CHAPTER 9.09

DESIGN AND IMPROVEMENTS

SECTIONS:

9.09.010 GENERAL PROVISIONS.

(a) All subdivisions and short subdivisions shall comply with the following standards of design and improvements except as noted elsewhere in this title.

(b) The design of plats shall conform to the requirements of all applicable county plans and standards, and any official control relating to land use which has been adopted to implement the Benton County Comprehensive Plan. In addition:

(1) The design, shape, size, and orientation of the lots should be appropriate for the use for which the divisions are intended, and the character of the area in which they are located.

(2) Block dimensions should reflect due regard to the needs of convenient access, public safety, emergency vehicle

access, topography, road maintenance, and the provision of suitable sites for the land use planned.

(3) Road alignments should be designed with appropriate consideration for existing and planned roads, anticipated traffic patterns, topographic and drainage conditions, public safety, and the proposed use of the land so divided.

(4) Where a lot is platted into lots of one (1) acre or more in size, the Planning Administrator may require an arrangement of the lots and roads, such as to permit a subsequent re-division in conformity with roads or plans adopted by Benton County.

(5) Lots should not be divided by the boundary of any city, county, zoning designation, public right-of-way, or drainage easement.

(c) All installation of improvements required in connection with the approval of a plat, including those serving a subdivision but located outside the subdivision, shall be installed in conformance with all applicable ordinances, codes and policies adopted by Benton County.

(d) Private Road Easements.

(1) Short Subdivision: New private road easements are permissible to meet the access requirements for a new short subdivision subject to the requirements in BCC 9.09.020.

(2) Subdivisions: New private road easements are not permissible to meet the access requirements for a new subdivision.

[Ord. 612 (2018) § 57]

9.09.020 SHORT SUBDIVISION-PRIVATE ACCESS EASEMENT REQUIREMENTS.

(a) All lots in a short subdivision must have a means of legal access to a city street, county road or state highway. In those

cases where the lots are served by private access easement, the access shall be labeled on the plat map as "Private Road Easement," and a statement placed on the plat that construction and maintenance responsibility for the easement is not Benton County's. If the private road easement extends to land outside the boundaries of the short plat, recording details and parcels served outside the short plat shall be shown.

(b) Except as set forth in BCC 9.09.020(d), private access easements are permissible to meet the access requirements for a new short subdivision imposed by BCC 9.09.020(a); provided, the width of such easement shall be at least forty (40) feet.

(c) Private access easements may be combined with utility easements, but not irrigation easements.

(d) A private access easement does not constitute adequate means of ingress and egress for the proposed lots if approval of the short plat would result in one private access easement serving more than twelve (12) lots. In such instances, access must be by a dedicated and constructed public road with widths and standards as required by the County Engineer.

(e) Private access easements are not built, improved, or maintained by Benton County, and the enforcement of all easement rights are the responsibility of the holder(s) of such rights and not Benton County.

(f) Road encroachment permits for all proposed private access easements abutting a county maintained public road shall be obtained prior to final short plat approval. When adjacent to a public road, the approach shall be shown on the final short plat.

(g) All dead-end private access easements shall be designed to include provisions for emergency vehicle turnarounds in accordance with standards established by the Benton County Code.

(h) Cul-de-sacs and other dead-end streets, roads, or access easements will be permitted where topography or other conditions justify their use. Cul-de-sacs and other dead-end streets, roads,

or access easements shall be limited to six hundred (600) feet in length unless a longer length is approved in writing by the Fire Marshal. Cul-de-sacs and other dead-end streets, roads, or access easements exceeding two hundred (200) feet shall end with a turn-around approved by the Benton County Fire Marshal. The turnaround shall be designed so that a pumper fire truck has to make no more than one back-up motion in order to reverse its direction. [Ord. 612 (2018) § 58]

9.09.030 DESIGN AND CONSTRUCTION STANDARDS-GENERAL LAYOUT DESIGN STANDARDS.

(a) Location and alignment of all proposed streets within a short subdivision or subdivision shall conform to any corresponding provisions in the County Comprehensive Plan and shall be compatible with existing and planned streets, topographical conditions, public convenience and safety, and the proposed uses of the land to be served by such streets.

(b) Where future alignment of roads is not shown in the County Comprehensive Plan, the alignment of roads in a subdivision shall:

(1) Be designed with appropriate consideration, as determined by the County Engineer, for existing and projected roads, anticipated traffic volumes and patterns, topographic and drainage conditions, public convenience, public safety, and the proposed uses of the land served; and

(2) Conform to all other standards set by the County Engineer.

(c) Proposed streets shall continue as extensions of existing streets unless good site planning dictates a different solution. Street patterns shall take into consideration access needed to develop adjacent properties presently unsubdivided. Sketches of a proposed street system for adjoining properties may be required if owned by the subdivider or if the arrangement of the large tracts makes it necessary to provide future access through the property under consideration.

(d) Local access streets shall be planned so as to discourage through traffic and to conveniently channel traffic onto collector streets and arterial roads.

(e) When a tract is subdivided into larger than normal lots or parcels, such parcels shall be so arranged as to permit the logical resubdivision and opening of future streets with provision for adequate utility connections for such resubdivisions.

(f) When dead end streets are created by the development of a portion of a larger plat because of the desirability of continuing a street into a presently unplatted parcel a temporary turnaround shall be provided unless the length of the dead end street, as measured from the center of the nearest intersection, is 100 feet or less or the County Engineer recommends against the provision of such a turnaround. If such turnaround includes private property the right of way for the turnaround shall be protected by an easement that shall remain in force until such time as the street is extended and the need for the turnaround has ceased to exist. Private driveways shall not be permitted to be used as a turnaround. All temporary turn arounds shall be surfaced in the same manner as the adjacent plat roads and the size and configuration of such turn arounds shall be approved by the County Engineer.

(g) Dead end streets created by the development of a parcel that are not planned to be extended in the future shall be terminated with a cul-de-sac regardless of their length. No dead end street exceeding 600 feet, as measured from the center of the nearest intersection to the center of the cul-de-sac shall be permitted. Cul-de-sacs shall be designed and constructed in accordance with the standards on file at the office of the County Engineer.

(h) Street names shall be assigned to conform with existing streets on the same or similar alignment. New street names shall not be so similar to existing street names as may cause confusion.

(i) Streets shall be laid out so as to intersect as nearly as possible to right angles, EXCEPT where topography or other

conditions justify variations. The minimum angles of intersection of streets shall be seventy-five (75) degrees.

(j) Intersections on arterial and collector roads shall be spaced not less than 300 feet apart measured centerline to centerline. Intersections on local access roads shall be spaced not less than 200 feet apart measured centerline to centerline.

(k) Driveways on arterial and collector streets shall be spaced at not less than 300 feet measured centerline to centerline. Where the Developers property frontage does not permit such spacing the County Engineer may fix driveway locations to allow for a lesser spacing.

(l) Site distance calculations shall be done utilizing the WSDOT Design Manual for all intersections and driveways within the project. Dedication of additional right of way may be required to encompass clear vision triangles. Use the following guidelines for determining required site distances:

(1) For residential driveways and residential private roads use design vehicle P.

(2) For commercial driveways and commercial private roads use design vehicle (SU-30 & CITY-BUS).

(3) For all roadway intersections within the urban growth area use design vehicle (SU-30 & CITY-BUS).

(4) For all roadway intersections in the rural area use deign vehicle (WB-40 & WB-67). On a case by case basis the County Engineer may permit a lower design vehicle in the rural area when the nature of the approaching road is determined to be primarily residential.

(m) Wherever the proposed land division contains or is adjacent to a railroad right-of-way or the right-of-way of a limited access highway, freeway, or primary arterial, provision may be required for a marginal or frontal access street at a distance appropriate to the proposed use of land between the right-of-way and the

marginal access street. Such distance shall be determined with due consideration to future grade separations and for required lot depths.

(n) Corner lots in residential areas shall be ten (10) percent wider than minimum lot widths to allow for adequate setback of a building from both streets.

(o) Side lines of lots shall be approximately at right angles to the street in front or radial to curved street lines.

(p) Lots with double frontage shall be avoided wherever possible.

(q) All lots shall front on a dedicated street other than an alley.

(r) In developments where individual sewage disposal systems are to be used, the size of the lots shall be subject to the approval of the Benton-Franklin Health District.

(s) Drainage easements for storm sewers or open channel ditches may be required where it is not feasible to carry storm drainage under the streets or rights-of-way. Open channel easements may be required where there is evidence of a present or future natural drainage pattern which may carry water at such time as the general water table of the area is raised, or increased runoff will result from altered land use. Drainage easements shall be placed adjoining or straddling property boundary lines. The developer may be required to alter the grading of the proposed development in order to direct the drainage pattern to the established easements.

(t) Where the roadway is at a higher elevation than the adjacent terrain the Developer shall be required to show how runoff from the roadway impacts the adjacent land in relation to ponding or pass through of stormwater.

(u) Storm water analysis and facility design shall be based on the Stormwater Management Manual for Eastern Washington. The design storm for all calculations shall be the SCS Type IA storm with a 25 year return period. The Developer shall, at a minimum,

retain the difference between the pre-developed condition storm water runoff volume and the post developed condition storm water runoff volume within the project boundary. Impervious surfaces that are not infiltrated on-site shall be limited to no more than 10% in rural areas.

(v) Infiltration rates for untested soils shall be fixed at 2 inches/hour. If the developer wishes to utilize a different infiltration rate they shall be required to provide certified infiltration test results from a licensed professional engineer qualified to perform such tests.

(w) Roadside ditches and drainage facilities shall be capable of storing and infiltrating all runoff from the required design storm without overtopping. Particular attention must be paid to low points in roadways to ensure adequate stormwater retention is provided. Roadside ditches in excess of a 2% gradient shall not be considered to store any runoff except at locations where a barrier causes the water to pool (e.g. driveway crossing with no culvert). Check dams will only be permitted in the ditch with express approval of the County Engineer.

(x) Connection to an approved public water supply and/or an approved public sewer system may be required if deemed to be in the best interest of the public and/or the future residents of the subdivision.

(y) Irrigation distribution facilities shall be provided as required under RCW 58.17.310 as now existing or hereafter amended, as directed by the applicable irrigation district.

(z) Maximum profile gradient for rural roadways of all classes is 7.0%. Maximum profile gradient for urban roadways of all classes is 10.0%. All roadways shall have a minimum profile gradient of 0.5%.

(aa) Horizontal and vertical alignments shall be based on the requirements set forth in the Washington State Department of

Transportation Design Manual in order to provide stopping sight distance. The County Engineer shall determine the design speed for each roadway to be used in alignment design.

(bb) All fore slopes and back slopes of a height greater than 12 inches shall be within the County right of way. Additional right of way and/or slope easements may be required to encompass the slope areas.

(cc) All subdivision plats with an average lot size of less than one (1) gross acre in size and more than sixteen (16) proposed dwelling units must include a second public road for access if otherwise served by a single public road over six hundred (600) feet in length.

(dd) All subdivision plats containing more than fifty (50) lots shall have a second access via a public road.
[Ord. 612 (2018) § 59]

9.09.040 ROAD DESIGN AND CONSTRUCTION.

(a) Required Improvements - Before the final plat or final short plat is recorded, all streets and other public rights-of-way shall be improved in accordance with minimum road requirements as set forth hereinafter, or if improvements are greater than the minimum requirements herein set forth, then as approved by the County Engineer; or in lieu thereof, a bond must be provided for the full amount of the cost of such work as estimated and/or approved by the County Engineer, including construction inspection costs, but in no case less than one thousand (1,000) dollars. Said bond shall be for a period of not less than two (2) years and shall guarantee that all construction inspection costs be paid and all streets and other public rights-of-way shall be improved within a period of one (1) year in accordance with the approved plans. If, after one (1) year, and total costs are not paid and/or all streets are not so improved, Benton County may cause such streets to be improved in accordance with the approved plans, and the cost thereof, including inspection costs shall be paid by the bonding company. The bond shall be approved by the County Engineer. If the road improvements are bonded, no building permits shall be issued for

lots within the final plat or final short plat until the roads are constructed to at least subgrade standards.

(b) All design and/or construction of plat streets shall be performed in accordance with standards, specifications and policies adopted by the Board of County Commissioners and on file in the office of the Benton County Engineer.
[Ord. 612 (2018) § 60]

9.09.050 UTILITY DESIGN AND CONSTRUCTION.

(a) Required Improvements - Before the final plat or final short plat is recorded, all proposed utilities shall be installed in accordance with the minimum utility requirements as set forth hereinafter, or if improvements are greater than the minimum requirements herein set forth, then as approved by the County Engineer and utility provider; or in lieu thereof, a bond must be provided for the full amount of the cost of such work as estimated and/or approved by the County Engineer, including construction inspection costs, but in no case less than one thousand ($1,000) dollars. Said bond shall be for a period of not less than two (2) years and shall guarantee that all construction inspection costs be paid and all proposed utilities shall be improved within a period of one (1) year in accordance with the approved plans. If, after one (1) year and total costs are not paid and/or all utilities are not so improved, Benton County may cause such utilities to be improved in accordance with the approved plans, and the cost thereof, including inspection costs, shall be paid by the bonding company. The bond shall be approved by the County Engineer.

(b) All utility design and construction pertaining to subdivisions shall be performed in accordance with the standards, specifications and policies adopted by the Board of County Commissioners and on file in the office of the Benton County Engineer.

(1) Office of the Benton County Engineer - Guidelines for Road and Utility Planning and Construction for Subdivisions, December 3, 1973, as amended.

(2) Other standards as set by the County Engineer and adopted by the Board of County Commissioners.

[Ord. 612 (2018) § 61]

9.09.060 MONUMENTS.

(a) Concrete or iron pipe monuments approved by the County Engineer shall be set at the intersection of the centerlines of all streets; all angle points of street centerlines; all points of curvature and points of tangents in street centerlines at the radial point on cul-de-sacs; and all external corners of the subdivisions.

(b) The corners of all lots within the subdivision shall be marked by a 1" minimum diameter iron pipe or 5/8" minimum diameter iron pin thirty (30) inches in length firmly driven into the ground to a depth of at least twenty-four (24) inches.

[Ord. 612 (2018) § 62]

9.09.070 SEVERABILITY. If any provision of this chapter is declared unconstitutional, or the applicability thereof to any person or circumstance is held invalid, the constitutionality of the remainder of the chapter and the applicability thereof to other persons and circumstances shall not be affected thereby.

[Ord. 612 (2018) § 84]

9.09.080 EFFECTIVE DATE. This chapter shall take effect and be in full force upon its passage and adoption.

[Ord. 612 (2018) § 85]