the proposed streets shall be extended by [dedication](#) to the boundary of such property.
 - f. Proposed streets and highways shall be adjusted to the contour of the land as far as practicable to produce useable lots.

- g. Dead-end streets without a cul-de-sac or a turnaround are prohibited except as stubs to permit future extensions to adjoining tracts or where they are designed as a cul-de-sac. A temporary cul-de-sac, upon approval of the County Engineer, may be constructed without asphalt base or wearing course. The developer may be exempt from providing curbing at the terminus of a temporary cul-de-sac, unless curbs are required for drainage control. A temporary cul-de-sac shall be removed by the applicant and replaced with the permanent street upon extension of the existing street.
- h. Every cul-de-sac shall be designed in accordance with Appendix A to permit safe ingress and egress. Cul-de-sac streets in excess of 1000' are prohibited, but may be permitted by the Planning Commission upon finding, due to topographic constraints, shorter, dead-end streets are not feasible, and the design will not unreasonably limit emergency response access.
- i. The Director of Information Technology shall approve street names but names should not be proposed which will duplicate or be confused with the names of existing or platted streets. Proposed streets in alignment with existing or platted streets should bear the names directed by the Director of Information Technology.
- j. If a project requires the vacation of any road contained on a recorded plat, then the process for vacation of a road must be followed as contained in W. Va. Code § 7-1-3h.

Section 705. Sidewalks and Multipurpose Pathways

1. All streets shall be designed to promote pedestrian circulation. Pedestrian circulation shall be designed with respect to topography, integration with surrounding streets, connection to existing or future pedestrian ways and transit stops, interior circulation and the separation of pedestrians from vehicles. All sidewalks and multipurpose paths shall be compliant with the Americans with Disabilities Act (ADA).
2. Public Sidewalks shall be required:
 - a. In all townhouse, multi-family developments, and in any residential development served by public utilities with lots less than one half acre (1/2);
 - b. In all Land Development Units, except; Recreational vehicle parks, Campgrounds and Cemeteries.

- c. Between residential developments listed above and surrounding areas of interest including commercial, educational or public areas.
 - d. In all areas covered by the North Martinsburg Area Pedestrian Plan (2012), and any subsequent Hagerstown/Eastern Panhandle Metropolitan Planning Organization (HEPMPO) studies recognized by the Berkeley County Commission.
3. Public Sidewalks shall be designed and constructed in accordance with the following requirements:
- a. Sidewalks must be at least five feet wide.
 - b. Sidewalks must be constructed in accordance with Standards and Details provided by the Berkeley County Engineer, in Appendix A.
 - c. There must be a planter strip separation of at least four feet between curb or shoulder and sidewalk.
 - d. Sidewalks shall be inspected by the County Engineer or his designated [agent](#) after the forms have been placed, just prior to the pouring of concrete and after completion of all work.
 - e. Any multipurpose path proposed in addition to required sidewalk shall be authorized by the County Engineer. Interior multipurpose paths within blocks shall be located in easements not less than 10' wide.
 - f. If sidewalks are provided on both sides of the street, 50% of required open space can be provided by the additional sidewalk.
4. The developer may elect, with the approval of the Planning Commission, to construct a multipurpose path system in lieu of or in addition to sidewalks.
- Multipurpose paths in lieu of sidewalks shall:
- a. Be submitted, reviewed, and acted upon at the Concept phase of development.
 - b. Be at least five feet wide and paved.
 - c. Be part of a multipurpose path maintenance agreement, which shall be included with the application materials.
 - d. Be constructed at the time of street construction.

Section 706. Curbs

1. Curbs may be installed in all land developments in order to control stormwater runoff, prevent erosion, prevent the deterioration of public streets and provide a contained area for vehicular movements, unless the street is an extension from a previous phase of the development that does not have curbs.
2. Curbs, when installed, shall be constructed on both sides of the interior streets.
3. Curbs shall be constructed of concrete and sized in accordance with the details in Appendix A. Mountable curb shall be permitted only in townhouse areas.
4. Terminal concrete curb ends shall have an exposed face of two inches and be tapered two feet.
5. When curbing is to be removed to construct a driveway or access drive, the length of curbing to be removed shall be carried to the nearest expansion joint or saw cut if the joint is located less than five feet from the end of the curb removal.
6. Vertical curb height at driveway entrances may be reduced to a minimum of one and one half inches for driveway entrances along streets where curbs are required.
7. No partial breakout of the curb shall be permitted. No cutting of the curb shall be permitted without approval by the County Engineer.
8. Curb ramps must be installed in accordance with ADA requirements.

Section 707. Culverts

When natural drainage channels intersect any driveway or street right-of-way, the applicant shall have satisfactory culverts and bridges designed and constructed. All culverts shall conform to the Design Manual as referenced in the Berkeley County Stormwater Management and Sediment and Erosion Control Ordinance.

Section 708. Water Supply Improvements

1. The following requirements shall govern water supply provision and improvements:
 - a. All water supply sources and distribution systems, whether public or individual lot, shall meet or exceed the minimum requirements of the West Virginia Bureau of Health, Environmental Engineering Division in effect at the time of development. The Planning Commission shall require written approval and/or a permit from the West Virginia Bureau of Health, Environmental Engineering Division that the minimum requirements for water supply sources have been met.
 - b. Public water supply systems shall also conform to BCPSWD standards.
 - c. If the water supply is to be on an individual lot basis and the lot contains its own sewage disposal system, the well shall be located and constructed according to standards, which shall demonstrate/show the production of safe, potable drinking water.
 - d. The proposed location of the well on each individual lot shall be shown on the plats and satisfactory separation shall be shown between the well and any proposed on-site sewage disposal system. The West Virginia Bureau of Health, Environmental Engineering Division, shall approve all proposed locations for well and septic systems.

Section 709. Sanitary Sewer Improvements

1. The following requirements shall govern sanitary sewage disposal:
 - a. All sanitary sewage disposal systems, whether public or individual lot, shall meet the minimum requirements of the West Virginia Bureau for Public Health, Office of Environmental Health Services Environmental Engineering Division in effect at the time of the development.
 - b. The Planning Commission shall require written approval and/or a permit from the West Virginia Bureau for Public Health, Office of Environmental Health Services Environmental Engineering Division that the minimum requirements for sanitary sewage disposal systems have been met.
 - c. When a proposed development is within 200' of an existing public sanitary sewer system, connections to the public sanitary system sewers shall be provided to all lots within the proposed development in accordance with state law and regulations, if available and acceptable.

- d. When a public sanitary sewer system is not available, a water-carried sewage disposal system approved by West Virginia Bureau of Health to serve the entire Land Development may be installed.
- e. If individual, on-lot sewage disposal systems are proposed, written approval from the Berkeley County Health Department must be obtained. Sewage disposal systems, drain fields, and any required septic reserve areas shall be setback a minimum of 100' from any known sinkhole or sink.
- f. An Underground Injection Control (UIC) permit from the West Virginia Department of Environmental Protection shall be required for septic systems that serve commercial and industrial uses.

Section 710. Drainage Improvements

- 1. All on-site stormwater management improvements shall be in accordance with the Berkeley County Stormwater Management and Sediment and Erosion Control Ordinance.
- 2. A drainage plan shall be submitted with the Preliminary Plan of any Land Development, showing the proposed scheme of all surface drainage. The construction of all drainage improvements shall be subject to inspection and approval of the County Engineer and/or the holder of the MS-4 permit.

Section 711. Storm Sewers and Stormwater Drainage

The Berkeley County Stormwater Management and Sediment and Erosion Control Ordinance is the controlling regulation for all land developments. All applicants must refer to and comply with that ordinance regarding stormwater management regulations and requirements. Applicants shall also follow all policies developed by the County Engineer and holder of the MS-4 permit, either which are based upon or which serve to interpret the language contained in the Berkeley County Stormwater Management and Sediment and Erosion Control Ordinance. In addition:

- 1. Storm sewers, culverts, drainage channels and related installations shall be provided where necessary to:
 - a. Permit unimpeded flow of natural water courses;
 - b. Ensure adequate drainage of all low points along streets; and
 - c. Intercept stormwater runoff along streets at intervals reasonably related to the extent and grade of the area drained.
- 2. In determining the proper drainage of any Land Development, the Planning Commission shall take into consideration and, if possible, make provisions for existing or future drainage problems. As the primary review agency for drainage plans, it shall be the responsibility of the County Engineer to advise the developer and the Planning Commission when additional or supplemental

drainage plans and provisions are appropriate, as well as the proper nature and extent of such supplemental drainage plans and provisions.

3. If necessary, due to the applicant's design, the Applicant may be required to extend the storm drainage system beyond the boundaries of the Land Development in order to conduct runoff to an acceptable point of disposal. If so, the Applicant will be responsible for securing all required drainage easements.
4. Lots shall be laid out and graded to provide positive drainage in all directions away from buildings and building sites.
5. In the design of storm drainage installations, special consideration shall be given to the avoidance of problems with erosion and safety, which may arise from concentration of stormwater runoff over adjacent properties.
6. All storm drainage systems shall be designed per the requirements as prescribed in the Berkeley County Stormwater Management and Sediment and Erosion Control Ordinance and its references without overflowing the system at any point.

Section 712. Community Open Spaces and Provision of Recreational Amenities

A residential (Single Family, Duplex, Multi-Family or Townhouse) subdivision/rental development with 15 or more units or wherein the average lot size is one-half of an acre or less shall include community open spaces for the use and enjoyment of its residents.

1. The community [open space](#) shall consist of an area of not less than 10% of the total acreage contained in the development parcel but in no case less than 5,000 square feet.
2. Two or more non-contiguous parcels may constitute the required open space, so long as the Applicant can demonstrate to the satisfaction of the Planning Commission that all of the open space areas provided are actually usable for passive or active recreational purposes. Existing and maintained forests/tree groves may be included in open space if approved by Planning Commission and County Engineer.
3. Best Management Practices such as rain gardens may be considered part of the open space requirement if they qualify as [passive recreation](#) and approved by County Engineer.
4. Where proposed development adjoins an existing or proposed open space, the open spaces should be contiguous to already established open space areas where feasible.
5. The open space areas shall be free of all other easements or encumbrances, which

would otherwise limit their use for recreational purposes.

Section 713. Off Site Extensions

1. If streets or utilities are not available at the boundary of a proposed Land Development, the applicant may be required to obtain necessary easements or rights-of-way prior to advancement of the Preliminary Plan.
2. Such improvements may be made available for connections by subsequent development of adjoining properties.
3. All off-site extension design and sediment/erosion control shall be provided to the County Engineer for review.

Section 714. Provisions for Maintenance and Operation

1. When the Land Development contains park areas, tot lots, streets, or other physical facilities necessary or desirable for the welfare of residents which are of common use and benefit and which are of such character that:
 - a. No public body may legally acquire or operate and maintain the facilities;
 - b. No public body which, if established, could legally operate and maintain such facilities, or;
 - c. A public body in existence, which may legally operate the facilities but refuses or does not desire to operate and maintain the facilities;then the Applicant shall establish a homeowners association that will operate and maintain such facilities described above, after approval of the final plat by the Planning Commission.
2. Such homeowners association shall be funded by the Developer and shall be sustained by assessment of the property owners. Authority for the homeowners association and the covenants in the proposed deed shall be reviewed and approved by the Legal Counsel to the Planning Commission.

ARTICLE 8 – OFF-STREET PARKING, BUFFERING, AND SCREENING

Off-Street Parking

1. Any of the following permitted uses shall be provided with not less than the minimum parking spaces as set forth below in Tables 8-1 A and 8-1 B. When the computation of required parking spaces results in a fractional number, any fraction equal to or exceeding 1/2 space shall be counted as one; any fraction less than 1/2 space may be dropped. Parking available in public rights-of-way shall not be considered in determining whether the off-street parking requirements of this Article have been met. The additional required off-street parking for Categories 7, 8 and 9 in Table 8-1 below are best provided by consolidating them into private parking lots.
2. Alternative parking spaces such as motorcycle parking may be included in the required number of parking spaces up to 2.5 percent of the required total, up to a limit of 5 spaces, when approved by the Planning Department and the County Engineer.
3. When an addition or change in the number of dwelling units, gross floor area, gross leasable area, seating capacity or other units of measurement specified herein causes a change in intensity of the use of any building that increases the required parking by 10 or more spaces cumulatively, the increment of additional parking shall be provided/required as set forth in this Ordinance and all applicable sections.
4. If fewer than 10 additional spaces are required by a change or series of changes in use, the Planning Commission, upon positive recommendation from County Staff, may waive up to the incremental required number of parking spaces following the guidelines of Section 1203.
5. For a proposed use not specifically covered in the Tables below, the County Planning Commission Staff, with recommendation from the County Engineer, may increase or decrease parking requirements to provide adequate and proper parking or upon request by an applicant, by considering and comparing similar uses as specified in this Article or by reviewing data gathered on existing similar uses.
6. Applicants for projects/uses not specifically covered in the tables below may request a parking requirement determination, in writing, from County staff to ensure adequate off-street parking. The applicant shall provide comparison information from other jurisdictions as well as any parking studies to support the request. If staff and the applicant cannot agree on a parking space requirement, then the decision shall be presented to the Planning Commission for determination. Any variation to the tables and uses, which are provided below,

shall require a waiver granted by the Planning Commission after a finding that ample justification has been provided by the applicant.

7. Parking requirements based on floor area shall be determined by the gross floor area of the use, excluding storage, stock rooms, mechanical areas, preparation areas and additional common areas such as corridors, stairwells, and elevators.
8. All residential driveways must be a minimum of 10' wide and 38' long or 20' wide and 19' long, measured from the edge of right-of-way dedication.

Table 8-1A. Residential Uses

Land Uses – Residential	Required Parking Spaces
1. Bed and Breakfast	1.1 for every room or suite
2. Boarding House Lodging/Rooming House	2 for every 3 guests
3. Group Home	1.1 for every sleeping room
4. Congregate Care Residence	0.50 per bed, plus 1 per employee
5. Continuous Care Retirement Community	0.15 per bed, plus 1 per employee
6. Nursing/Convalescence Home	0.15 per bed, plus 1 per employee
7. Multi-family Dwelling/Apartments	2.1 per dwelling, plus 1 per employee, plus 10% for guests
8. Single Family Attached Dwelling	3 per dwelling unit. For the purposes of this Ordinance, when one or two spaces are required for dwellings, an attached or unattached garage or covered carport (minimum 10'x18'), on the premises shall be considered as 0.5 spaces. 1 additional offsite space per dwelling unit must be provided.
9. Single Family Detached Dwelling	2 per dwelling unit. For the purposes of this ordinance, when one or two spaces are required for dwellings, an attached or unattached garage or covered carport (minimum 10'x18'), on the premises shall be considered as parking. 1 additional external space per dwelling unit must be provided.

Table 8-1B. Non-Residential Uses

Land Uses – Non-residential	Required Parking Spaces
1. Ambulance Facility	2 per ambulance
2. Auto Sales and Service	1 per 300 square feet of gross floor space
3. Auto Service Station	2 per service bay, plus 1 per employee
4. Child Care facility	1 for every employee and 0.5 per child during operational hours or sufficient cueing area
5. Fire Station	10 spaces minimum
6. Hospital	1.5 per employee on main shift; plus 0.5 spaces per bed for in-patient services; plus 1.5 spaces per 250 sq. feet for outpatient services.
7. Hotels and Motels	1 for each guest room or suite, plus 1 per every 2 employees. Requirements for restaurants, ballrooms, and other places of assembly must be provided for in addition.
8. Industrial Uses	1 for every 600 square feet of gross floor area used for industrial purposes (processing, assembly, treatment, storage, fabrication, etc.) or 1 for every 2 employees on the largest shifts, whichever is greater.
9. Laundromat	1 for every 3 washing machines.
10. Library, Museums, Galleries, Places of Worship	1 for every 400 square feet of gross floor area, or 0.3 per person permitted in occupancy.
11. Membership Organizations, Civic and Fraternal Organizations, Clubs	0.3 per person permitted in occupancy; plus 1 per employee
12. Medical Center (Clinic)	5 for first 1,000 sq. feet gross floor area, plus 3 per 1,000 sq. ft. thereafter
13. Mortuary, Funeral Parlor	1 per 150 square feet of floor area devoted to viewing and 1 per vehicle used in activity plus 1 per each two employees with a minimum of 20 spaces.
14. Office Building, Professional Office, Business	1 for every 200 square feet of gross floor area

ARTICLE 8: OFF-STREET PARKING, BUFFERING & SCREENING

15. Office Building, Banks and other office activities with moderate to heavy use	1 for every 200 square feet of gross floor area plus 5 reservoir for each drive-up window exclusive of driveways or access areas
16. Personal Services (Barber Shop, Beauty Shop, etc.)	Minimum of 3; for barbershops and beauty shops, 1 for each operator chair. (Note: Chair does not include dryer chairs, washing/rinsing chairs, or waiting area chairs)
17. Public Stable	1 for every 4 stalls.
18. Public Utilities and Facilities	1 for every 400 square feet of gross floor area plus 1 for each stored vehicle.
Recreation Areas	
19. Athletic Fields	20 for each field. (On-street parking on local streets can qualify for required parking.)
20. Basketball Courts	5 for each court. (On-street parking on local streets can qualify for required parking.)
21. Bowling Alley	3 for each alley.
22. Campground	1 gravel space for every campsite.
23. Golf – Regulation, Golf-Driving Range, Golf-Miniature	6 for each golf hole. 2 parking spaces for each driving tee.
24. Park	2 for each acre plus 2 per maximum occupancy of each pavilion. (On-street parking on local street can qualify for required parking.)
25. Rifle or Archery Range	1 for each target area
26. Skating Rink (Indoor or Outdoor)	1 for every 100 square feet of skating area
27. Swimming Pool	1 for every 20 square feet of swimming pool surface area plus 1 parking space for every 300 square feet of building area.
28. Tavern, Lounge, Nightclub	1 for every 50 square feet of customer floor area.

ARTICLE 8: OFF-STREET PARKING, BUFFERING & SCREENING

29. Tennis and Racquetball Courts	2 for each court, plus 1 for every 200 square feet of clubhouse and non-court floor area.
30. Theaters/Auditoriums	1 per every 2 seats.
Restaurants – Fast Food, Carry Out, Deliveries	
31. Restaurant with Seating	1 for every 50 square feet of floor area, dedicated to customer service, excluding food preparation and storage area
32. Restaurant without Seating	1 for every 100 square feet of gross floor area with a minimum of 5 spaces.
33. Restaurant with Drive Through	In addition to the spaces required above, 8 stacking spaces for the drive-through window with a minimum of 5 of these for the ordering station. Such spaces shall be designed to not impede the pedestrian or vehicle circulation on the site or abutting street.
Retail, General	
34. Under 2,000 square feet	1 for every 250 square feet of gross floor area
35. 2,000 to 75,000 square feet	1 for every 275 square feet of gross floor area
36. Over 75,000 square feet	1 for every 300 square feet of gross floor area
37. Retail, Grocery and Convenience Store	1 for every 200 square feet of gross floor area
Schools (Private)	
38. Elementary School	1 for each classroom plus 1 space for every employee on the largest shift.
39. High School	1 per 8 students based on the design capacity of the building, plus 1 additional for each employee on the largest shift.
40. Trade, Technical	1 per 8 students
41. Studios (Art, Dance, Karate, etc.)	1 for every 300 square feet of gross floor area
42. Veterinary Services/Hospital	1 for each 2 employees on the two largest shifts.
Miscellaneous	
43. Distribution, Trucking, Warehousing, Wholesale	1 for every 2 employees on the two largest shifts.

Section 801. Design and Construction Standards

All off-street parking areas shall conform to the following standards (See illustrations in Appendix A):

Section 801.1. Parking Spaces

All parking spaces, except handicapped, shall conform to requirements provided in Table 8-2 below.

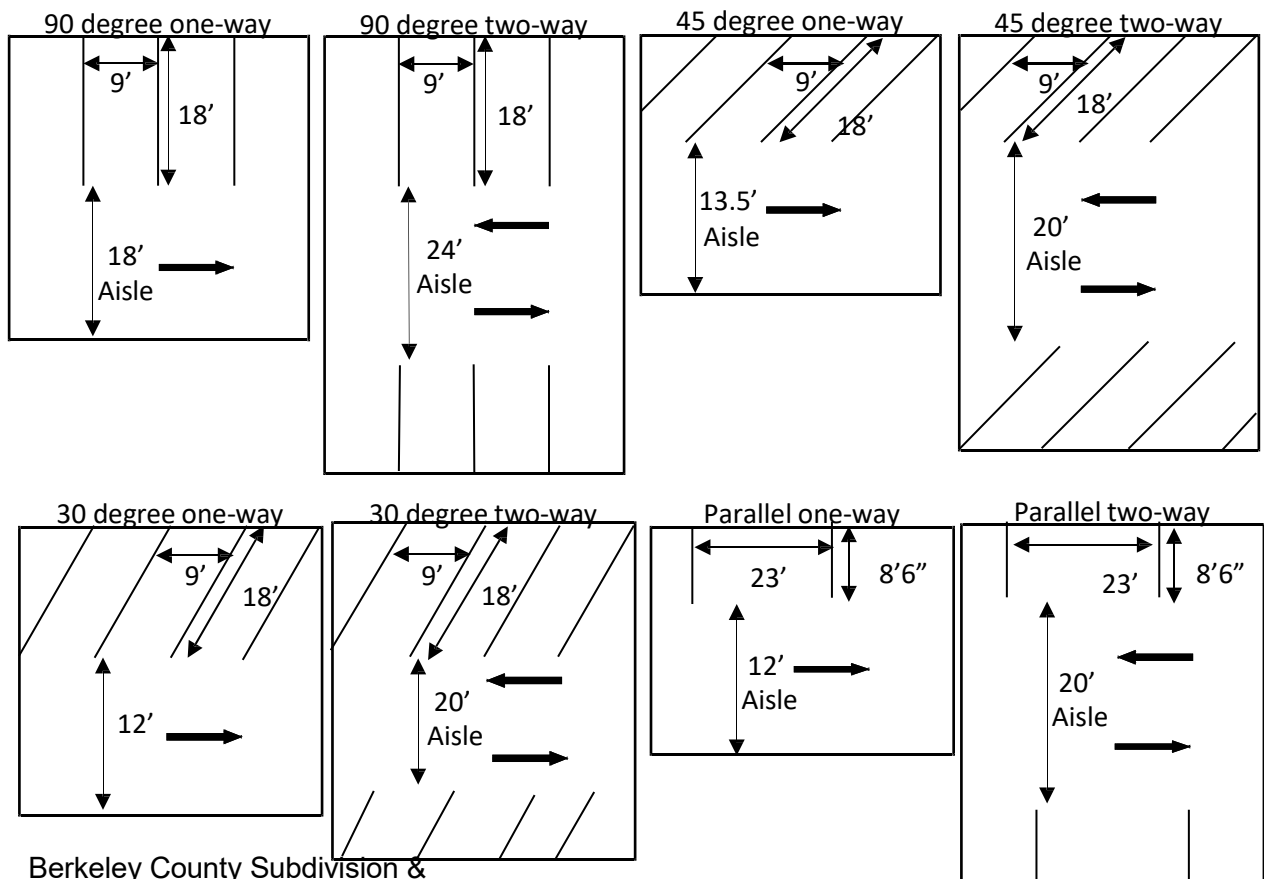
Section 801.2. Aisle Widths in Parking Lots

Parking lot aisle dimensions shall be not less than those listed in Table 8-2 below. The depth of any parking stall may be reduced by two feet for any space that directly abuts a vegetated, unobstructed buffer area that allows vehicles to overhang.

Table 8-2. Parking Space and Aisle Widths

Angled of Parking Spaces	Parking Space Stall Width (Feet)	Parking Space Stall Depth (Feet)	Parking Lot Aisle Width – One-Way Aisle (Feet)	Parking Lot Aisle Width Two-Way Aisle (Feet)
90 Degrees	9	18	18	24
45 Degrees	9	18	13.5	20
30 Degrees	9	18	12	20
Parallel	8'6"	23	12	24

*Depth of parking space stalls is the measurement from the curb or edge of the parking space toward the interior portion of the space to be occupied by a parked vehicle and does not include any part of the aisle or driveway.



Section 801.3. Entrances, Circulation, Vehicle Movement

1. No parking shall be permitted along the circulation roads or exit and entrance drives. Roads shall be uniform in width, smooth flowing, and provide for 90-degree intersections wherever possible.
2. Entrance and exit drives shall be a minimum of 18' wide for any one-way use and a minimum of 25' wide for two-way use. Fire lanes shall be provided where determined necessary by the County Engineer and shall be a minimum of 25' wide.
3. All dead-end parking lots shall be designed to provide sufficient turn around area for the end stalls of the parking area as detailed in Appendix A.
4. Parking lot areas shall be designed so that each vehicle may proceed to and from the parking space provided for it without requiring the moving of any other vehicle.
5. Off-street parking areas for buildings with three or more dwelling units shall have no more than one ingress and/or one egress from any public street per building.

Section 801.4. Multi-family Dwelling Units, Single-family Attached Dwellings and Non-residential Uses

Parking lots and spaces for [multi-family dwelling](#) unit structures, single-family attached dwellings and non-residential uses shall be readily accessible to the buildings served. Such parking spaces shall conform to the following requirements:

1. Required parking lots and parking spaces shall be linked to the principal use that they serve by sidewalks and shall be located within 160' of the principal building or use, as measured from the nearest point of the parking lot to nearest point of the principal building or use.
2. Required parking spaces for a building or use may be located across a street with the following conditions:
 - a. A crosswalk shall be constructed to ensure safe pedestrian access to and from the parking lot. The design of the crosswalk shall consider the speed limit, sight distance, visibility, road conditions, and other safety factors.
 - b. Safety lighting shall be provided at the crosswalk to illuminate the cross area during darkness.
 - c. A sign shall be installed on each side of the road to warn oncoming vehicles of the presence of the crosswalk.

Section 801.5. Semi-Trailer Truck Parking Spaces

Where truck parking is required to be provided, the minimum width of a truck parking space shall be 12' and the minimum depth shall be 60'. Aisle widths in truck parking lots shall be 55'.

Section 801.6. Setbacks from Buildings, Lot Lines, Buffers and Street Right-of-Way

1. All surface parking spaces and access drives shall be located at least 10' from any multiple dwelling building, office, commercial, institutional, industrial, and other similar non-residential buildings located on the lot. The 10' corridors established between the parking area and building shall be for providing a pedestrian access walkway.
2. All parking spaces and access drives shall be at least eight feet from any exterior lot line, except where a buffer yard is required. In that situation, the parking lot shall be at least two feet from the buffer yard.
3. Except at designated entrance and exit drives, parking areas shall be physically separated from any public and/or private street right-of-way by a minimum 10' vegetative planting strip. In no case shall parking areas be designed to require or encourage cars to back into a through street in order to leave the parking area.
4. No off-street parking area shall be located within a WV DOH public right-of-way.

Section 801.7. Handicapped Parking

1. Paved handicapped parking spaces shall be provided for all uses, with the exception of single family attached without driveways, single family detached and two-family residential uses, and shall comply with the location, size, marking, and ingress and egress requirements set forth herein. All handicapped parking shall be designed to be compliant with the Americans with Disabilities Act (ADA). Each reserved parking space for the physically handicapped person shall be not less than eight feet wide and shall include a minimum five-foot wide aisle to allow for wheelchair access. The number of accessible parking spaces required is provided in Table 8-3 below.
2. In addition to the number of accessible parking spaces required in Table 8-3, spaces shall be provided to accommodate vans. Parking for vans shall be at the rate of one in every six handicapped accessible parking spaces required in Table 8-3. Each reserved van parking space shall be not less than 11' wide and shall include a 5' wide aisle to allow for wheelchair access. If only one accessible parking space is required, it shall be a van parking space.
3. When one parking space is required by Tables 8-1 & 8-2, one handicap space is required in addition. When more than one parking space is required by Tables 8-1 & 8-2, handicap spaces are included in the total number of spaces required.

Table 8-3. Handicap Parking Requirements

Total Number of Parking Spaces in Parking Lot	Required Number of 8' Handicapped Accessible Parking Spaces	8' Van Accessible Parking Spaces with minimum 8' wide access aisle
1 to 25	0	1
26-50	1	1
51-75	2	1
76-100	3	1
101-150	4	1
151-200	5	1
201-300	5	1
301-400	6	1
401-500	7	2
501-1000	2% of Total Parking provided in each lot	1/8 of Required Number of Spaces
Over 1001	20 plus 1 for every 100 over 100	1/8 of Required Number of Spaces

In all cases, minimum standards for handicapped parking shall comply with current American National Standards Institute (ANSI) and ADA criteria.

Section 801.8. Parking Lot Lighting

1. All multi-family and non-residential parking areas shall be adequately lighted during after-dark operating hours.
2. Any lighting used to illuminate off-street parking areas, shall be full cut-off and reflect the light away from adjacent properties and public right-of-way. Light standards shall be protected from vehicular traffic by curbing, concrete barriers or guard rail.
3. All building mounted and parking lot lighting shall be constructed so that light and glare are diffused toward the ground.

Section 801.9. Curb Radii

Where curbs are provided in parking lots for light standards and islands, a minimum five-foot radius curvature shall be required at the face of all curb lines.

Section 801.10. Parking Lot Surfacing

1. All off-street parking areas shall be paved. All driveways to off-street parking areas that enter or exit onto an improved street shall be paved in accordance with WVDOT specifications.

2. An alternative surface to pavement may be approved for overflow parking areas. An alternative paving material is one of the following: porous asphalt; porous concrete; permeable interlocking pavers; permeable pavers; hard surface elastomeric paving; restrained systems (a plastic or concrete grid system confined on all sides to restrict lateral movement and filled with gravel or grass in the voids); or recycled rubber. Alternative paving materials are permitted for use in every parking area, automobile storage area, automobile, manufactured home or trailer sales area and driveways, subject to the following:
 - a. Any product installed within areas designated as a fire lane must be approved by the County Engineer
 - b. Permeable interlocking concrete pavers and permeable pavers shall have a minimum thickness of 80mm (3.14 inches).
 - c. Products and underlying drainage material shall be installed per manufacturer's specifications. Sub-grade soils shall be compacted as required per the product installation specifications. Copies of specifications shall be provided to the County Engineer and Berkeley County Planning, as part of site plan submittal.

Section 801.11. Exemption from paved surfacing requirement

Uses of a commercial or industrial nature, with intermittent, non-public use, are exempt from the requirement to provide a paved surface and may have parking areas comprised of decomposed granite, crushed rock or gravel. This exemption does not apply to any public parking areas, handicap parking requirements, or public entrance(s) to property. All applicable stormwater management regulations shall be complied with, and this exemption does not absolve the developer of the responsibility of stormwater quality and quantity management.

Section 801.12. Parking Lot Landscaping

1. Parking areas shall have landscaping strips of a minimum width of 10' and depth equal to the parking stalls in order to separate the parking spaces from the entrance and exit drives and circulatory roads.
2. In addition, all parking lots with 20 or more spaces shall be provided with interior landscaped areas equal to 10 square feet for each parking space, excluding those spaces located directly along the perimeter for which landscape screens may have been otherwise provided. Landscaping screens, planting strips and landscaping surrounding buildings shall not be considered as parking lot interior landscaping.
3. The interior landscaping shall be provided within curbed island planters having a minimum area of 50 square feet. The interior parking lot landscaping shall be placed so as to delineate driving lanes, define rows of parking lot and generally to mitigate the visual impact of parking lots.

4. The interior parking lot landscaping shall be composed of a combination of shrubs and trees. Native, non-invasive species shall be used when possible. At least one shade or ornamental tree shall be required for each 20 parking spaces.
5. In order for the Planning Commission Staff to determine compliance with the requirements of this Section, a plan shall be submitted showing the proposed design of the interior landscaping. Said plan shall include a plant schedule, species and sufficient information as required for the installation of the landscaping.

Section 801.13. Service Traffic

Customer and service traffic shall be separated whenever possible. Loading and unloading areas shall be located as not to interfere with customer parking areas.

Section 801.14. Fuel dispensing facilities and drive-thru services

Queuing areas shall be designed so as not to interfere with normal traffic flow or required parking.

Section 801.15. Parking Lot Aisle Length

Parking aisles shall not be longer than 300' feet without providing a circulatory road.

Section 801.16. Parking Area Permitted (Commercial/Industrial)

Large parking lots shall be divided into parking areas which should not exceed 300' long and a width of four parking lanes or 240'. These areas shall have their entire perimeter defined by curbs, walks, landscaping strips, or other divides to control traffic to the parking lanes.

Section 801.18. Marking

Parking spaces shall be defined by lines painted or so marked with a road surface tape with a minimum width of four inches.

Section 801.19. Loading and Unloading Spaces

1. In addition to the off-street parking requirements set forth herein, any building designed for commercial, office, manufacturing, institutional, hospital, or other similar uses requiring the delivery or pick up of products or materials shall provide adequate off-street areas for the loading and unloading of vehicles. Such areas shall be provided for as shown on Table 8-4.
2. All off-street loading and unloading areas shall be maintained as long as the use exists which the facilities were designed.
3. Off-street loading facilities shall be designed to conform to the following specifications:

Each required berth shall be not less than 12' in width, 45' in length and 14' in height, exclusive of drives and maneuvering space, and located entirely on the lot being served. For uses that are less than 5000 square feet in gross floor area, the dimension of the required loading space may be reduced to 36' in length by 15' in width.

There shall be appropriate means of access to a street or [alley](#), as well as adequate maneuvering space. Maneuvering space for tractor trailers shall be a minimum of 75'.

All accessory driveways and entranceways shall be graded, surfaced and drained in accordance with applicable codes and ordinances of the County.

The area of a loading berth or space and its driveways shall be graded, surfaced with an impervious surface (e.g. asphalt or concrete) or other stable material and drained in accordance with this Ordinance.

Parking and loading areas shall be kept open and free from obstruction, product display or other accessory type uses. When the County Engineer agrees safety is not compromised, loading areas may be placed in remote parking lot drive aisles.

Table 8-4. Loading and Unloading Spaces

Commercial, wholesale, manufacturing, hospitals, institutional, similar uses	
Gross Floor Area (Square Feet)	Required Loading Spaces
Under 5,000	36' X 15' Optional
Under 8,000	1
Over 8,000 to 40,000	2
Over 40,000 to 100,000	3
Over 100,000 to 250,000	4
Each Additional 200,000	1
Office Building or Hotel/Motels	
Gross Floor Area (Square Feet)	Required Loading Spaces
Under 100,000	1
Over 100,000 to 300,000	2
Over 300,000	3

Section 801.20. Shared Parking

1. Shared parking can be utilized by providing the required number of parking spaces at the highest peak time, for each proposed use. Tables 8-5 and 8-6 detail the percentage of parking required by land use, at the peak hour(s) for weekday and weekend.

TABLE 8-5. HOURLY ACCUMULATION (PERCENTAGE OF PEAK HOUR) BY LAND USE (WEEKDAY)

					Hotel				
Hour Of Day	Office	Retail	Restaurant	Cinema	Guestroom	Restaurant/Lounge	Bank	Health Club	Residential (Guest)
6:00 AM	3%	3%	14%	0%	95%	0%	0%	70%	0%
7:00 AM	30%	7%	28%	0%	95%	10%	0%	41%	10%
8:00 AM	75%	20%	36%	0%	90%	30%	54%	41%	20%
9:00 AM	95%	43%	44%	0%	80%	10%	94%	70%	20%
10:00 AM	100%	69%	57%	0%	70%	10%	100%	70%	20%
11:00 AM	100%	87%	70%	0%	70%	5%	68%	80%	20%
12:00 PM	90%	96%	89%	21%	65%	100%	68%	61%	20%
1:00 PM	90%	100%	84%	46%	65%	100%	68%	70%	20%
2:00 PM	100%	96%	63%	55%	70%	33%	81%	70%	20%
3:00 PM	100%	92%	47%	56%	70%	10%	68%	70%	20%
4:00 PM	90%	92%	52%	56%	75%	10%	87%	80%	20%
5:00 PM	50%	95%	78%	62%	80%	30%	100%	90%	40%
6:00 PM	25%	95%	89%	62%	85%	55%	0%	100%	60%
7:00 PM	10%	95%	91%	81%	85%	60%	0%	89%	100%
8:00 PM	7%	82%	91%	100%	90%	70%	0%	79%	100%
9:00 PM	3%	55%	82%	100%	95%	67%	0%	68%	100%
10:00 PM	1%	32%	76%	81%	95%	60%	0%	34%	100%
11:00 PM	0%	11%	64%	65%	100%	40%	0%	10%	80%
12:00 AM	0%	0%	27%	40%	100%	30%	0%	0%	50%

TABLE 8-6. HOURLY ACCUMULATION (PERCENTAGE OF PEAK HOUR) BY LAND USE (WEEKEND)

					Hotel				
Hour Of Day	Office	Retail	Restaurant	Cinema	Guestroom	Restaurant/Lounge	Bank	Health Club	Residential (Guest)
6:00 AM	0%	3%	8%	0%	95%	0%	0%	79%	0%
7:00 AM	20%	7%	18%	0%	95%	10%	0%	45%	20%
8:00 AM	60%	16%	28%	0%	90%	30%	48%	36%	20%
9:00 AM	80%	39%	41%	0%	80%	10%	61%	50%	20%
10:00 AM	90%	57%	51%	0%	70%	10%	84%	36%	20%
11:00 AM	100%	71%	58%	0%	70%	5%	100%	50%	20%
12:00 PM	90%	84%	77%	21%	65%	100%	94%	50%	20%
1:00 PM	80%	92%	73%	46%	65%	100%	0%	31%	20%

ARTICLE 8: OFF-STREET PARKING, BUFFERING & SCREENING

2:00 PM	60%	100%	60%	55%	70%	33%	0%	26%	20%
3:00 PM	40%	100%	47%	56%	70%	10%	0%	31%	20%
4:00 PM	20%	96%	50%	56%	75%	10%	0%	56%	20%
5:00 PM	10%	91%	66%	62%	80%	30%	0%	100%	40%
6:00 PM	5%	81%	83%	62%	85%	55%	0%	95%	60%
7:00 PM	0%	76%	85%	81%	85%	60%	0%	61%	100%
8:00 PM	0%	67%	85%	100%	90%	70%	0%	31%	100%
9:00 PM	0%	53%	65%	100%	95%	67%	0%	10%	100%
10:00 PM	0%	37%	61%	100%	95%	60%	0%	2%	100%
11:00 PM	0%	15%	56%	80%	100%	40%	0%	2%	80%
12:00 AM	0%	0%	32%	50%	100%	30%	0%	0%	50%

2. Residential and commercial/industrial shared parking is prohibited.
3. Provide signage that clearly identifies when different users may use shared parking spaces and placement of signage to discourage offsite parking.
4. Reduction of parking may be considered for public transportation if a transit stop and agreement are provided to BCPC along with a study demonstrating the percentage of reduction, however no more than 10% shall be reduced in total parking.
5. Shared parking arrangements shall be considered when the number of parking spaces requested by the developer/applicant is more than 10* percent higher or more than 10* spaces higher than the minimum number of parking spaces required by Code for a site, whichever is more.
6. Factors evaluated to establish shared parking arrangements should include operating hours, seasonal/daily peaks in parking demand, the site's orientation, location of access driveways, transit service, accessibility to other nearby parking areas, pedestrian connections, distance to parking area, availability of parking spaces, cooperation of adjacent owners).

Section 802. Changes in Requirements

1. Existing Parking
Buildings in existence on the effective date of this Ordinance shall not be subject to the requirements of this Article, except those required by ANSI, unless the use of the building is changed. Parking facilities now serving such buildings and uses shall not be reduced.
2. Changes in Requirements
Whenever there is an alteration of a building or a change or extension of a use that requires additional parking spaces to conform to the requirements of the

Ordinance, the total additional parking required shall be provided in accordance with the requirements of this Ordinance.

Section 803. Continuing Obligation

All required parking facilities shall be provided and maintained as long as the use exists which the facilities were designed to serve. Off-street parking facilities shall not be reduced in total number of spaces or area after their provision, except upon the approval of the Planning Commission and then only after proof that a change in circumstances makes the reduction comply with the requirements of this Article.

Minimum Buffer and Screening Requirements

Section 804. Buffers

Buffers required by this Ordinance are intended to separate different land uses from each other at a reasonable distance in order to minimize or eliminate potential nuisances such as dirt, litter, noise, glare, signs, buildings, parking areas. Buffers are also intended to provide spacing between uses and structures to reduce the adverse impacts of noise, light, odor or danger from fire and explosions.

General Buffer Requirements

1. Required buffers shall be provided along the perimeter of a lot for any given use and shall not be located in any portion of a public right-of-way or proposed right-of-way.
2. Buildings, parking lots, parking spaces, and storage shall not be permitted in a buffer yard.
3. Stormwater management facilities, public utility facilities, picnic areas, or pedestrian walkways and sidewalks shall be permitted in a buffer yard.
4. A buffer may be part of a front, rear or side yard.
5. Adjacent parcel use determines buffer requirements.
6. [Alleys](#) and streets next to property lines shall not be considered buffering. In cases where alleys and streets are adjacent to the proposed development, the use on the other side needs to be considered.
7. In major subdivisions, where the lots along State Highway Rights-of-way are less than an average of 15,000 square feet, the Developer shall also provide a 15' vegetated buffer yard between the adjacent lot lines and the State Right-of-Way dedication line for any lot abutting a State Road Right-of-Way. This buffer yard shall not be included within the r-o-w reservations.

Land Use and Buffers

Buffer area and screening in accordance with this section and Table 8-5 shall be provided as follows:

1. A buffer of 25' shall be required between a commercial use and a residential use. Screening shall be provided in the buffer.

2. A buffer of 25' shall be required between a multi-family residential use and a single family/two family residential use. Screening shall be provided in the buffer.
3. A buffer of 100' shall be required between any industrial use and a residential use. Screening shall be provided in the buffer.
4. A buffer of 25' shall be required between any industrial use and a commercial use or public right of way. Screening shall be provided in the buffer.

Section 805. Screening

Screening required by this Ordinance is intended to provide an effective visual barrier at the street level between conflicting uses. This section provides standards and options for the design, and installation of plants, fences and walls in the County in accordance with the following guidelines:

Table 8-5, "Screening Requirements," outlines below the screening required by this Ordinance. The Screening Options on page 8-17 & 8-18 describe the various options for screening. Screening options 1, 2, 3 and 4 provide flexibility to the applicant through various combinations of evergreen and deciduous trees, hedges, fences, and walls for screening. The suggested alternatives are screening alternatives A and B available for negotiation as necessary.

All standards for screening in Table 8-5 shall be met at the time of planting except that a hedge is expected to reach a mature height of six feet.

All required tree planting and landscaping used for screening shall comply with all landscaping requirements of this Ordinance. All physical and vegetative screening shall be maintained in good condition, and repaired and replaced by the property owner when deemed necessary by the Planning Commission. When practical, native, non-invasive species shall be used for screening.

The County Planning Commission may approve a different screening plan if such a plan is warranted and acceptable; however, deviation from the ordinance shall require a waiver.

Table 8-5 Screening Requirements

Options	Requirements	Minimum Size	Minimum Spacing
1	Wall Deciduous Trees	6 ft. in height 2" in caliper 6 ft. in height	N/A N/A N/A
2	Hedge Evergreen Trees	6 ft. in height 4 ft. in height	Ten feet (10') on center
3	Deciduous Trees	2" in caliper	Fifteen feet (15') on center
4	Fence Hedge	6 ft. in height 6 ft. in height	N/A N/A

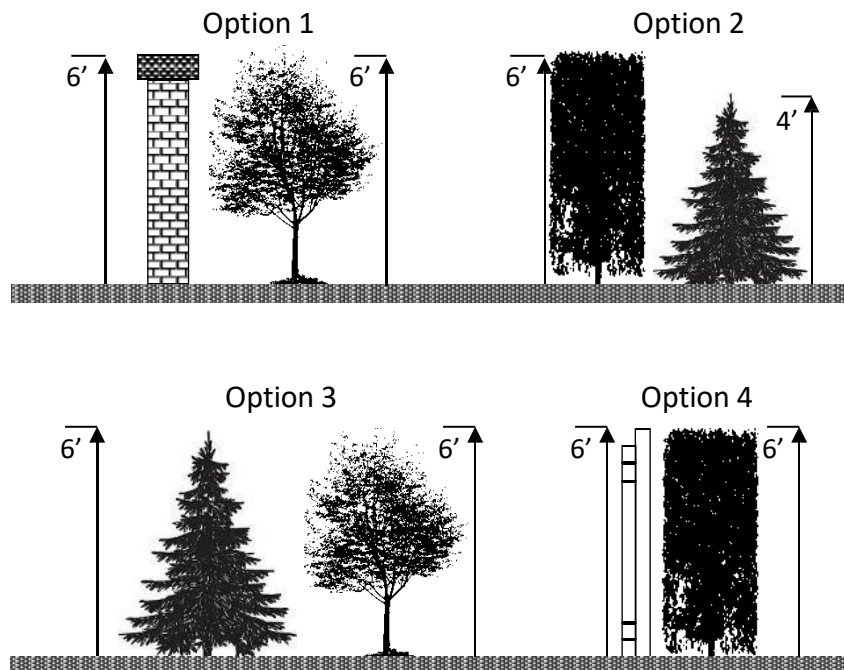
Alternatives	Requirements	Minimum Size	Minimum Spacing
A	Wall/Fence	6 ft. in height	N/A
	Evergreen Trees	4 ft. in height	Ten feet (10') on center
	Hedge	2 ft. in height	N/A
	Berm constructed 3 feet in height with ground cover	N/A	Maximum 3:1 slope
B	Evergreen trees on prescribed side of berm	6ft. in height	Six feet (6') on center
	Wall/Fence on top of berm	3 ft. in height	N/A
C	Negotiated between applicant & Planning Commission		

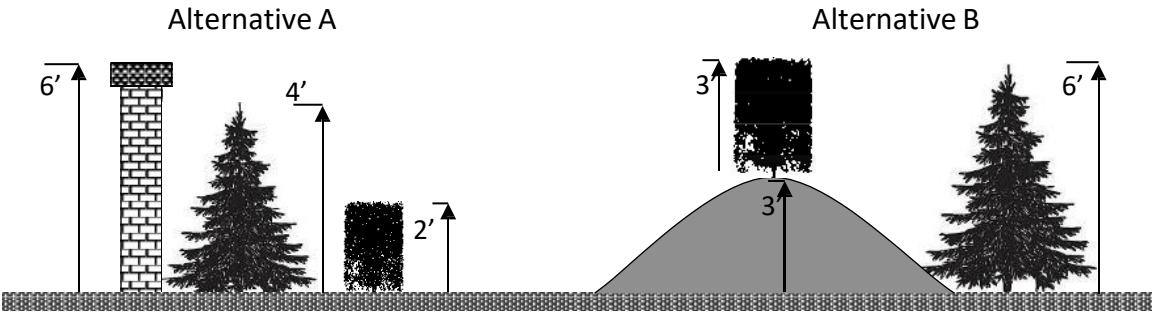
**Where opaque fencing is not used, landscaping on the outside shall be required to provide an opaque vegetative buffer.*

Dumpster Screening

Outside commercial trash, refuse or recycling dumpsters shall be located within a three-sided enclosure sufficient to screen such containers from sight from all adjacent properties and from any adjacent roads, streets or other access ways.

Screening Options 1-4 & Alternatives A & B





ARTICLE 9 – PLANNED UNIT DEVELOPMENTS

Section 901. General

The purpose of this section is to encourage the planned development of land in larger parcels. Large development units require intensive private planning and capital investment to achieve smooth traffic flow, provide infrastructure, and create adequate residential services. They comprise an essential aid to local governments to meet the challenges posed by rapid growth. Planned Unit Developments (PUD) promote economical and efficient use of the land and provide for diversity in housing choices with varied levels of community amenities and adequate open spaces appropriate to the community they serve.

Definition of [Planned Unit Development](#).

Section 902. Requirements for Planned Unit Development

1. Ownership: The tract of land proposed for development as a PUD must be owned by one “[person](#),” as that term is defined in Article 2. Proof of that ownership shall be submitted to the Planning Commission by no later than review and recommendation for advancement of the [Concept Plan](#). Equitable ownership arising from binding contracts to purchase, subject to development approvals, meets the requirement of this section.
2. The specific site shall be located adjacent to adequate roadway facilities capable of serving existing traffic and being upgraded to serve future increased traffic generated by the existence of the PUD.
3. All PUD shall be served with public water and public sewer meeting the requirements of public utilities of this Ordinance and of the West Virginia State Department of Health and providing sufficient storage, flow capacity, and fire hydrants to meet the requirements of the Insurance Service Office.

Section 903. Review and Approval Process

1. Flexibility in site design is inherent in the PUD process. The Planning Commission may modify specific requirements and may establish other requirements deemed necessary to satisfy the purpose of this Article.
2. The review and approval of PUD is a multi-step process. Those steps are:
 - a. [Concept Plan](#) Review and Public Hearing
 - b. Initial Survey Plat & Engineering Final Plan Review, Public Hearing and Approval and Advancement to Final Plat Review

- c. Final Plat Review and Approval.
3. Design and Development Schedule: It is the intent of this Ordinance that the PUD not be a speculative device. The Concept Plan as submitted by the applicant shall reflect the actual development to be designed and constructed within an anticipated timeframe. Each phase of the design and development review process must occur within specified periods. If the applicant fails to submit plans, or if construction does not commence, the PUD shall automatically be voided unless the Planning Commission grants a revision to the schedule.

Section 904. Content and Format of Application

1. Concept Plan: Please refer to Article 3, Section 307 for requirements.

These standards are intended to ensure that the PUD is compatible with neighboring properties and that it provides a quality living environment for its residents. The standards established for any PUD are considered *prima facie* to be acceptable to the developer and may not be the subject of appeal for a waiver.

2. Density:

- a. The maximum gross density for a PUD, but not for individual elements within the PUD, is 10 dwelling units per acre. In determining the specific density for a particular PUD or for any particular phase of a PUD, the Planning Commission shall give consideration to and shall make findings of fact concerning, at a minimum, the impact of the proposed development on adjacent properties, the availability of public facilities, the impact of proposed development on public roadways, the impact on public schools, fire and police protection, and the availability of adequate open space.
- b. In making these determinations, the Planning Commission shall not unduly withhold approval where these services can be provided in an orderly manner, over time, to accommodate expected growth.

3. Tract Size:

There shall be no minimum tract size for a PUD. However, the tract size and shape shall be appropriate for the development proposed as determined by the Planning Commission.

4. Open Space:

- a. Open space shall comprise an area of at least 15% of the proposed residential acreage.
- b. Such open space shall include land to be developed as recreational areas or for the use of occupants of the Planned Unit Development, but shall not

ARTICLE 9: PLANNED UNIT DEVELOPMENTS & CLUSTER DEVELOPMENTS include streets, off-street parking areas, or stormwater management/retention ponds. Best Management Practices such as rain gardens may be considered part of the open space requirement if they qualify as passive recreation and are approved by County Engineer.

- c. Existing and maintained forests/tree groves may be included in open space if approved by Planning Commission and County Engineer. The applicant must provide satisfactory evidence that such open space area will be continued and that perpetual maintenance is provided for as a condition for approval.
- d. Maintained and operating golf courses shall be counted as open space for the purpose of this section; however, additional open space to accommodate all age groups within a planned unit development shall be negotiated at the time of Concept Plan review.

5. Landscaping:

All Land Development Plans shall contain a schedule for landscaping. The landscaping schedule shall contain a planting schedule and a listing of landscaping materials to be installed. Trees, shrubs, and other ground cover are expected to be so designed as to provide enhancement of the overall layout. Landscaping shall be considered an integral part of the PUD rather than an optional amenity.

6. Buffer Requirements:

- a. Buffer requirements are intended to protect existing or future development adjacent to a proposed PUD from potentially adverse effects.
- b. Non-residential uses, except parks and golf courses, in the PUD shall have a 50' buffer yard along the common boundary with any adjacent residential lot either within or outside of the PUD. Existence of a street between residential and non-residential uses meets the buffer requirement of this section.
- c. Any multi-family residential use, excluding townhouses, shall be provided with a 50' setback along its common boundary with any lot for a single-family detached dwelling either within or outside of the PUD.
- d. No structure, materials storage, or vehicular parking may be permitted in the buffer yard.
- e. Buffer yards shall include adequate screening in accordance with the provisions of Article 8.

7. Walkways:

- a. Pedestrian connectors shall be installed for connections between residential and non-residential portions of the PUD. The method of connection shall be negotiated with the Planning Commission at the Concept Plan stage in order to safeguard the privacy of residential units, and provide pedestrian connections for the convenience and safety of residents. Pedestrian connections shall comply with Article 7 of this ordinance.
- b. When a proposed multi-family residential development is located adjacent to an existing public transit route or where students require school bus transportation, a bus waiting area consisting of an impervious surface shall be provided at such location as determined by the Planning Commission and the applicable transportation or education agencies.

8. Building Spacing and Height Requirements:

In review of a PUD, the Planning Commission may negotiate the area, yard, height and other design requirements to increase the amenities of the development or foster desirable diversity in architectural and community design.

9. Non-Residential Development:

- a. In general, non-residential development proposed as part of a PUD shall be integral to the overall development and shall relate well to residential areas in terms of pedestrian and vehicular circulation. Setback requirements between non-residential and residential uses within a PUD shall be as provided in Article 5.
- b. The gross area for commercial uses shall be jointly negotiated between the applicant and the Planning Commission taking into account the character and location of the PUD. Commercial uses shall not be built or established prior to the residential development without the prior approval of the Planning Commission. Commercial uses may be built in phases consistent with phasing of the residential construction.
- c. The Planning Commission may approve innovative and well-designed proposals for the sharing of buildings or parking areas by compatible residential and non-residential uses whenever it can be demonstrated to the satisfaction of the Planning Commission that such sharing is a logical and efficient use of buildings and land, and that the peak operating hours for the respective uses will not be in conflict.

10. Traffic Circulation and Parking:

The Planning Commission shall determine whether existing streets outside of a PUD are of sufficient capacity or are capable of being upgraded to serve existing traffic and all new traffic when fully developed. New streets, within PUDs shall be designed and constructed to handle all expected traffic when the PUD is fully built out.

11. Phasing:

Different phases of the PUD may have different densities, so long as the overall density of the Concept Plan is followed and intent of the Concept Plan is carried out.

ARTICLE 10 – MANUFACTURED/MOBILE HOME COMMUNITY

Section 1001. General

Manufactured/Mobile Home Communities, whether the individual proposed building sites are to be leased or sold, shall comply with the requirements as set forth in this Ordinance and applicable sections of these articles.

Section 1002. Design Standards

1. The following design standards shall apply to all Manufactured/Mobile Home Communities:
 - a. Each Community shall contain a minimum of five acres, including [open space](#).
 - b. Each Community shall have a minimum buffer area of 25 feet or more around the perimeter of the property. Such buffer area shall not be occupied by or counted as part of any individual proposed building site.
 - c. Each Community shall be provided with a common entrance or entrances. Access to all homes shall be from streets within the Community. In no case shall a home have individual, direct access to any public street or highway.
2. Layout of Proposed Building Sites
 - a. Individual proposed building sites shall abut a street. Building sites shall be laid out in rectangular blocks or shall be diagonal to the street at an angle no greater than 30 degrees from perpendicular. Front and rear building site lines in rectangular blocks shall be straight and continuous.
 - b. In cul-de-sac arrangements, the building site lines shall be radial to the street lines.
 - c. Corner building sites shall situate the home to permit the required building set back from both streets and allow proper sight distance.
 - d. Each building site intended for a singlewide shall be a minimum of 5,000 square feet. Minimum building site width, for single wide, shall be 50'. Each building site intended for a doublewide shall be a minimum of 6,500 sq. feet. Minimum building site width, for double-wide lots, shall be 65'. Each proposed building site shall be clearly defined by [monuments](#) or markers in accordance with the requirements of this Ordinance.
 - e. Each proposed building site shall be designed to fit the dimensions of the Manufactured/Mobile homes anticipated as well as provide all public utilities, pads, hookups, appurtenant structures and other appendages.

- f. Setbacks of Manufactured/Mobile home pads may vary, subject to plan review by the Planning Commission. In no case shall the setback be less than 25' from any street, common parking area, common use area, or built structure within the Manufactured/Mobile Home Community.
- g. Front, Side and Rear setbacks shall be a minimum of 10' in width for each proposed building site. If the rear of an individual proposed building site abuts the 25' perimeter buffer area, then the rear setback may be reduced to five feet. A minimum of 10' shall be maintained for structures on adjoining proposed building sites.

Section 1003. Manufactured/Mobile Home Pad

1. All occupied homes shall be situated on a pad.
2. Each pad shall be constructed to comply with the requirements of the State Building Code, as adopted by Berkeley County.

Section 1004. Streets

All streets in Manufactured/Mobile Home Communities shall meet the requirements set forth in this Ordinance. Curbs and gutters are not required.

Section 1005. Off-Street Parking

Off-street parking shall be provided in accordance with the requirements set forth in this Ordinance as a residential street using the appropriate anticipated traffic counts for the street classifications.

Section 1006. Water and Sewage

Each Manufactured/Mobile Home pad shall be provided with a connection to a water and sewer system approved by the Berkeley County Public Water Service District, Berkeley County Public Sewer Service District, and/or the Department of Health, Environmental Engineering Division.

Section 1007. Utilities

All telephone, electrical and other distribution lines shall be installed in underground conduits. No overhead lines shall be permitted. All underground utilities, sanitary sewers and drainage structures installed in streets shall be constructed prior to the surfacing of such streets.

Section 1008. Buffer strips, Screening and Landscaping

Screening will be provided within a buffer area 25' in width along the entire perimeter of the Manufactured/Mobile home community in order to separate the community from the adjacent land uses and roadways. Screening shall include one of the screening options

provided in Article 8. Where opaque fencing is not used, landscaping shall be installed to provide an opaque vegetative buffer.

Section 1009. Accessory Structures

Accessory structures shall be permitted in the rear yard no closer than five feet from the rear or side lot lines of individual lots.

Section 1010. Solid Waste Disposal

Outdoor collection stations shall be provided for garbage and trash removal when curbside collection is not provided. Collection stations shall be located to avoid being offensive and shall be screened from view and landscaped, in compliance with screening options outlined in Article 8.

ARTICLE 11 – RECREATIONAL VEHICLE PARKS/CAMPGROUNDS, PARKS AND CEMETERIES

For all projects discussed in this Article, a detailed site plan shall be submitted in accordance with Article 3.

RECREATIONAL VEHICLE PARKS/CAMPGROUNDS

Section 1100. General

Recreational vehicle parks and campgrounds are intended to provide temporary pad sites for staying outdoors.

Section 1101. Design Standards

1. Each pad site shall contain a minimum of 1200 square feet of space.
2. Camping units, including canopies and similar appurtenances, shall be separated from other camping units on adjacent pad sites, all campground buildings and structures by a minimum distance of 10'.
3. There shall be at least 10' between a pad site and any campground street, common parking area, or other common use areas.
4. Gatherings of 100 people or more shall provide at least 20 square feet per person at the site for daytime gatherings, and at least 40 square feet per person for nighttime gatherings, exclusive of parking.
5. Campground comfort stations shall provide for each 20 campsites or fraction thereof: one water closet and one urinal for males; two water closets for females; one sink for each sex; one shower for each sex. A maximum of 40 sites may be served per building.
6. Campgrounds shall be a minimum of five acres in size.

Section 1102. Streets and Parking

1. The entrance street to the check-in location shall be designed as a Class L2-street.
2. Interior roads shall be designed as a Class L1-Gravel.
3. Each pad site shall be provided with a gravel off-street parking space.

4. Recreational vehicle spaces shall have a minimum of an 8' x 30' pad. Pull through sites shall be graveled eight feet wide across the entire site.
5. Nothing contained herein would preclude the owner from paving the streets or sites, if they so desire, upon compliance with stormwater management regulations.

Section 1103. Water and Sewer

1. An approved, adequate, easily accessible, potable water supply shall be provided.
2. Water and sewer facilities shall be connected to a water and sewer system approved by the Berkeley County Public Water Service District, Berkeley County Public Sewer District, Berkeley County Health Department, or the Department of Health, Engineering Division.

Section 1104. Utilities

All telephone, cable, electrical and other distribution lines shall be installed in underground conduits. All underground utilities, sanitary sewers, and drainage structures shall be constructed prior to completing the streets.

Section 1105. Buffer-strips, Screening and Landscaping

1. Removal of existing trees shall be kept to a minimum.
2. Screening shall be provided within a 25' buffer area along the entire perimeter of the campground, unless all facilities are greater than 100' from the lot line.
3. Screening shall be a wall or fence 6' in height with a hedge or a hedge 6' in height and trees 15' on centers.
4. Structures shall not be located within 50' of a lot line.

Section 1106. Solid Waste Disposal

Outdoor collection stations shall be provided for garbage and trash removal. Outdoor collection stations shall be located to avoid being offensive and shall be screened from view and landscaped.

Section 1107. Open Space

A minimum of 25% of the site shall be maintained as [open space](#).

PARKS

Section 1108. General

Community parks are intended to provide a temporary location for recreation and observance of nature.

Section 1109. Design Standards

1. Park comfort stations shall be situated throughout the park; one every 15 acres. They shall contain two water fountains, one unisex station or one sink for each sex; two urinals and one handicap accessible stall for males; two stalls for females (one of which must be handicap accessible).
2. Parks shall be a minimum of one acre in size.

Section 1110. Streets and Parking

1. The entrance street to the park shall be designed as a Class L2 street.
2. Interior roads leading to open spaces and pavilions shall be designed as a Class L2 Street.
3. Each pavilion site shall be provided with a gravel off-street parking space.
4. Refer to Article 8 for parking requirements.
5. Nothing contained herein would preclude the owner from paving the pavilion site parking area, if they so desire, upon compliance with stormwater management regulations.

Section 1111. Water and Sewer

1. An approved, adequate, easily accessible, potable water supply shall be provided.
2. Water and sewer facilities shall be connected to a water and sewer system approved by the Berkeley County Public Water Service District, Berkeley County Public Sewer District, Berkeley County Health Department, or the Department of Health, Environmental Engineering Division.

Section 1112. Utilities

All telephone, cable, electrical and other distribution lines shall be installed in underground conduits. All underground utilities, sanitary sewers, and drainage structures shall be constructed prior to completing the streets.

Section 1113. Buffer-strips, Screening and Landscaping

1. Removal of existing trees shall be kept to a minimum.
2. Screening will be provided within a 25' buffer area along the entire perimeter of the park, unless all facilities are greater than 100' from the lots line. Screening shall be designed according to the requirements in Article 8, Section 824.4 and Table 8-5.
3. Structures shall not be located within 50' of a lot line.
4. Stormwater management areas shall be protected from waste contamination.

Section 1114. Solid Waste Disposal

Outdoor collection stations shall be located to avoid being offensive and shall be screened from view and landscaped.

Section 1115. Open Space

A minimum of 25% of the site shall be maintained as open space.

CEMETERIES/MEMORIAL AREAS

Section 1116. General

A cemetery or graveyard is a location intended to provide a permanent burial or internment site for the remains of the dead.

Section 1117. Design Standards

1. Minimum size of proposed cemeteries shall be at least five acres.
2. Structures and burial sites shall be setback a minimum of 20' from the outer perimeter of a proposed cemetery.
3. Interior circulation roads shall be required and may be located within the setback.
4. Burial sites shall be set back a minimum of 10' from any interior roadway to allow for vehicles to park.

Section 1118. Site Plan Requirements

1. Applicant shall provide the planning commission proof of application with the State of West Virginia.

Section 1119. Streets and Parking

1. The entrance street to the cemetery shall be designed as a Class L2 street.
2. Interior roads shall be designed as a Class L1-Gravel.

3. Nothing contained herein would preclude the owner from paving the streets or sites, if they so desire, upon compliance with stormwater management regulations.

Section 1120. Water and Sewer

Water and sewer facilities shall be connected to a water and sewer system approved by the Berkeley County Public Water Service District, Berkeley County Public Sewer District, Berkeley County Health Department, or the Department of Health, Engineering Division.

Section 1121. Utilities

All telephone, cable, electrical and other distribution lines shall be installed in underground conduits. All underground utilities, sanitary sewers, and drainage structures shall be constructed prior to completing the streets.

Section 1122. Buffer-strips, Screening and Landscaping

1. The perimeter of the proposed cemetery shall be clearly defined by a wall, fence or hedge.
2. Removal of existing trees shall be kept to a minimum.
3. A 25' buffer with screening will be provided in accordance with Article 8.

Section 1123. Solid Waste Disposal

Outdoor collection stations shall be located to avoid being offensive and shall be screened from view and landscaped.

ARTICLE 12 – ADMINISTRATION AND AMENDMENTS

Section 1201. Administration of Regulations

1. The Berkeley County Planning Commission shall administer these land development regulations. Only complete submittal packages including all applications, fees, maps, proof of submission or approvals from participating State and local agencies of government and documents relative to land development approval shall be submitted to the Berkeley County Planning Commission. Electronic filing through the online portal of a complete submittal of documents shall constitute submission to the Planning Commission. Office submission dates and other administrative procedures are detailed in Article 3, Processing Procedures.
2. The Planning Commission may seek the advice of professionals or State agencies regarding proposals for land development at any stage of the process.
3. The Planning Staff, or other designee of the Planning Commission, shall be responsible for the daily administration of these regulations.
4. In order to affect a timely and orderly processing and review of any plat or land development plan, prior to the approval of any plat or plan, the Planning Commission Staff and representatives of other agencies shall review the project and make recommendations regarding approval to the Planning Commission.
5. No approval of a plat or plan of any land development subject to the provisions of this Ordinance shall be official unless authorized by a majority of all of the members present of the Berkeley County Planning Commission at a regular meeting or properly called special meeting, unless approval is permitted through the administrative approval process.

Section 1202. Application Fees

The County Commission shall establish a uniform schedule of fees, with recommendation from the Planning Department Staff and Planning Commission, the revenues from which shall be proportionate to the costs of operating the Planning Department and providing the requisite review services. The Berkeley County Commission shall approve the schedule of fees before it becomes effective. The Applicant shall pay the specified fee at the time of filing the application.

Section 1203. Waivers

Waivers may be permitted in rare circumstances to allow exceptions from specific provisions of this Ordinance. The granting of a waiver does not constitute a change in the Ordinance or set a precedent.

Section 1203.1. Requirements, Waivers

The Planning Commission may grant a waiver request only if it specifically finds that the approval of the request:

1. Will not adversely affect the public health, safety or welfare, or the rights of adjacent property owners or residents;
2. Arises from special conditions or attributes which pertain to the property for which a waiver is sought and which were not created by the person seeking the waiver;
3. Would eliminate unnecessary hardship and permit a reasonable use of the land;
4. Is based on limiting restrictions unique to the property which prevent the applicant from developing the property as outlined in the Ordinance;
5. Will not substantially compromise the intent of the Ordinance; and
6. Will not compromise consistency and fairness in application of the Ordinance.

Notwithstanding the above, the Planning Commission may grant a waiver when, in its opinion, the Applicant has presented evidence that the waiver represents an innovative and beneficial approach to development which is in the best interest of Berkeley County.

Section 1203.2 Procedure, Waivers

1. The Applicant must submit an explanation and justification for the waiver request on forms provided by the planning Department Staff.
2. The Planning Commission shall cause a public notice of the date, time, and place of the public hearing to be published in a local newspaper within at least 21 days prior to the public hearing. The applicant/developer shall post this sign at least 21 days prior to the public hearing as close to the road as possible, in a location that is clearly visible. Once the sign has been posted, the applicant/developer shall furnish a photograph showing that the sign was posted and the date and location of the posting to the Planning Department. Staff will include the digital photograph of the sign and coordinates in the project file.
3. All waiver requests will be reviewed by the Planning Department Staff and by the County Engineer, both of whom will make a recommendation of approval or disapproval to the Planning Commission.
4. The Planning Commission shall take all evidence and recommendations presented by the Applicant, County Engineer, Planning Staff and the public into consideration. If, after a public hearing on the requested waiver, the Planning Commission can make a finding as described in Section 1203.1, then it may

grant the waiver. All findings, including justification for granting the waiver, must be recorded in the Planning Commission meeting minutes.

5. If any waivers are granted, then a notation must be provided on the plat and plan providing the approval date of the waiver and section of the Ordinance waived. If a Final Plat has already been recorded, a Replat will be required with a notation of the waiver.

Section 1204. Conditional Waivers

In granting waivers, the Planning Commission may require conditions that will substantially achieve the objectives of the waived standards or requirements.

Section 1205. Request for Consideration

If the Planning Commission denies a formal application, the Planning Commission staff shall notify the Applicant in writing of the reasons for the denial. The Applicant may request, one time, a reconsideration of the decision of the Planning Commission. The Request for Consideration must be submitted in writing and received by the Planning Commission no later than 10 days after the Applicant receives the notification.

Section 1206. Appeal

A decision of the Planning Commission may be reviewed by certiorari procedure. A petition for certiorari shall specify the grounds upon which it is alleged that the Commission's action is illegal. Such petition must be filed in the Circuit Court of Berkeley County within 30 days after the date of such decision.

Section 1207. Planning Commission Records

The Planning Commission shall keep a record of its findings, decisions and recommendations, relative to all plats or land development plans filed with it for review or approval.

All records of the Planning Commission shall be public records, with the exception of any correspondence or documents exchanged between the Planning Commission and the Planning Commission's legal counsel and records exempted from disclosure by West Virginia Code § 29B-1-4.

Section 1208. Remedies and Jurisdiction

The Planning Commission is vested with all the necessary authority to administer and enforce conditions attached to the plats and plans approved for a development project. The Planning Commission, County Commission, or authorized employee may enforce the provisions of this Ordinance in a manner provided for in this Article and by applicable State Code.

Section 1208.1. Procedure, Notification

1. Upon learning of a potential violation of this Ordinance, Planning Staff shall investigate and determine whether a violation has occurred.
2. When it appears after the investigation that a violation of this Ordinance has occurred, Planning Staff shall notify the violator by means of a written violation notice. The violation notice shall specify the nature of the violation, request that the violation cease within 15 days from the date of the notice and request that the violator and/or property owner provide the appropriate documentation to bring the site into compliance.

Section 1208.2. Preventative Remedies

1. The County may take appropriate actions by law or in equity to restrain, correct or abate violations, to prevent unlawful construction, to recover damages, and to prevent illegal occupancy of a building, structure, or premises.
2. The County may refuse to issue any permit and deny any approval necessary to further improve or develop any real property which has been developed or which has resulted from a subdivision of real property in violation of this Ordinance. This authority to deny such a permit or approval shall apply to any of the following applicants:
 - a. The owner of record at the time of such violation;
 - b. The vendee or lessee of the owner of record at the time of such violation whether or not such vendee or lessee had actual or constructive knowledge of the violation;
 - c. The current owner of record who acquired the property subsequent to the time of violation whether or not such current owner had actual or constructive knowledge of the violation; and
 - d. The vendee or lessee of the current owner of record who acquired the property subsequent to the time of violation whether or not such vendee or lessee had actual or constructive knowledge of the violation.

3. The County may issue a condemnation and request demolition and to return the site to the previous or natural state.

Section 1208.3. Enforcement Remedies

1. Any person who violates the provisions of the Ordinance shall, upon being found liable in a civil enforcement proceeding commenced by the County, pay a judgment of up to \$1,000.00 plus all court costs, including reasonable attorney fees incurred by the County as a result thereof. If the defendant neither pays nor timely appeals the

judgment, the County may enforce the judgment pursuant to the applicable rules of civil procedure. Each day that a violation continues shall constitute a separate violation.

2. The alleged violator may seek an Order of Stay from the Circuit Court tolling the per diem judgment pending a final adjudication of the violation and judgment.

Section 1209. Amendments

The regulations set forth in this Ordinance may from time to time be amended, supplemented, changed, or repealed. However, no such action may be taken until after a public hearing is held, at which interested parties and citizens shall have an opportunity to be heard. Notice of the time and place of such hearing shall be published in a newspaper of general circulation in the County at least 30 days prior to the hearing.

Any proposed amendment shall be submitted to the Planning Commission for report and recommendation prior to any action thereon by the County Commission.

APPENDIX A

THE MANUAL OF STREET STANDARDS FOR BERKELEY COUNTY, WEST VIRGINIA

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Section 1. Purpose

Any individual or entity desiring to construct a road, street, or parking area within a subdivision or land development within Berkeley County, West Virginia shall follow the procedures described herein. Design and construction shall also be as specified.

Section 2. Specifications

Specifications for all road improvements and site work, including workmanship and pay items for bonds, shall be those of the West Virginia Division of Highway Standard Specifications for Roads and Bridges.

Section 3. Geometric & Pavement Design

Geometric and pavement design shall be in accordance with Table 1: “Geometric Design Criteria Streets and Highways” shown below and with information included herein. Items not covered shall be in accordance with WVDOH Engineering Design Manuals, Construction Standards, and Specifications as well as ASSHTO Policy on Geometric Design of Highways and Streets as may be appropriate.

All residential streets, accesses, intersections, cul-de-sacs, and turnarounds shall be designed to accommodate a 77-passenger Thomas C-2 Safe-T-liner bus.

For all commercial, industrial, and multistory residential (30 feet tall or greater) all streets, accesses, intersections, cul-de-sacs, and turnarounds shall be designed to accommodate the Fire Department Aerial Platform.

Table 1:
“GEOMETRIC DESIGN CRITERIA
STREETS AND HIGHWAYS”

Item	Streets			
	L1 - Alley	L2	L3	Heavy Duty
Design Speed (MPH)	25	30	35	40
Posted Speed (MPH)	20	25	30	35
Minimum Turning Lane Width (Feet)	-	12	12	12
Minimum Horizontal Curvature Radius (Feet)	100	150	250	535
Minimum Turning Flair Radius At Connections (Feet)	30	30	35	50
Stopping Sight Distance (Feet) ¹	155	200	250	305

¹ Stopping sight distance is based on a reaction time of 2.5 seconds, and a deceleration of 11.2 feet/second².

K-Value Crest Vertical Curve ²	12	19	29	44
K-Value Sag Vertical Curve ³	26	37	49	64
Minimum Vertical Curve Length (Feet) 3V	75	90	105	120
Minimum Roadway Grade (%)	0.5	0.5	0.5	0.5
Maximum Roadway Grade (%)	10	10	10	8
Intersection Approach Grade (%)	8	6	6	6
Roadway Pavement Cross-Slope (Inches/Feet)	1/4	1/4	1/4	1/4
Maximum Super Elevation (Feet/Feet)	-	-	0.04	0.04
Maximum Super Elevation Run Out (Feet)	-	-	175	200
Minimum Clear Travel Way (Feet) ⁴	20	20	22	24
Minimum Paved Outside Diameter at Cul-De-Sac (Feet)	80	80	80	N/A
Right of Way (Feet)	50/20	50	60	60

Section 4. Intersection Design

A. Sight Distances at Intersections

Sight distances at intersections should be regulated to allow approaching driver's sufficient time to stop. Each vehicle should be visible to the other driver when each vehicle is located on the street centerline and at a specified distance from the point of intersection of the street centerlines. Clear sight triangles should be provided at all intersections and no building, structure, grade, or planting higher than two and a half (2 ½) feet above the centerline of the street should be permitted within such sight triangles.

1. Clear sight triangles of 50' measured along street centerlines from their points of junction should be provided at all intersections of lanes and places.
2. Clear sight triangles of 75' feet measured along street centerlines from their points of junction should be provided at all intersections.
3. For intersections of industrial or commercial with state highways, a greater sight distance is desirable.

B. Horizontal Alignment at Intersections

The preferred angle of intersection for intersecting streets is 90 degrees.

1. The minimum angle is 75 degrees. Any change in street alignment to meet this requirement should occur at 100' from the intersection.

² The length of a crest vertical curve shall be based on an eye height of 3.5 feet above the roadway with a height of object at 2 feet above the roadway. Crest Vertical Curves shall satisfy both stopping sight distance and K-Value.

³ The length of a sag vertical curve shall be based on a headlight height of 2 feet, with a 1-degree upward angle of the headlight beam.

⁴ If on-street parking is provided, the pavement section shall be widened 8'6" on each lane to accommodate parking for a drive aisle of 12'. On-street parking is only intended for parallel parking.

2. Multiple intersections involving junctions of more than two streets should be avoided.
3. Two streets intersecting the same street from opposite sides should intersect this same street directly opposite one another.
4. Street jogs with centerline offsets of less than one hundred fifty feet (150') shall not be allowed.

Section 5. Cul-de-Sac Requirements

- A. For all housing developments which contain an interior roadway in excess of 600' in length (measured from the centerline of the intersecting street to the center of the cul-de-sac) with no intersecting streets, at least one cul-de-sac shall be provided with a paved diameter of not less than 80 feet and a ROW diameter of not less than 110 feet to accommodate emergency vehicles and school bus turning movements. Additional larger cul-de-sacs may be required dependent upon the proposed design.
- B. Cul-de-Sacs shall be signed with "No Parking" in accordance with MUTCD Standards unless the Cul-de-Sac design provides additional paved area for parking.
- C. Dead-end streets are prohibited except as stubs no more than 150 feet to permit future extensions to adjoining tracts. They shall provide cul-de-sacs or turnarounds (Hammerhead/Y-type) that are compliant with NFPA 1140 for all fire and emergency vehicles.
- D. No more than 5 driveways will be permitted to enter the cul-de-sac beyond the point of curvature at the beginning of the cul-de-sac.

Section 6. Street Lighting

- A. Whenever street lighting is required, the minimum lighting intensity shall be in accordance with the American National Standard Practice for Roadway Lighting. Illuminating Engineering Society, Approved July 2, 1972, American National Standards Institute and amendments thereto.

Section 7. Street Classification and Design

- A. Classification – HIGHWAYS
 1. Arterial. This classification includes highways which are major traffic corridors or provide for regional traffic of substantial volumes where the average trip lengths are usually five miles or greater. Generally, these highways should accommodate operating speeds of 35-55 MPH and have an estimated average daily traffic (ADT) count of 5,000 vehicles or greater after being fully developed.
 2. Collector. This classification is intended to include those highways which connect local access highways to arterial highways. They may serve as traffic corridors connecting residential areas with industrial, shopping, and other services. They may penetrate residential areas. Generally, these highways will accommodate operating speeds of 35 MPH and

have an estimated ADT count of 1,750 to 5,000 vehicles after being fully developed.

B. Classification – LOCAL (Subdivision Street)

1. Local. This classification is intended to include streets and roads that provide direct access to abutting land and connections to higher classified roadways. Traffic volumes will be low and travel distances generally short.
 - i. L1 – Rural Lane (Gravel). Lots over 5 acres in size.
 - ii. L2 – Local Road. Serving a maximum of 60 lots and an ADT count of 420-600 vehicles.
 - iii. L3 – Local Road. Serving a maximum of 250 lots and an ADT count of 1,750-2,500 vehicles.
 - iv. Alley – serving off-street parking or rear of residential lots.

C. Classification – HEAVY DUTY

1. This classification is intended to provide access to industrial areas and other areas where semi-trailer truck traffic is expected.

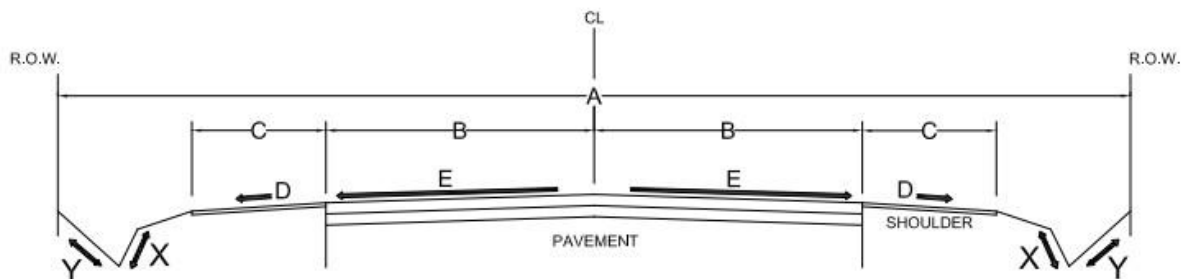
- D. All roadways shall be designed in accordance with The Asphalt Institute, AASHTO design of pavement structures. The design shall be based on a site-specific geotechnical report. For superpave pavements, the report and pavement design shall be provided to support the development site plan drawings. New pavement sections not constructed in full (no surface course) shall have at least 1 (one) inch of the remaining surface/wearing course placed on base course paving until final surface/wearing course is placed.
- E. All curb and gutters shall be Portland Cement Concrete Class B in accordance with WVDOT standard details and specifications. All combination curb and gutter shall be 6" high and Type I.
- F. Closed section (curb and gutter) roadways shall be used for all developments where density is greater than 3 (three) houses per acre. All single family attached developments shall have curb and gutter closed roadway sections including off-street parking areas.
- G. Boulevard streets (travel ways separated by a curb and gutter median) are only permitted with two (2) travel lanes in each travel direction and crossovers located no more than three-hundred (300) foot intervals. Crossovers shall be designed such that plantings do not impair sight distance and provide for emergency vehicles to safely make the turning movement. Consideration shall be given to dedicating lanes for turning movements at the entrance to a WVDOT roadway into and out of the development including channelization.

Table 2:
“MINIMUM WIDTHS FOR STREET CLASSIFICATIONS”

	Type of Street	Right-of-Way (Feet)	Cartway Width (Feet)
Highway	Arterial	60-120	26 or 40
	Collector	60	24 or 34
Local	L1 - Gravel	50	20
	L2	50	20
	L3	60	22
	Alley	40	20
Heavy-Duty	Heavy-Duty	60	24

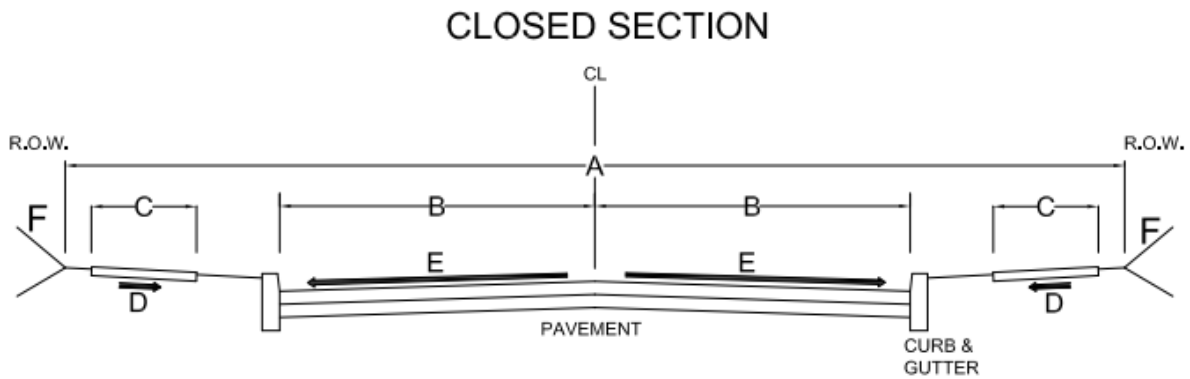
Section 8. Standard Street Sections

OPEN SECTION



Open Section				
	L1 (Gravel & Paved)	L2	L3	Heavy Duty/ Collector

A: ROW	50'	50'	60'	60'
B: Cartway	10'	10'	11'	12'
C: Shoulder Width	4'	4'	6'	6'
D: Shoulder Cross Slope	4%	4%	4%	4%
E: Pavement Cross Slope	48:1	48:1	48:1	48:1
X: Ditch Slope	3:1	3:1	3:1	3:1
Y: *Ditch Slope (*4:1 Desirable)	3:1	3:1	3:1	3:1



Closed Section			
	L2	L3	Heavy Duty/ Collector
A: ROW	50'	60'	60'
B: Cartway	10'	11'	12'
C: Sidewalk Width	5'	5'	5'
D: Shoulder Cross Slope	48:1	48:1	48:1

E: Pavement Cross Slope	48:1	48:1	48:1
F: *Tie Back (*4:1 Desirable)	3:1	3:1	3:1

APPENDIX B

DEVELOPER'S AGREEMENT

Developer's Agreement

MADE this day of _____, 20 , by and between _____
("Developer") and **The Planning Commission of Berkeley County, West Virginia** ("the
Commission").

WHEREAS, Developer is the owner of, or has contractual rights to develop, a certain parcel of
land located within the County, being more particularly described in Exhibit "A" attached hereto;
and

WHEREAS, Developer seeks to develop said lands under a Land Development Plan captioned
_____ and dated _____, 20 , as the same was approved by the
Commission on _____, 20 , copies of which plan are on file at the office of the
Commission; and

WHEREAS, in the application to the County for approval of the Subdivision Plat (hereinafter the
"Plat") captioned _____, prepared by _____, Developer indicated its

intention to construct at its sole cost and expense (including but not limited to engineering
inspections and review expenses incurred by the County in connection with the Plan) all those
improvements within the Plat required by the Plan or by any conditions attached thereto by the
Commission; and

WHEREAS, Developer has agreed to deliver to the County a bond, renewable Irrevocable Letter
of Credit or other form of surety (in a form and substance to be approved by the County Attorney)
from an institution licensed to do business in West Virginia (hereinafter Developer's "surety") in
an amount sufficient to guarantee the installation of the improvements and reimbursement of the
County for expenditures that may be directly incurred in connection with the completion of the
improvements should the Developer default.

NOW THEREFORE, IT IS AGREED:

1. Developer covenants, promises and agrees to build, construct and install all improvements
within the Plat in accordance with the Plan, the specifications of the County, and in the
manner provided and approved by the County, on or before the _____ day of
_____, 20____.
2. Developer shall enter into contract(s) with such person(s) necessary to construct the
improvements. The Developer shall provide the County with a construction schedule for
all the required public improvements which satisfies the completion date agreed upon in
Paragraph 1 above, a schedule of job site meetings, and the name and address of the

supervisory point of contact for the contractor. Developer agrees that the construction or installation of the improvements is subject to the inspection and approval of the County Engineer.

3. Developer shall deliver to the County its surety in an amount approved by the Commission. The amount of financial security required for the surety shall be 115% of an estimate of the cost of completion of the required improvements, based upon the prevailing wage rates, submitted by the Developer and prepared by a Professional Engineer licensed as such in the State of West Virginia and certified by such Engineer to be a fair and reasonable estimate of such cost. The Commission, upon the recommendation of the County Engineer, may refuse to accept such estimate for good cause shown. Exhibit "B" of this Agreement may be used for the purpose of documenting the needed surety or any other form prescribed by the County Engineer.

The surety shall be posted as security for performance of this Agreement, including the construction of improvements as shown on the Plat, the Plan, or in other written approvals from the County. The term of such surety shall be for the period agreed upon for the completion of construction of the improvements and, if required by the County Engineer, will include an "evergreen" clause which will allow for an automatic extension of the term to cover any extended period of construction. The County Engineer shall have authority, on his/her own initiative, with the approval of the County Commission and after thirty (30) days' notice to the Developer, to increase the amount of surety at any time if in his judgement and sole discretion, such increase is appropriate. The County Engineer must justify such decision by a demonstrable increase in costs, which must be disclosed to the Developer.

In the event the Developer fails to construct the improvements in a manner acceptable to the County or by the time agreed upon in the Agreement or any amendment thereto, the County shall notify the Developer of said circumstance in writing and, when possible, allow the Developer forty-five (45) days from the date of said notification to correct the deficiencies.

In the event Developer fails to complete said deficiencies to the satisfaction of the County Engineer, the County may, at its option call the bond or other surety and construct said improvements at the Developer's expense. In such case, any bond or other surety balance remaining after construction shall be returned to the surety or the Developer as appropriate.

In the event that the amount of the surety is insufficient to satisfactorily construct the improvements or reimburse the County for its costs and expense to construct the same, the County may file an appropriate legal action against the Developer based upon this

Agreement for the balance of the funds required to construct the improvements or reimburse the County for the same.

4. As the work of installing the required improvements proceeds, the Developer may, from time to time, request that the County reduce the amount of the surety on account of work performed. Any such request shall be in writing addressed to the County Commission, and the County Engineer shall have 30 days from receipt of such request in which to certify in writing that such portion of the work has been completed in accordance with the Plat, Plan and other applicable requirements. Upon such certification, the County Commission may authorize a reduction in the surety by an amount estimated by the County Engineer as fairly representing the value of the improvements completed.
5. All construction shall be in accordance with the Plat, Plan, County Ordinances, and other applicable regulations. Unless otherwise specified by the applicable regulations, if a conflict exists between the Plat, Plan, and ordinances, the strictest provision shall be used. The Developer is responsible to correct any unforeseen conditions that are caused by the installation of the improvements.
6. Developer shall grant and convey, to third parties if appropriate, by Deed of Dedication, all easements for rights-of-way (including maintenance) shown on the Plat and Plan. In the event easements are required from third parties, it shall be the duty of the Developer to obtain them at its sole cost and expense.
7. At such time as the County Engineer, upon inspection, reports approval of all required improvements, the surety may be reduced to an amount not less than fifteen percent (15%) of the estimated cost of all required improvements at the inception of the project. 180 days following the aforesaid report, the County Engineer shall perform a performance inspection of all improvements. Upon an acceptable performance inspection, the surety shall be released in full.
8. In addition to the aforesaid requirements, the Developer agrees that it will, at its own expense:
 - a. Pay to the County any fees required by outside/third party agencies hired by the County and as agents thereof for inspecting construction of public improvements and for fees and other expenses such as, but not limited to, the payment for third party engineers, additional applications and approvals, as may be required by the ordinances and regulations of the County or other governmental entities.

- b. Connect underground springs or other waters encountered during construction to the proposed storm sewers or to a proper outlet as designated by the County Engineer.
- c. Upon completion of the construction, the Developer shall ensure removal from the site and disposal of all brush, rubbish, refuse, and debris, leaving the area free and clear of same.
- d. Remove all temporary buildings or structures within one month after final acceptance of the improvements by the County.

THIS AGREEMENT shall be binding upon the heirs, executors, administrators, successors and assigns of Developer and the County.

DEVELOPER

Berkeley County Planning Commission
President (or Designee)

APPENDIX C

ENVIRONMENTAL IMPACT CHECKLIST

ENVIRONMENTAL IMPACT CHECKLIST FOR PROJECT REVIEWS

APPLICANT/OWNER:

PROJECT NAME:

PROJECT LOCATION:

PROJECT DESCRIPTION:

Please attach a sheet describing answers to the questions listed below.

1.	Is the proposed development consistent with the goals and objectives of the Comprehensive Plan and the growth management man?
2.	Is the proposed development consistent with the Subdivision and Land Development Regulations?
3.	What types of uses are proposed for the entire subdivision?
4.	What is the size of the proposed development, including buildings, acreage, and lot coverage (impervious surface) by buildings, roads, driveways, and sidewalks, gross density, lot area, stormwater management, and easements?
5.	Is the applicant aware of any impact the development would have on groundwater supply or quantity? Has a draw down test been performed?
6.	Is the applicant aware of any effect the development would have on the quality or supply of water to a lake, pond, stream, or wetland?
7.	What will be the source of water? If on-site water is proposed, is there sufficient water to accommodate the development? Is the applicant aware of any potential ways in which the proposed water source would be contaminated from nearby landfills, commercial or industrial uses? Could the on-site use of water reduce water availability to adjoining properties?
8.	Is the applicant aware of any impact the development would have that could change stormwater drainage patterns or increase runoff from the site?
9.	Is the applicant aware of any impact the development would have that could produce significant soil erosion and sedimentation?
10.	How will sewage be disposed of? If on-site sewage disposal is proposed, are soils appropriate and the lot large enough to provide an adequate absorption field?
11.	How will the development affect transportation use and patterns?
12.	How will solid waste from the development, including any toxic substances, be disposed of?
13.	Is the applicant aware of any known rare or endangered plant or animal species, sensitive wildlife habitat, or hunting and fishing areas that would be impacted by development?
14.	Is the development proposed for an area with known natural hazards, especially floodplains and steep slopes?
15.	Are there any known archaeological or historic sites, historic buildings, or cemeteries?
16.	Are there any known rock outcrops, sinkholes, caverns, unique, or unusual landforms found on the site? (i.e., geological formations, etc.)
17.	What state and federal reviews and permits are needed for approval of the proposed development and have they been applied for or obtained?
18.	Is the applicant aware of any known impaired streams located on the property?
19.	Has the applicant taken into consideration the environmental features on the site in the development of the project? What environmentally significant features have been preserved?

APPENDIX D

SCHEDULE OF FEES

Planning Department Fee Schedule		
Requested Service		Fee
Miscellaneous		
Public Hearing (paid to the Planning Department)		\$200
Request for Waiver (PLUS public hearing fee)		\$225
Request for Consideration (PLUS public hearing fee)		\$225
Fee for each additional review after 3 reviews		
	Planning:	\$700
	Engineering:	\$700
Final Plat Resignature (expired after 90 days)		
	Planning:	\$500
Bond Reduction		
	Planning:	\$150
	Engineering:	\$350
As-Built		
	Engineering:	\$350
Minor Plans		
Merger, Family Transfer, Financing Lots, Administrative, Testamentary: base fee		\$385
Merger, Family Transfer, Financing Lots, Administrative, Testamentary: per parcel fee		\$105
Right-of-Way, Boundary Line Adjustment, Easement, Correction, Judicial Partition		\$175
Major Plans		
Concept Plan (1-49 lots) PLUS public hearing fee		
	Planning:	\$420
	Engineering:	\$210
Concept Plan (50 lots or more) PLUS public hearing fee		
	Planning:	\$835
	Engineering:	\$420
Concept Plan (Commercial/Industrial) PLUS public hearing fee		
	Planning:	\$420
	Engineering:	\$210
Detailed Site Plan (DSP) (1-49 lots) base fee PLUS public hearing fee		
	Planning:	\$835
	Engineering:	\$835
Detailed Site Plan (DSP) (1-49 lots) per lot fee		
	Planning:	\$280
	Engineering:	\$280
Detailed Site Plan (DSP) (50 lots or more) base fee PLUS public hearing fee		
	Planning:	\$1,530
	Engineering:	\$1,530
Detailed Site Plan (DSP) (50 lots or more) per lot fee		
	Planning:	\$280
	Engineering:	\$280

Planning Department Fee Schedule		
Requested Service		Fee
Detailed Site Plan (DSP) (Commercial/Industrial) base fee PLUS public hearing fee		
	Planning:	\$700
	Engineering:	\$700
PLUS per acre (or fractions therefor) of site disturbance		
	Planning:	\$210
	Engineering:	\$210
Final Plat (1-49 lots)		
	Planning:	\$420
	Engineering:	\$210
Final Plat (50 lots or more)		
	Planning:	\$835
	Engineering:	\$420
Final Plat (Commercial/Industrial)		
	Planning:	\$420
	Engineering:	\$210
Re-Plat (1-49 lots)		
	Planning:	\$420
	Engineering:	\$210
Re-Plat (50 lots or more)		
	Planning:	\$835
	Engineering:	\$420
Re-Plat (Commercial/Industrial)		
	Planning:	\$420
	Engineering:	\$210
Administrative Plan Change		
	Planning:	\$835
	Engineering:	\$835
Major Plan Change PLUS public hearing fee		
	Planning:	\$835
	Engineering:	\$835

APPENDIX E

HYDROGEOLOGIC TESTING

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Section 1.1 Hydrogeologic Testing

Hydrogeologic testing as set forth in this document is an evaluation of groundwater quantity and quality and the potential effects that a proposed land development may have on water resources. The evaluation is based on both on-site hydrogeologic testing and existing and readily available information.

Hydrogeologic testing and reports are required and specifically defined for residential subdivisions not served by public water and public sewer with fifteen (15) or more lots. Each hydrogeologic test shall be performed by or under the direct supervision of a professional geologist. A report of the evaluation, the Hydrogeologic Report, shall be prepared and signed by the professional geologist and submitted to the County for review. Where not specifically defined in this Appendix, the methodology used for testing and evaluation shall follow generally accepted professional hydrologic and hydrogeologic practices and standards.

Section 1.2 Testing Requirements for Subdivisions with 15 lots or more not served by Public Water and Public Sewer

A hydrogeologic report for subdivisions will examine the local hydrogeologic conditions and the relationship between the proposed land use and those conditions. The testing will focus on the groundwater quantity and quality as they relate to the requirements of the proposed land development and the potential impacts the subdivision may have on the water resources. A hydrogeologic report is required prior to a preliminary subdivision submission.

Subdivisions not served by public water and public sewer can be divided into two (2) groups based on the type of water supply system; those having a private well on each individual lot and those having community water systems serving two or more lots.

Section 2.1 Water: Home and Business Consumption

This section addresses water for home and business consumption. The intent is to establish: 1) demand levels which satisfy quality of life, 2) requirements for well/pump testing, and 3) procedures to enhance sustainability of this resource.

Section 2.1.1 Acronyms

gpm = gallons per minute
gpd = gallons per day
psi = pounds per square inch
ERU= equivalent residential unit
ADD = average daily demand (gallons per day/ERU)

AARn = average annual rainfall under normal conditions
AARd = average annual rainfall under drought conditions
MDD = maximum daily demand (gallons per day/ERU)
PHD = peak hourly demand (gallons per day/ERU)

Section 2.1.2 Standard Units for Berkeley County Applications

AARn for Berkeley County = 39.4 inches/year
AARd for Berkeley County = 19.7 inches/year
ADD = 180 gpd (based on Berkeley County Public Service District (PSD) statistics)
MDD = 360 gpd (2 x ADD)

Section 2.1.3 Private Wells

1. A private well shall be defined as a well which supplies a single ERU.
2. Each private well must be capable of providing a continuous yield of > 3 gpm.
3. If the well does not yield at the minimum required rate, then the water supply system (i.e. borehole + storage/pressure tank) must provide a reservoir of 360 gallons (equivalent to the regional MDD). In addition, the well must be capable of supplying enough water to refill the reservoir within a twenty-four (24) hour period.

Section 2.1.4 Community Wells

1. A community well shall be defined as a well, which supplies more than one ERU.
2. Community well yield shall be determined based on the number of ERUs being supplied. It is critical that the water system source, treatment and storage facilities must be designed such that, together, they provide the MDD for the system based on the number of residences. It is preferable that the system be designed such that the source alone will be able to meet, and preferably exceed, the MDD. This is important, as larger storage tanks, with corresponding residence times of stored water, are more susceptible to water quality issues such as stale water, warm water in the summer, and biological growth. It is notable that the more a utility relies on storage rather than source to meet the MDD, the longer it will take the utility to replenish the storage once it is depleted. In addition, fire protection authorities generally recommend the ability to replenish fire protection storage within a twenty-four (24) hour period after it is depleted. To accomplish this, the flow rates must equal or exceed the MDD.
3. The yield for a community well shall be determined by multiplying the number of proposed ERUs to be supplied by the system by the MDD, as shown in the following formula:

$$\text{Community Well Yield (gpd)} = (\text{No. of ERUs})(\text{MDD in gpd})$$

For example: (No. of ERUs)(MDD) = CYY
 (200)(360)=72,000gpd

Section 2.1.5 Non-Residential Wells

1. All wells that supply commercial establishments (e.g. agricultural, retail, industrial, recreational, etc.) shall be sized based upon the design engineer's recommendations regarding the specific establishment's water supply requirements. Guidance for the requirements of a specific establishment should be derived from Table 4-1 as follows:

Table E-1 Guide for Non-Residential Water Demand

Type of Establishment	Water Used (gpd)
Airport (per passenger)	3 - 5
Apartment, multiple family (per resident)	50
Bathhouse (per bather)	10
Boardinghouse (per boarder)	50
Additional kitchen requirements for nonresident boarders	10
Camp:	
Construction, semi permanent (per worker)	50
Day, no meals served (per camper)	15
Luxury (per camper)	100 - 150
Resort, day and night, limited plumbing (per camper)	50
Tourist, central bath and toilet facilities (per person)	35
Cottage, seasonal occupancy (per resident)	50
Club:	
Country (per resident member)	100
Country (per nonresident member present)	25
Factory (gallons per person per shift)	15 - 35
Highway rest area (per person)	5
Hotel:	
Private baths (2 persons per room)	50
No private baths (per person)	50
Institution other than hospital (per person)	75 - 125
Hospital (per bed)	250 - 400
Lawn and Garden (per 1000 sq. ft.) Assumes 1-inch per day (typical)	600

Type of Establishment	Water Used (gpd)
Laundry, self-serviced (gallons per washing [per customer])	50
Livestock Drinking (per animal):	
Beef, yearlings	20
Brood Sows, nursing	6
Cattle or Steers	12
Dairy	20
Dry Cows or Heifers	15
Goat or Sheep	2
Hogs/Swine	4
Horse or Mules	12
Livestock Facilities	
Dairy Sanitation (milk room)	500
Floor Flushing (per 100 sq. ft.)	10
Sanitary Hog Wallow	100
Motel:	
Bath, toilet, and kitchen facilities (per bed space)	50
Bed and toilet (per bed space)	40
Park:	
Overnight, flush toilets (per camper)	25
Trailer, individual bath units, no sewer connection (per trailer)	25
Trailer, individual baths, connected to sewer (per person)	50
Picnic:	
Bathhouses, showers, and flush toilets (per picnicker)	20
Toilet facilities only (gallons per picnicker)	10
Poultry (per 100 birds):	
Chicken	5 - 10
Ducks	22
Turkeys	10 - 25
Restaurant:	
Toilet facilities (per patron)	7 - 10
No toilet facilities (per patron)	2-1/2 - 3
Bar and cocktail lounge (additional quantity per patron)	2
Service station (per vehicle)	10

Type of Establishment	Water Used (gpd)
School:	
Boarding (per pupil)	75 - 100
Day, cafeteria, gymnasiums, and showers (per pupil)	25
Day, cafeteria, no gymnasiums or showers (per pupil)	20
Day, no cafeteria, gymnasiums or showers (per pupil)	15
Store (per toilet room)	400
Swimming pool (per swimmer)	10
Maintenance (per 100 sq. ft.)	
Theater:	
Drive-in (per car space)	5
Movie (per auditorium seat)	5
Worker:	
Construction (per person per shift)	50
Day (school or offices per person per shift)	15

Source: Adapted from Design and Construction of Small Water Systems: A Guide for Managers, American Water Works Association, 1984, and Planning for an Individual Water System. American Association for Vocational Instructional Materials, 1982.

Section 2.2 Well Proving Requirements: Low Density Private Wells

This material shall apply to all individual residential wells, including private wells in subdivisions where there are less than fifteen (15) lots, or where the lot size is greater than ten (10) acres. Approval of subdivisions will not require wells to be drilled in advance; however a use and occupancy (U & O) permit will not be issued until the well has been approved by the County Health Department and has been shown to meet the requirements of this section of the ordinance.

Section 2.2.1 Pumping Test Requirements

1. Prior to the test, the well must be fully developed.
2. Physical or chemical alteration of geologic materials or structures (e.g., hydraulic fracturing, use of explosives, or addition of chemicals) to increase yield will not be permitted.
3. The air-lift test may be conducted whenever water from precipitation is not flowing over the ground surface. A three (3) week delay in testing will be enforced whenever two inches (2") of rain have been recorded within a ten (10) day period in the location of the well to be tested.

4. Upon the cessation of pumping, the water level shall be measured after every fifteen (15) minutes for the first hour, and then every two (2) hours until ninety percent (90%) of the pre-test static water level is achieved (full recovery). If the well does not fully recover to within ninety percent (90%) of the pre-test static water level after twenty-four (24) hours it will be considered a non-sustainable source of water.
5. In addition if an individual well does not meet the minimum >3 gpm yield requirement as specified in part A of this Section, then the water supply system (i.e. borehole + storage/pressure tank) must provide a reservoir of 360 gallons (equivalent to the regional MDD). In addition, the well must be capable of supplying enough water to refill the reservoir within a 24-hour period.

Section 2.2.2 Reporting Requirements

No extraordinary reports will be required for the approval of individual wells other than the completion logs and forms necessary for permitting. Reporting forms shall be obtained from the Berkeley County Engineering Department.

Section 2.3 High Density Individual Wells, Small (< 50 Gpm) Nonresidential Wells, and Small (<50 Gpm) Community Wells

This material shall apply to all individual residential wells in subdivisions where there are fifteen (15) or more (regardless of lot size) and non-residential or community wells rated at less than 50 gpm yield.

Section 2.3.1 Hydrogeological Study

A hydrogeologic report for subdivisions will examine the local hydrogeologic conditions and the relationship between the proposed land use and those conditions. The analysis and report will focus on the groundwater quantity and quality as they relate to the requirements of the proposed subdivision and the potential impacts the subdivision may have on the water resources. A hydrogeologic report shall be required prior to a preliminary subdivision submission regardless of whether it is planned for individual or community wells.

At a minimum, evaluation shall encompass the area within approximately one thousand foot (1,000') radius from each and all proposed well(s). Such evaluation shall include the following:

1. USGS and Berkeley County geologic and topographic information including USGS fracture trace data.
2. Property plats and aerial photographs.

3. Existing Berkeley County Health Department well data or descriptive statistical summary of the same. (e.g. minimum, maximum and mean of well data, etc.)
4. Geologic maps and data reports (well logs, water quality analysis, geologic information).
5. Proposed pumping test plan (Note - this shall only apply if the subdivision's water will be provided by single or multiple community wells).

Using the background information compiled previously, conduct an evaluation of the site hydrogeology and the occurrence, quality, and quantity of groundwater. The quantity must meet the conditions of part A of this Section and quality must conform to requirements of West Virginia Department of Health. These data and conclusions shall be compiled into a hydrogeological report.

Section 2.3.2 Pumping Test Requirements

(Applies to community wells **ONLY**; Individual wells shall be exempt from this requirement)

Wells shall be installed and tested to provide evidence that the hydrogeologic system is capable of furnishing and sustaining the potable water needs of the eventual inhabitants of the proposed development as follows:

(Applies to both residential and non-residential wells)

1. Prior to the test, the well must be fully developed. Preliminary yield estimates should be determined using standard air-lift methods.
2. Physical or chemical alteration of geologic materials or structures (e.g., hydraulic fracturing, use of explosives, or addition of chemicals) to increase yield of test wells will not be permitted prior to the pumping test.
3. The aquifer test may be conducted whenever water from precipitation is not flowing over the ground surface. A three (3) week delay in testing should be enforced whenever two inches (2") of rain have been recorded within a ten (10) day period in the location of the well to be tested. No production from the well will be allowed for twenty-four (24) hours prior to the pumping test.
4. Water pumped from the well shall be discharged at least fifty feet (50') from the well so that it does not enter the ground and "short-circuit" the aquifer. If this cannot be accomplished safely, or the water will be directed onto an adjoining property, then a temporary water storage method (tank) must be provided.
5. The test shall be conducted using a submersible pump, and the discharge will be monitored using a calibrated flowmeter.
6. The pumping rate shall be controlled so as to maintain a constant discharge rate and allow pumping water levels to stabilize at some point in the test.
7. The test shall be at least twenty-four (24) hours in duration at a constant

pumping rate.

8. In the event an accurate totalizing flowmeter cannot be used (e.g. if the flow from the well is less than 3 – 4 gpm) the tester can determine the flow rate by obtaining the time to fill a container of known volume. The number of seconds to fill the container, and the exact time of day each such measurement is taken shall be recorded every hour.
9. Water levels shall be measured every fifteen (15) minutes during the first hour of pumping, and hourly for the next seven (7) hours. All water levels measurements must be recorded with the exact time of day the measurement was taken.
10. Upon the cessation of pumping, the water level shall be measured after every fifteen (15) minutes for the first hour, and then every two (2) hours until ninety percent (90%) of the pre-test static water level is achieved (full recovery). If the well does not fully recover after twenty-four (24) hours it will be considered a non-sustainable source of water.
11. The allowable (or permitted) yield of the well shall be total gallons pumped divided by the duration of the test in minutes, provided that full recovery occurs within the following twenty-four (24) hour recovery period.

Section 2.3.3 Individual Wells

1. Approval of subdivisions with fifteen (15) or more lots will not require wells to be drilled in advance; however a use and occupancy (U & O) permit will not be issued until the well has been approved by the County Health Department and has been shown to meet the requirements of this section of the ordinance.
2. If an individual well does not meet the minimum > three (3) gpm yield requirement as specified in the part A of this Section, then the water supply system (i.e. borehole + storage/pressure tank) must provide a reservoir of three hundred and sixty (360) gallons (equivalent to the regional MDD). In addition, the well must be capable of supplying enough water to refill the reservoir within a twenty-four (24) hour period.

Section 2.3.4 Sustainable Yield Evaluation

(Individual wells shall be exempt from this requirement).

Data analysis shall include an analysis of sustainable yield of the aquifer and well based upon the following:

- Extrapolation of drawdown to one hundred and eighty (180) days.
- Significant adverse impacts (quality or quantity) on neighboring wells and springs.

Section 2.3.5 Reporting Requirements

The principal reporting requirement shall be:

1. The hydrogeologic report, and
2. The pumping test report, which must be made available prior to preliminary plat approval. (Individual wells are exempt from this requirement).

Section 2.4 Well Proving Requirements: Community Wells and High Production Non-Residential Wells (>50 gpm)

This section shall apply to community wells and non-residential wells rated at yields of greater than fifty (50) gpm. This yield shall be either based on single wells, or the cumulative yield of a production well field, where the wells are all within the same aquifer or hydrologic unit.

NOTE: Before starting construction, a location map of the proposed new wells and any related construction shall be submitted to the WVDEP in the appropriate Regional office for a determination as to whether that construction requires any other permits, such as for disturbance of protected streams or springs, protected freshwater wetlands, or for storm water runoff from a construction site. Other factors to consider when siting a project include flood plain location, agricultural districts, conceptual wellhead protection/recharge areas, existing or potential groundwater contamination sources, and existing sub-surface utility corridors (whose bedding might provide a preferential path for groundwater flow or contamination).

Section 2.4.1 Hydrogeological Study

A hydrogeologic report/water supply assessment for subdivisions will examine the local hydrogeologic conditions and the relationship between the proposed land use and those conditions. The testing will focus on the groundwater quantity and quality as they relate to the requirements of the proposed subdivision and the potential impacts the subdivision may have on the water resources. A hydrogeologic report shall be required prior to a preliminary subdivision submission.

At a minimum, evaluation shall encompass the area within an approximate ¼-mile radius from each proposed well. Such evaluation shall include the following:

1. USGS and Berkeley County geologic and topographic information, including fracture trace analysis data available from the USGS.
2. Property plats and aerial photographs.
3. Existing Berkeley County Health Department well data or descriptive statistical summary of the same. (e.g. minimum, maximum and mean of well data, etc.)
4. Geologic maps and data reports (well logs, water quality analysis, geologic

information including karst features, bedrock outcrops, etc.).

5. At sites with bedrock outcrops, fracture orientations (strike and dip measurements) shall be measured and documented in the report. The number and orientations of linear features or photo lineaments shall be analyzed and correlated with documented bedrock fractures.
6. A proposed pumping test plan.

Using the background information compiled previously, conduct an evaluation of the site hydrogeology and the occurrence, quality, and quantity of groundwater. These data and conclusions shall be compiled into a hydrogeological report.

Section 2.4.2 Pumping Test Requirements

Wells shall be installed and tested to provide evidence that the hydrogeologic system is capable of furnishing and sustaining the potable water needs of the eventual inhabitants of the proposed development. Well construction and testing shall be performed in accordance with the West Virginia Department of Health and the Berkeley County Health Department.

Prior to the commencement of any drilling or pumping tests, a pump test plan will be required to obtain preliminary approval for well development. The pump test plan should contain location, construction, and purpose of at least two (2) or more monitoring wells. It shall also include the planned pumping rate, duration, and frequency of monitoring. A minimum test shall include:

1. Test Pumping Rate - The pump test must be performed at or above the pumping rate for which approval will be sought in the water supply application. If multiple wells are to be pumped simultaneously to achieve the necessary yield, the test shall incorporate such a pumping plan. To reproduce the anticipated stress on the aquifer, the pump test shall be done when any nearby wells normally in operation are running. Pumping of other wells in the test area shall be monitored.

A constant pumping rate should be maintained throughout the test. The pumping rate should be measured accurately and recorded at least as often as water level measurements (see No. 5 of this section, Measuring Schedule).

During the first hour of the test, any failure to pump within ten percent (10%) of the test pump rate for any reason will require termination of the test, recovery of water levels to static, and a restart of the test. Later pump failures must have no significant effect on the data or a similar termination and restart is necessary.

2. Length of Test - Regardless of the type of aquifer, pump tests shall be conducted for a minimum of seventy-two (72) hours at a constant pumping rate.

(a) A minimum of six (6) hours of stabilized drawdown must be displayed at

the end of the test. Stabilized drawdown is defined herein as a water level that has not fluctuated by more than plus or minus 0.5 foot for each one hundred feet (100') of water in the well (i.e., static water level to bottom of well) over at least a six (6) hour period of constant pumping flow rate. The plotted measurements shall not show a trend of decreasing water level.

(b) If stabilized drawdown is not achievable, the test period may be extended or semi-log extrapolation of drawdown versus time (or other similar methods) may be employed to demonstrate the ability of the aquifer to supply a pumping rate equal to the desired yield (which must be equal to or less than the pump test yield) on a long term basis. Normally, an extrapolation of six (6) months of pumping with no assumed recharge must be compared against the level of water remaining above the pump intake at the end of the period (see paragraph No. 12 of this section, Analysis of Pump Test Data). This type of evaluation may be used in lieu of satisfying the objectives of section 2(a) of this document at the discretion of the County Engineer.

(c) Excessive rainfall may require extension of the test or a rescheduling of the test.

3. Pre-Test Conditions - No pumping should be conducted at or near the test site for at least 24 hours prior to the test (including the step-drawdown test). Static water levels at the pumping well and observation wells should be measured at least daily for one (1) week prior to the start of the test and again immediately prior to the start of the test. If on site or nearby pumping cannot be curtailed due to system supply needs or other factors, the County Engineer should be consulted prior to the start of the test.

4. Discharge of Water - Water discharged during the pump test should be conducted away from the pumping well to a nearby stream or surface water body if possible, or as far from the well as is practicable.

5. Measuring Schedule - Water levels in observation wells and at the pumping well should be measured to give at least ten (10) observations of drawdown within each log cycle of time, beginning one (1) minute after the start of pumping. A suggested schedule of measurements at all wells is as follows.

Table E-2

Time intervals for water level measurements	
Time After Pumping Started	Time Intervals
0 to 15 minutes	1 minute
15 to 50 minutes	5 minutes

50 to 100 minutes	10 minutes
100 to 500 minutes	30 minutes
500 to 1000 minutes	1 hour
1000 to 5000 minutes	4 hours

6. Observation Wells - At least two (2) observation wells or piezometers should be monitored during the pump test. The observation wells should be placed so as to best define the hydrogeologic characteristics of the aquifer with respect to the pumping well. In some cases the Engineering Department may recommend that a representative sample of nearby homeowner wells be monitored during the pump test, regardless of whether the anticipated zone of influence will extend to those wells or not. Existing wells may be used as observation wells.

Water levels in nearby water bodies (streams and springs) should be measured prior to and during the test.

7. Recovery Period - Water level measurements should be collected during the recovery period for all wells using the same procedure and time pattern followed at the beginning of the pump test (see No. 6.) Measurement should commence at least one (1) minute prior to shutdown of the pumping well and continue for at least twelve (12) hours. Water level measurements should be made to the nearest 0.01 foot. To obtain accurate data during the recovery period, a check valve must be installed at the base of the pump column pipe in the pumping well to eliminate backflow of water into the well. Water level measurements should also be collected during the recovery period in all off-site monitoring wells, such as homeowner's private wells.

8. Rainfall Measurement - Rainfall should be measured to the nearest 0.01 inch and recorded daily at or near the site for one (1) week preceding the pump test, during the test, and during the recovery period. A log of weather conditions during this period should also be kept, including barometric pressure recorded on the same schedule as rainfall. Weather station data available from within a reasonable distance of the test site can be utilized.

9. Surface Water Measurements - Fluctuations in surface water stages (or flow) for all surface waters within one thousand feet (1000') of the pumping well should be measured to the nearest 0.01 foot. Measurements should be made using, as appropriate: weirs, staff gages (with stilling wells as necessary), nested piezometers, etc. The horizontal distance between each observation point and the pumping well should be measured to the nearest 0.1 foot. The vertical elevation of a fixed reference point on each observation point should be established to the nearest 0.01 foot and reported in North American Datum 1983 (NAD 1983). Measurements should be read and recorded at least once daily for one (1) week prior to the start of the test and at least twice per log cycle, after the first ten (10) minutes, for the duration of the test.

Measurements should be made more frequently if surface water levels are changing rapidly. The degree and nature of hydraulic connection with the surface water body should be quantified.

10. Water Quality Samples - Comprehensive (per WV DHHR requirements) water samples should be obtained from the pumping well during the last hour of pumping. Samples should be analyzed to establish acceptable quality as per WV DHHR requirements.

11. Wells Under the Influence of Surface Water - Additionally, If the pumping well is, or may be, hydraulically connected to a surface water body, water samples from the well should be analyzed in the field at least once every four (4) hours for the following parameters: pH, temperature, conductivity, and hardness. Further, representative water samples from the surface water body should be taken at both the beginning and the end of the pump test and analyzed for the same parameters. The WV DHHR should be consulted on all issues related to groundwater under the influence of surface water.

12. Analysis of Pump Test Data - In order to accurately analyze pump test data, it is necessary to use the methods and formulae appropriate for the hydrogeologic and test conditions encountered at, and specific to, the pump test site. Knowledge of the hydrogeologic conditions of the area is necessary in order to ensure the use of appropriate techniques of analysis. Accordingly, analysis of pump test data should be carried out by a hydrogeologist, professional engineer or geologist with hydrogeologic training, or another appropriately trained evaluator.

(a) Data Corrections - Water level data, graphs, and interpretations should be corrected, as appropriate or deemed significant, for the effects of: ambient water level trends; partially penetrating production well(s); partially penetrating observation wells; delayed yield from unconsolidated aquifers; aquifer thickness, recharge and/or impermeable boundaries; barometric pressure changes; changes in stage in nearby surface water bodies (including springs); recharge events (rainfall, snow melt) during the week preceding the test, during the test, or during the recovery period; influence from nearby pumping wells; and any other hydrogeologic influences. All such data and calculations should be included in the test information package.

(b) Theoretical time-drawdown graphs should be prepared from the recorded drawdown graphs. The graphs should be derived from the pump test data, setting time equal to one hundred eighty (180) days and groundwater withdrawal equal to the pump test production rate. Based on these graphs and the remaining standing water in the well at the end of the pump test, a maximum safe pumping rate (yield) should be established for each production well or for the well field if simultaneous pumping of multiple production wells is planned (taking into account well interference).

(c) Theoretical distance-drawdown graphs should be prepared. The graphs should be derived from the pump test data, setting time equal to one hundred eighty (180) days and groundwater withdrawal equal to the pump test production rate. It is highly recommended that the following wellhead protection areas be delineated using all available information (e.g., published hydrogeologic information, local knowledge, pump test results, etc.) and best professional judgment: zone-of contribution area or recharge areas (for confined or bedrock aquifers), and aquifer boundary area.

(d) Recovery data should be analyzed in a similar manner to drawdown data.

13. Submission of Data - Data submitted in support of a requested groundwater withdrawal should include:

- the raw pump test data (legible) with: date, clock time, elapsed time (minutes), measuring point (top of casing) elevation, static water level, water level measurements, and calculated drawdown [an "Excel" or "Quattro Pro" spreadsheet file may be submitted with this data in place of a written record];
- engineering diagrams showing construction details (e.g. well casing, screen setting and casing stickup, etc.) and depths of pumping wells and observation wells;
- geologic logs (completed well registration reports);
- transmissivity, storage coefficient, and safe yield, as well as all graphs, formulae and calculations used to estimate these values;
- scaled site plan showing water level elevation controls (e.g., top of casing) and grade elevation for all wells, staff gages and other water measuring points, pump test discharge piping and discharge point, the location of nearby surface water bodies, and, if applicable, the one hundred (100) year flood plain and elevation;
- latitude and longitude (in degrees, minutes, seconds, tenths of second), State Plane Coordinates, or Universal Transverse Mercators (UTMs) for all production wells and any observation wells which are to remain, preferably in NAD83 (specify the method and datum used to locate the wells);
- a topographic map showing wellhead protection areas and the locations of existing or potential groundwater contamination threats; and
- Interpretations including methodology, geologic sections of the area, references, and rationale.

All documentation submitted must be legible. Plans and maps should use shading, cross-hatch patterns, symbology, etc., such that features are readily distinguishable and remain readable when photocopied in black and white.

14. Discharge of Water - Please note it is not legal in the State of West Virginia to discharge water into any water body or wetland if such discharge results in turbidity or erosion leading to turbidity or down stream flooding. Accordingly, if it is anticipated that discharged water will create flooding, erosion and/or turbidity, water must be directed

to a holding area and released in a controlled manner to prevent such problems.

Section 2.4.3 Sustainable Yield Evaluation

Data analysis shall include an analysis of sustainable yield of the aquifer and well based upon the following:

- Recharge to the site under normal and drought conditions.
- Extrapolation of drawdown to one hundred eighty (180) days without significant recharge.
- Significant adverse impacts (quality or quantity) on neighboring wells and springs.

Section 2.4.4 Delineation of Contributing Areas

The delineation of recharge zones and contributing areas to a community water supply well requires the application of appropriate geologic information and methods to assess ground water flow and the influence of boundary conditions. Unless the aquifer is homogeneous and isotropic and no near-field boundary conditions are present, analytical methods (e.g., Wellhead Protection Areas (WHPA), stagnation point calculations) will not provide realistic results. For most semi-confined, fractured bedrock wells, surface water bodies provide positive (recharge) boundaries, and the edges of the water-bearing unit provide negative (barrier) boundaries. These conditions influence the contributing area significantly, and cannot be adequately simulated by common analytical methods.

A Certified Geologist or Hydrogeologist who is familiar with the conditions at the well site shall perform the delineation. The goal of wellhead delineation is to provide the public water supplier with an area that is most likely to provide recharge to the well. This area must be reasonably sized, and appropriate to the anticipated yield of the well.

Section 2.4.5 Reporting Requirements

The principal reporting requirement shall be:

1. The hydrogeologic report, and
2. The pumping test report, which must be made available prior to preliminary plat approval.

Subdivision and Land Use Regulations to become effective January 30, 2025.

Adopted this 30th of January 2025.

Attested:


G. Edgar Gochenour, President


R. Stephen Catlett, Vice President


James P. Whitacre, Commissioner


H. D. Boyd, Commissioner


John Hardy, Commissioner


Anthony J. Petrucci, County Clerk

