

## **XI. GENERAL DESIGN AND IMPROVEMENT STANDARDS**

### **A. Introduction**

The general design and improvement standards listed below are intended to help protect the health, safety, and general welfare of Lewis and Clark County residents, conserve natural resources, and comply with applicable state statutes.

All subdivisions must be designed and developed by the Applicant to provide satisfactory building sites that properly relate to topography and must avoid or mitigate any significant adverse impacts on:

- agriculture, agricultural water users, or agricultural water;
- local services and provision of local services;
- natural environment;
- wildlife and habitat; and
- public health safety and general welfare.

All subdivisions approved by the governing body shall comply with the provisions of this chapter, except where granted a variance pursuant to Chapter II, section B. Certain types of subdivisions may have additional or alternative development standards set forth in these regulations. For procedures for subdivisions created by rent, lease, or other conveyance refer to Chapter VI. For planned unit developments refer to Chapter IX., and for condominiums and townhouses refer to Chapter X.

### **B. Conformance**

The design and development of a subdivision shall be consistent with any applicable adopted land use controls, existing covenants, zoning ordinances, health department requirements, and other applicable, adopted resolutions, and regulations. Where no zoning regulations are in effect, maximum density and minimum lot size shall be established by the subdivider in consultation with local and state health authorities and the County Planning Department.

### **C. Lands Unsuitable for Development or Requiring Mitigation**

The governing body may find land to be unsuitable for subdivision because of natural or human caused hazards identified during the subdivision review process. These lands must not be subdivided for building or residential purposes unless the hazards are eliminated, or will be overcome by approved design and construction techniques.

1. Examples of hazards that could render property unsuitable for subdivision or require mitigation include (but are not limited to) the following:
  - a. Earthquake fault zones;
  - b. Irrigation ditches and canals;
  - c. Steep slopes and/or areas prone to rock falls, land slides, or avalanches;
  - d. Radon/radiation;
  - e. Mine tailings, contaminated soils, toxic waste, etc.;
  - f. Flooding;
  - g. High water table, as defined by the Sanitation in Subdivision Act;
  - h. Polluted or non-potable water supplies;
  - i. High voltage power lines;
  - j. High pressure gas lines;
  - k. Air or vehicular traffic hazards or congestion; and/or
  - l. High-risk fire areas (see fire standards).
  
2. In addition to specific hazards, there may be cases where a subdivision proposal has potential to place unreasonable burdens on the general public because of environmental degradation, critical fish and wildlife habitat, vegetation listed as rare or threatened, or other factors that may require an excessive expenditure of public funds. In other cases, a proposal may, for a variety of reasons, be detrimental to the health, safety, or general welfare of existing or future residents. In these cases, the governing body has the authority to deny a subdivision request, based on its analysis of impacts, and the inability to adequately mitigate the impacts.
  
3. In cases where a subdivision is proposed in areas where mining has historically occurred, the applicant must contact the Department of Environmental Quality (DEQ) for a file search of their records, to help determine the extent, nature, and impacts of the mining. The DEQ response to the file search request must be included as part of the preliminary plat application. Other related requirements are as follows:
  - a. Unless specifically allowed by the DEQ (and documented through a letter), construction on top of reclaimed lands in which waste materials have been buried and capped is prohibited. In some cases, such areas could potentially be used as open space providing the mine waste repository cap is not disturbed.

- b. If the subdivision is located in areas where there are safety and/or subsidence issues associated with tunnels or mine shafts, the applicant must indicate the location and demonstrate how the potential adverse impacts of these features can be mitigated.
    - c. If mining waste or other potentially hazardous materials are present or believed to occur on the property, the applicant must demonstrate how the potential hazard can be mitigated to protect human health and safety.
  4. Where a subdivision is proposed next to an irrigation ditch or canal, the developer may be required to install fencing between the affected property and the ditch in order to protect children, depending on the hazard posed by the ditch. The fence must be built outside the boundary of the ditch easement, and must not cross the ditch. The property owner(s) or homeowners' association will be responsible for maintaining the fence in good condition.
  5. Building sites shall be prohibited on slopes greater than thirty percent (30) and at the apex of "fire chimneys" (topographic features, usually drainage ways or swales, which tend to funnel or otherwise concentrate fire toward the top of steep slopes), head of draws designated high fire hazard areas, or severe fire hazard areas. The governing body may require a minimum lot size and building envelopes for development in areas of steep slopes greater than thirty (30) percent.

## **D. Floodplain Provisions**

1. Land located in the floodway of a flood of 100 year frequency as defined by Title 76, Chapter 5, MCA as delineated by the Montana Department of Natural Resources and Conservation, or land deemed subject to flooding as determined by the floodplain administrator shall not be subdivided for building or residential purposes, or other uses that may increase or aggravate flood hazards to life, health, or property. All subdivision proposals shall be submitted to the county floodplain administrator for review.
2. All land shall not be subdivided for building or residential purposes, or be subject to other uses that may increase or aggravate flood hazards to life, health, welfare, or property, if any of the following are in effect:
  - a. The land is located in the floodway of a 100-year frequency flood event or in the designated 100-year floodplain, as defined by Title 76, Chapter 5, MCA, and indicated on

- county-adopted 100-year floodplain/floodway maps.
- b. The land is deemed subject to flooding, as determined by the floodplain administrator.
  - c. The proposal is otherwise prohibited by state or local floodplain or floodway regulations.
3. No new structure shall be located in the 100-year floodplain.
  4. County staff will attempt to make applicants aware of areas where flooding is likely to occur, and provide information on how to deal with such hazards.
  5. If any portion of a proposed subdivision is within 2,000 horizontal feet and less than 20 vertical feet of an intermittent or perennial stream (see Appendix A for definition) draining an area of 15 square miles or more, and no official floodplain or floodway delineation (study) of the stream has been made, the Applicant may be required to provide in detail, the calculated 100-year frequency water surface elevations and/or 100-year floodplain boundaries. This information must be compiled by a licensed professional engineer experienced in the field, and shall comply with the Standards for Flood Hazard Evaluations as contained in Appendix F of these regulations.
  6. The above information (number 5) may be submitted, upon the request of the Governing Body, to the Floodplain Management Section, Water Resources Division, Department of Natural Resources and Conservation (DNRC) for review and concurrence. The DNRC floodplain management section may review any detailed flood study or water surface profile analysis for accuracy when requested by the local Floodplain Administrator, County Sanitarian, County Planner, or County Commissioners. The applicant shall in all cases subsequently submit the information to the County, along with any environmental assessment required for the preliminary plat.
  7. The governing body shall waive the above requirement (number 5) when the applicant contacts the DNRC Water Resources Division, and that agency states in writing that available data indicate that the proposed subdivision is not in a flood hazard area.
  8. The governing body shall require mitigation measures, including but not limited to: minimum ground floor elevation for main floors of residences and prohibition against construction of basements in residences constructed in the 500-year floodplain.

## **E. Improvement Design**

Engineering and survey plans, specifications, and reports required in connection with public improvements and other elements of the subdivision required by the governing body shall be prepared by a registered professional engineer or registered land surveyor (as their respective licensing laws allow), in accordance with the Montana Subdivision and Platting Act and these regulations. Certification of public improvements shall include a statement that the improvements and other elements were constructed to the approved design plans.

## **F. Lots**

1. Each lot shall contain a satisfactory building site that is based on topography and conforms to County Health Department, zoning, and subdivision regulations.
2. No single lot shall be divided by a municipal or county boundary line.
3. No single lot shall be divided by a public street, road, alley, or right-of-way.
4. Each lot shall abut and have legal and physical access to a public street or road. Alleys may not be used to provide the primary means of access to a lot. A subdivision in which only lots or spaces for rent, lease or other conveyance are created for the location of a wireless communication facility or an off-premise sign is not required to meet the design, level of service, or maintenance requirements of Chapter XI.H.
5. Corner lots shall have driveway access to the same street or road as interior lots.
6. Lots shall be designed with sufficient non-buildable easements to provide adequate visibility for traffic safety, as determined by planning staff.
7. No lot shall have an average length greater than three times its average width.
8. Side lot lines shall be at substantially right angles to street or road lines, and radial to curved street or road lines.
9. Through or double frontage lots are prohibited except where necessary to provide separation from arterials or collector streets, or to overcome specific disadvantages of topography or orientation.

10. For parcels that have topographical or environmental constraints (e.g., rolling or hilly terrain, natural drainages, lakeshore, wetland/riparian areas, etc.), the governing body may require the designation of building sites, building envelopes, building setbacks, or building restrictions to avoid conflicts and ensure compatible development.
11. Lots shall have a minimum of 60 feet of continuous frontage onto a county road easement or right-of-way at the location where legal and physical access is to be provided.

## **G. Blocks**

1. Blocks shall be designed to assure traffic safety and ease of traffic control and circulation, to assist in the provision of fire protection, to accommodate the special needs of the use contemplated, and to take advantage of the limitations and opportunities of the topography.
2. Block length shall not be designed, unless otherwise impractical, to be more than 1,600 feet. Blocks in high density subdivisions (five or more dwelling units per acre) shall not exceed 1,200 feet in length. Unless terrain or other factors dictate to the contrary, blocks shall be at least 400 feet in length.
3. Blocks shall be wide enough to allow for two tiers of lots except where essential to provide separation of residential development from traffic arteries or to overcome specific disadvantages of topography and orientation, or unless the governing body approves the design of irregularly shaped blocks indented by cul-de-sacs.
4. Rights-of-way for pedestrian walks (not less than ten feet wide) shall be required where deemed essential to provide circulation or safe access to schools, playgrounds, shopping, transportation and other community facilities.
5. Blocks on the preliminary plat and final plat shall be designated by letter or number in accordance with Appendix B of the County Subdivision Regulations.

## **H. Streets and Roads**

1. Roads located within a subdivision, shall meet appropriate County design specifications in Appendix J. The appropriate road design standard shall be determined through a traffic impact analysis by a

professional engineer registered in the State of Montana (See Appendix B).

2. The arrangement, type, extent, width, grade, and location of all streets shall be assessed in respect to existing and planned streets, topographical conditions, public convenience and safety, and to proposed uses of the land to be served by them.
3. Adjacent and Off-Site Road Improvements:
  - a. Maintaining Level of Service. The level of service (LOS), as defined by the current edition of the Highway Capacity Manual, of all roads, sections of roads, and/or intersections within the subdivision's traffic impact corridor shall not be lowered because of traffic generated by the subdivision.

The applicant shall be required to complete all improvements necessary to ensure that the projected LOS at full build out of the subdivision is at or above the existing LOS at the time of submission of a complete and sufficient application.

At a minimum, a traffic impact corridor includes:

1. adjacent roads that are impacted by the subdivision;
  2. two ingress-egress routes for major and subsequent minor subdivisions and one ingress-egress route for a first minor subdivision to the nearest state or federal highway/road;
  3. off-site roads where projected traffic from the proposed subdivision will account for at least ten (10) percent of the average daily traffic on those roads; and
  4. intersections where projected traffic from the proposed subdivision will account for at least five (5) percent of the traffic volume on any approach leg of the intersection.
- b. Payment for Other Costs Directly Attributable to the Subdivision. When any road or section of road within the traffic impact corridor will not meet or exceed the Lewis and Clark County road standards in Appendix J at the time of full build out of the subdivision, the governing body shall require the subdivider to pay or guarantee payment of the costs of improving the road or section of road so that it meets the standards in Appendix J. The subdivider shall be required to pay or guarantee payment of costs that reflect the expected impacts directly attributable to the subdivision, as described below.

If an engineer, licensed in the State of Montana and working for a firm that is pre-qualified by the County's current Statement of Qualifications process, certifies that all roads within a subdivision's traffic impact corridor will meet or exceed the Lewis and Clark County road standards in Appendix J at full build out of the subdivision, the subdivider shall not be required to contribute to the cost of improving the road or segment of road.

- c. Determining Costs Directly Attributable to the Subdivision. A Preliminary Engineering Report (PER), prepared and certified by an engineer licensed in the State of Montana and working for a firm that is pre-qualified by the County's most recent Statement of Qualifications process, shall provide estimated costs of improvements necessary to make a road meet or exceed the Lewis and Clark County road standards in Appendix J. The PER shall describe the existing and proposed conditions within the traffic impact corridor to the extent necessary so that all components can be quantified and assigned an estimated cost. Estimated costs shall include the following:
1. estimated preliminary and final engineering costs including, but not limited to, design plans and specifications, material testing during construction, inspection and administration;
  2. estimated costs of obtaining and completing necessary permits;
  3. estimated surveying costs;
  4. estimated right-of-way acquisition costs;
  5. estimated utility relocation costs;
  6. estimated costs for geotechnical and miscellaneous design related site testing and laboratory analysis;
  7. estimated costs for road construction/improvements including materials, turning lanes, horizontal alignment and vertical grade adjustments, construction staking, temporary and permanent erosion control, road upgrade stabilization including geotextiles and subbase, sidewalks, curb and gutter, topsoil salvage and replacement, revegetation, weed management, traffic signals, signal timing changes, temporary traffic control, traffic control, approaches, bridges, guardrails, signage and/or pavement markings, approaches, non-motorized facilities, provisions for stormwater drainage, and contingencies to bring the facility into compliance to these regulations; and
  8. estimated costs for any other items necessary to improve the road.

Estimated costs shall not be older than six months at the time of final plat application. The burden of proof for estimated costs is the responsibility of the subdivider. Estimated costs must be prepared and certified by an engineer licensed in the State of Montana and working for a firm that is pre-qualified by the County's most recent Statement of Qualifications process. Estimated costs shall be submitted to the County Public Works Department for review and recommendation. The governing body may, at the subdivider's expense, require a third party, designated by the governing body, to review estimated costs as described in the PER.

With preliminary approval of the subdivision application, the governing body shall determine a percentage of the costs described above by comparing projected average daily traffic (ADT) at full build out of the subdivision with existing ADT, which includes projected ADTs from any preliminary approved and final platted subdivisions within the County. This percentage reflects the expected impacts directly attributable to the subdivision. The percentage of costs shall be calculated for each segment of road(s) impacted using the following formula:

$$\frac{P}{(P + E)} * (100) = I$$

Where:

*P* = Projected ADT

*E* = Existing ADT

*I* = Percentage of Impact

- d. Use of Funds. Upon receipt of funds related to estimated costs, the County shall place funds in an interest bearing reserve account, held and used by the County strictly for the impacted roads or sections of road within the subdivision's traffic impact corridor. The County shall complete the construction or improvement of all impacted roads within the traffic impact corridor in compliance with the Lewis and Clark County road standards when sufficient funds become available.

In the event an RID is subsequently created to make the same improvements that the subdivider has contributed to, under this section, the lots within the subdivision shall be considered to have already contributed to the RID.

4. Whenever physically feasible, all roads shall connect to other roads within the neighborhood or development and connect to existing or projected through streets, as part of an interconnected road network, outside of the development.
5. All streets and roads shall be designed and developed in accordance with the Greater Helena Area Transportation Plan. The developer shall develop arterials and collector roads in accordance with the transportation plan or provide and develop right-of-way for such roads in accordance with these plans.
6. All roads shall be designated as county road easements, and shall be shown and described as such on the final plat.
7. All internal roads and streets within either major or minor subdivisions shall be maintained by creating and properly funding a rural improvement district.

In all subdivisions, property owners shall sign a waiver of right to protest joining a maintenance district. Where a road maintenance district exists, the subdivider shall enter into said district.

At a minimum, maintenance districts shall provide for road maintenance, dust control, weed control, and maintenance of traffic control signs and drainage structures.

8. Local roads and residential driveways shall not have direct access onto roads that are functionally classified as state highways, arterial roads or major collectors. Where there is no other reasonable alternative to a local road or residential driveway accessing a state highway, arterial road or major collector, an approach permit must be obtained from the appropriate agency (Montana Department of Transportation, City of East Helena, City of Helena, Lewis and Clark County) before approval can be granted for the proposed road or driveway.

When a proposed subdivision abuts a state highway and an arterial road or major collector, and there is no other reasonable alternative to a local road or driveway accessing a state highway, arterial road or major collector, approval shall be granted only for access onto the arterial road or major collector when an approach permit from the appropriate agency is obtained.

9. Unless designed as part of an integrated road network, or identified as an important traffic corridor, or public health and safety would be

enhance by a through connection, local streets should be designed to discourage through traffic.

10. Whenever a subdivision abuts or contains an existing or proposed collector, arterial highway, or other major thoroughfare, the governing body may require the following: frontage roads; a reservation prohibiting access along certain property lines; deep lots; building setbacks; county road easements or reservations for additional right-of-way; and/or other treatment as necessary for adequate protection of residential properties, and to separate collector or arterial traffic from local traffic.
11. A dead-end street, road or cul-de-sac shall be proposed as part of a future integrated network including the extension of a County road easement, and shall be constructed to the road design standards identified in Appendix J.

A dead-end street or cul-de-sac shall not be greater than 700 feet in length, unless the existing or proposed road can meet one of the following two exceptions:

- a) Maximum of a 1,300-foot cul-de-sac is permitted if:
  - the topography of the property is classified as level (slope range of 0 to 8.0 percent); and
  - the fire hazard rating for the property is classified as low by an on-site inspection by a recognized fire fuel or fuel management specialist; and
  - the cul-de-sac is proposed as part of a future integrated network including the extension of a County road easement; and
  - road does not exceed the maximum grade standards identified in Table A of Appendix J.
- b) Maximum of 1,000-foot cul-de-sac is permitted if:
  - the topography of the property is classified as rolling (slope range of 8.1 to 15.0 percent); and
  - the fire hazard rating for the property is classified as low to moderate per an on-site inspection by a recognized fire fuel or fuel management specialist; and
  - the cul-de-sac is proposed as part of a future integrated network including the extension of a County road easement; and
  - the road does not exceed the maximum grade standard identified in Table A of Appendix J.

12. The county only accepts the dedication of full width county road easements unless, 1) a subdivision abuts an existing county road easement that is less than the required width, and the remaining portion of the county road easement can be dedicated within such subdivision; 2) the dedication of a partial width county road easement provides, or could provide, for interconnectivity of a road network in accordance with the Greater Helena Area Transportation Plan; and/or 3) the dedication of a partial width county road easement provides, or could provide, for the interconnectivity of roads when the adjoining property is subdivided.
13. Horizontal and vertical alignment of streets shall ensure adequate sight distances. When street centerlines deflect more than five degrees, connection shall be made by horizontal curves.
14. Intersections (see Appendix J).
15. Each major subdivision and subsequent minor subdivision shall provide at least two different ingress-egress vehicular access routes, and provide standard legal and physical access.

The exceptions to this requirement would be major subdivisions and subsequent minor subdivisions that meet all of the following criteria:

- access provided by a cul-de-sac that is 700 feet or less in length and the subject cul-de-sac accesses a local, collector or arterial road that is not classified as a dead end road;
  - the cul-de-sac serves 10 lots or less;
  - does not present an evident threat to public health and safety and will not inhibit evacuation or residents in the event of an emergency; and
  - provisions are provided to incorporate the cul-de-sac into a future road network that would provide for a second access route to the subdivision, such as extension of county road easements or access to public land. Access routes shall provide standard legal and physical access.
16. When county road easements are extended to property boundaries within a subdivision for future road connections, the road way shall be built to the minimum County Road Standard to ensure that adjacent property owners do not construct improvements within the county road easement.

17. If utilities are to be installed after an access road is constructed, the subdivider shall install conduit prior to road construction per the requirements of the utility providers to ensure that utilities can be installed without disturbing the roadbed.
18. External and internal access roads constructed to the previous County Road Standards (Peccia Typical Sections No. 1, 2, 3, or 4) are grandfathered and acceptable as standard physical access if they meet all of the following criteria:
  - the subject road(s) are certified by an engineer registered in the State of Montana as meeting the original standard. Certification shall include a statement that the road meets the original standard for width, base course, top surfacing, compaction, and drainage. The certification shall include the engineer's stamp; and
  - no upgrade is needed because of increased average daily trips (ADT's) or decreased LOS. If upgrading is required due to these reasons, then the road must meet the County Road Standards (Appendix J).
19. Where roads constructed under the previous county roads construction and design standards (Peccia) connect with roads constructed under the current road standards the connection shall integrate the road profiles as seamlessly as possible, including drainage improvements.
20. Internal access roads for all major, subsequent minor and first minor subdivisions shall be constructed to the paved standard for local roads. An exemption from the paving requirement for 1-400 ADT local roads is allowed for any subdivision where only residential lots are created and all lots are greater than 2 ½ acres in size.
21. No subdivision shall be designed in such a way that prevents or inhibits public access by a gate or other method of obstruction on any road within or accessing the subdivisions.

## **I. Improvements**

1. All roads within subdivisions shall be dedicated as county roads, except within mobile home and recreational vehicle parks.
2. All roadway improvements required by the governing body, including pavement, curbs, gutters, sidewalks, driveway

approaches and drainage shall be constructed in accordance with the specifications and standards prescribed in these regulations, and the Lewis and Clark County Specifications for County Roads, using materials approved by the governing body.

3. The subdivider must provide proof that all easements are county road easements.
4. Existing trees and other vegetation shall be preserved where possible. Plantings may be required for buffering, screening, weed control, or soil erosion protection and are subject to approval by the governing body.
5. Street light installation may be required by the governing body on all streets within the subdivision or may be included as part of the public improvements agreement. All street lighting must be configured with a horizontal cutoff, and positioned so as to minimize any objectionable direct glare source and not create light trespass.
6. Street or road signs and traffic control devices, when appropriate, shall be placed at all intersections by the developer or included as part of the public improvements agreement. Traffic control devices and placement shall be consistent with the Manual on Uniform Traffic Control Devices, available from the County Public Works Department.
7. If subsequent subdivisions will be served by improvements (roads/streets, fire protection water supplies, storm-water drainage facilities, mailbox facilities etc.) that were installed by a previous subdivider, then the subsequent subdivider may be required to reimburse the previous subdivider for a pro-rata share of the cost of the improvement(s) if all of the following criteria are met:
  - The improvements in question meet the applicable standard; and
  - The improvements do not have to be upgraded.
8. Prior to construction of any public improvements, and after receiving preliminary approval, County Planning must review and approve all plans for public improvements required to be submitted by the subdivider, and the subdivider must obtain all necessary permits, which may include but are not limited to: a weed management plan, approach permits, encroachment permits, water rights for public water systems, and floodplain development permits, as well as any permits required by state and federal agencies.

9. As part of the final plat submission, all approach designs (roads and driveways) and approach locations shall be part of the subdivision's engineer-certified roadway and drainage plans.

## **J. Mailbox Placement and Design**

1. If mail delivery will not be to each individual lot within the subdivision, the developer shall provide an off street area for mail delivery within the subdivision, in cooperation with the United States Post Office.

Where feasible, it is generally preferable to collect boxes in a central location, to reduce the number of stops a mail carrier must make along a road. Neighborhood delivery and collection box units shall be placed in a turnout (see below), off the main roadway.

Mailbox locations must be indicated on the preliminary and final plats.

2. On collectors and arterials, mail delivery will occur outside the travel way. Responsibility for maintenance of the road surface of the turnout shall be the homeowners' association, if one exists. Where a turnout is used, it shall be no less than 10 feet wide, from the edge of the travel lane to the far side of the turnout. If the shoulder is 10 feet or more in width, a turnout is not necessary. No turnout may be constructed without contacting the managing road authority.
3. If several property owners are served by a local road that intersects an arterial or collector, the mailboxes shall be installed in a turnout off of the local road, rather than off the more heavily traveled arterial/collector.
4. Montana law (Section 60-6-101, MCA), states the Montana Department of Transportation has adopted rules pertaining to the accommodation of mailboxes and newspaper delivery boxes on public highway rights-of-way. The rules must ensure that the location and construction of mailboxes and newspaper delivery boxes conform to the rules and regulations of the U.S. postal service. If any highway under the jurisdiction of the transportation commission is encroached upon by a fence, building, structure, sign, marker, mailbox, newspaper delivery box, or other obstruction, the Department of Transportation may give notice in writing to the person erecting or maintaining such encroachment requiring the same to be removed.

5. Authority to approve mailboxes rests with the U.S. Postal Service. Mailbox design and support systems shall also meet the crash test requirements of the Federal Highway Administration.

## **K. Street and Lot Identification**

1. Street names shall comply with the provisions of Appendix G. (Lewis and Clark County Road Naming Regulations).
2. Name signs shall be placed at all roadway intersections.
3. Whenever possible, name signs shall be placed on the northeast and southwest corners of all intersections. If it is not feasible to utilize the northeast and southwest corners, signs shall be placed so as to be conspicuous to the majority of people.
4. All signs must be consistent with the standards in the Manual on Uniform Traffic Control Devices.
5. Signs shall have white reflective letters on a dark green background.
6. Name signs shall be mounted not less than 5 feet nor more than 7 feet above the roadway.
7. The developer shall apply for address assignments for lots within the subdivision. Application is made to the County Address Coordinator.
8. In rural subdivisions where topography, vegetation, lot size, mailbox location, and/or other circumstances prevent clear visibility or accurate identification of homesites from access roads, the subdivider shall install address identification plaques. The plaques shall conform to the specifications for street identification signs, except for sign width.

## **L. Grading, Drainage, and Erosion Control**

1. The drainage system and facilities required for any surface run-off affecting the subdivision shall comply with the regulations of the Montana Department of Environmental Quality (DEQ) and are subject to the approval of the governing body. The intent of these regulations is to assure that proper drainage facilities are provided for runoff generated by subdivisions, and that such facilities are maintained.

2. If road construction or other surface improvements are required, the subdivider shall provide a complete grading and drainage plan with accurate dimensions, drainage courses, and elevations, showing the proposed grades of streets and drainage improvements. The plan shall be designed and certified by a registered professional engineer. The completed plan must be submitted with the final plat; preliminary information shall be supplied with the subdivision application. (See Appendix B)
  
3. Standards for all grading and erosion control are as follows:
  - a. Grading shall not significantly increase the rate of stormwater runoff, and shall avoid the erosion of natural or constructed slopes and sediment accumulation in natural drainage channels or watercourses.
  
  - b. Grading shall not significantly alter the natural drainage patterns.
  
  - c. Grading shall preserve and conform to the general natural form and contours of the land surface, as much as practically possible.
  
  - d. Grading shall be designed to preserve natural or established vegetation as much as is practically possible. The planned revegetation shall stabilize the slope and be compatible with native vegetation. Suggested (but not required) plant material is native vegetation appropriate to adjacent plant communities in both species composition and spatial distribution patterns. It is recommended that the use of native vegetation acknowledge certain plant species' relative attractiveness to wildlife.
  
  - e. Affected site area shall be revegetated as necessary for the stabilization of disturbed surfaces, with the exception of areas covered by impervious surfaces and/or structures.
  
  - f. Grading shall allow for the most rapid possible recovery of disturbed lands to natural or introduced vegetation.
  
  - g. Any areas disturbed while installing drainage systems shall be restored and revegetated. Where necessary, topsoil shall be placed on disturbed areas prior to revegetation. The proposed restoration plan, which must include a schedule, shall be included as part of all grading and drainage plans



- a recurrence interval of 10 years).
- d. For flows that originate within the subdivision, provisions for detaining or retaining these flows, so that the peak flow (from the 2-year, 1-hour event) that leaves the subdivision after development does not exceed the peak flow before development.
  - e. Where storm drainage is intended to be discharged into the ground, locations of nearby (within 200 feet) wells and drain fields that may be impacted, or a statement that there are no wells or drain fields nearby.
- 6. To accommodate upstream drainage, a drainage facility shall be installed, of sufficient size to accommodate existing and potential runoff from the entire upstream drainage area. The drainage system shall be designed to prolong the time of surface water concentration on the site, and retain maximum infiltration into the ground.
  - 7. The subdivision's drainage system design shall provide for on-site storage of water in excess of historic volumes discharged from the site, based on the storm water analysis. It is suggested that retention ponds be designed to have natural edges, using native plant materials.
  - 8. Street curbs and gutters, swales, or protection of the natural drainage shall be required, according to the character of the area, density of development, and nature of adjoining properties. Any curbs and gutters present on adjoining properties shall be extended according to current specifications of local and state authorities. Where practicable, retention of surface water in drainage ways is encouraged. Natural drainage ways shall be preserved and used, whenever feasible. The intent is to retain water on the land (without causing flooding), and allow it to be absorbed into the soil gradually.  
  
Where flows permit, the drainage channels shall be designed as grassed swales, or wetlands, encouraging sheet flow.
  - 9. Culverts or bridges of adequate size shall be provided and installed by the subdivider where drainage channels intersect any street right-of-way or easement. Minimum culvert sizes shall be 18 inches in diameter for major collectors and 15 inches in diameter for other road categories and driveways (see Appendix J). All culverts shall extend at least across the entire width of the base of

the fill; the amount of backfill to be placed over the culvert and the culvert's capacity shall be determined by a qualified engineer. This shall include arrangements for driveway culverts. The cost, installation, and maintenance of driveway culverts shall be the responsibility of each individual lot owner. This responsibility shall be clearly stated in the covenants.

10. Drainage facilities shall be located in street rights-of-way or in perpetual drainage easements of appropriate widths and are subject to approval by the governing body. Streets shall be designed to drain in a manner that is compatible with existing streets and natural drainage patterns.
11. Drainage systems shall not discharge into any sanitary sewer facility.
12. Where required by the governing body, perpetual easements to convey drainage shall be provided, and graphically shown on the final plat or site plan.
13. Where a subdivision is traversed by a watercourse, drainage way, channel, ditch, or stream, easements or rights-of-way may be required to parallel the lines of such watercourse at a sufficient width to allow for maintenance or to protect natural drainage. Setbacks on each side of irrigation canals or ditches may be required for maintenance purposes.
14. Where a subdivision is traversed or bordered by an irrigation ditch, the subdivider may be required to fence or otherwise restrict access to the ditch to protect public health and safety. Determining the type of access restriction shall be based on consideration of the size of the ditch, seasons of flow, type of subdivision, other safety factors, and comments from the irrigation district or water users association, if any.

## **M. Water Supply Systems**

1. All water supply systems (including both individual wells and community systems) shall meet applicable regulations and design standards of the Montana Department of Environmental Quality (DEQ) and the Department of Public Health and Human Services (DPHHS), and comply with existing water rights and water rights regulations. The proposed method of supplying domestic water to each lot in the subdivision must comply with the applicable current Administrative Rules of Montana (ARM). By this reference these

DEQ standards are incorporated into and made a part of these regulations. Unless defined elsewhere in these regulations, the terms used in these standards will have the meanings assigned to them in ARM.

2. The water supply system shall be subject to approval by the governing body, which may require that any proposed central system provide adequate and accessible water for fire protection.
3. Where the subdivision is within the service area of a public water supply system, the subdivider shall submit plans and specifications for the proposed water system to the water district involved and DEQ, and shall obtain their approval prior to undertaking any construction to install such facilities. In cases when the proposed development is within 500 feet of an existing public system, the applicant must provide evidence that the public water supplier has been contacted and the applicant can meet the appropriate standards. If connection to an existing public system is denied, then the landowner must submit plans and specification for the proposed water systems to the County for review and approval.
4. Where the subdivision could be served by a centralized water supply system in the future, the governing body may require a restrictive covenant on the property, waiving the right to protest joining a district to fund the installation and/or maintenance of such a system.
5. All pump tests for ground water wells must comply with all applicable requirements and standards set by DEQ.
6. All water service connections in public and multi-user systems must be equipped with a viable water-metering device.
7. Prior to final plat approval by the governing body, subdivisions containing lots of less than 20 acres in size, the subdivision must have been approved by DEQ or other authorized reviewing authority under the Sanitation in Subdivisions Act sections 76-4-101 *et seq.*, MCA.
8. Prior to final plat approval by the governing body, subdivisions containing lots from 20 to 160 acres in size must meet applicable local and state regulations for water supply systems. This demonstration to the BOCC is to evaluate the ability to develop lots at the platting stage and is not a guarantee that a source of water or a location for a septic system or drainfields will be available when the lots are developed.

9. For proposed subdivisions that include new water supply or wastewater facilities, the Applicant shall provide as part of the subdivision application all applicable information required under 76-3-622, MCA.
10. A subdivision that is served by a community water supply system must demonstrate a sufficient water supply prior to final plat approval.
11. Any centralized water supply system must provide adequate and accessible water for fire protection, unless an alternative fire-fighting water supply system is approved for use by the Fire Protection Authority Having Jurisdiction (FPAHJ).

## **N. Wastewater Treatment Systems**

1. All sewage wastewater treatment systems shall meet the regulations and design standards of the Montana State Department of Environmental Quality, the City-County Health Department, and applicable zoning regulations. The proposed method of disposing of sewage from each lot in the subdivision must comply with the Administrative Rules of Montana (ARM) 17.36.301, 17.36.302, 17.36.312, and 17.36.320 through 17.36.326 or subsequent amendments as applicable. By this reference these DEQ standards are incorporated into and made a part of these regulations. Unless defined elsewhere in these regulations, the terms used in these standards will have the meanings assigned to them in ARM 17.36.101.
2. The means of wastewater treatment shall be subject to approval by the governing body.
3. Where the subdivision is within the service area of a public wastewater treatment system, the subdivider shall submit plans and specifications for the proposed wastewater treatment facilities to the sewer district involved and the Montana Department of Environmental Quality. The subdivider shall obtain their approval prior to undertaking any construction to install such facilities. When a subdivision is located within 500 feet of a public sewer system, the applicant must provide evidence that the public water supplier has been contacted and the applicant can meet the appropriate standards. If connection to an existing public system is denied, then the landowner must submit plans and specification for the proposed wastewater treatment systems to the County for review and approval.

4. Where the subdivision could be served by a central wastewater treatment system in the future, the governing body may require a restrictive covenant on the property, which waives the right to protest joining a district to fund the installation and/or maintenance of such a system.
5. Before the governing body will approve the final plat of a subdivision containing lots of less than 20 acres in size, the subdivision must have been approved by DEQ or other authorized reviewing authority under the Sanitation in Subdivisions Act sections 76-4-101 *et seq.*, MCA. This approval applies to the development of the lots at the time of the approval and is no guarantee that the location for a septic system will be available when the lots are actually developed.
6. In order to obtain approval from the governing body, subdivisions from 20 to 160 acres in size must meet applicable local and state regulations for wastewater treatment systems. This demonstration to the local reviewing authority is to evaluate the ability to develop lots at the platting stage and is no guarantee that a location for a septic system or drainfields will be available when the lots are developed.
7. Pursuant to 76-3-622, MCA, the Applicant shall provide information for new wastewater facilities.

## **O. Solid Waste**

1. The subdivider shall assure that provisions for collection and disposal of solid waste meet the regulations of the Montana Department of Environmental Quality (DEQ). The proposed method of storing and disposing of solid waste generated within the subdivision must comply with the Administrative Rules of Montana (ARM) or applicable statute. By this reference this DEQ standard is incorporated into and made a part of these regulations. Unless defined elsewhere in these regulations, the terms used in these standards will have the meanings assigned to them in ARM or applicable statute. The means for solid waste collection and disposal shall be subject to approval by the governing body.
2. Where the subdivision is not located within a landfill district, the governing body may require a restrictive covenant on the property that waives the right to protest joining a district to fund the collection and/or disposal of solid wastes generated by the subdivision.

3. Before the governing body will approve the final plat of a subdivision containing lots of less than 20 acres in size, the subdivision must have been approved by the Montana Department of Environmental Quality or other authorized reviewing authority under the Sanitation in Subdivisions Act sections 76-4-101 *et seq.*, MCA.
4. In order to obtain approval from the governing body, subdivisions with lots ranging in size from 20 to 160 acres in size must meet applicable local and state regulations for solid waste.

## **P. Other Utilities**

1. All new utilities must be placed underground, except where there are topographic or soil constraints, or other constraints determined by the applicable utility provider. Underground utilities, if placed in the street right-of-way, shall be located between the roadway and the right-of-way line to simplify location and repair of lines. Such underground facilities shall be installed after the street has been brought to grade and before it is surfaced, to eliminate as far as practicable the necessity for disturbing such surfacing for the connection of individual services.
2. If an overhead utility line is required or determined to be necessary, the overhead utility lines shall be located at the rear property line, where practical.
3. Utility facilities shall be designed by utility firms in cooperation with the subdivider, subject to all applicable laws, rules, and regulations of any appropriate regulatory authority having jurisdiction over such facilities.
4. If utilities are not installed adjacent to the proposed lots prior to the filing of the final plat, the subdivider shall either enter into a subdivision improvements agreement guaranteeing the installation of those utilities or the subdivider shall provide the County with signed contracts from all pertinent utility companies guaranteeing that the utilities will be installed when homes are constructed on the subject lots. The subdivider shall bear the cost of installing the trunk line utilities. Lot owners shall be responsible for the hookup of the utilities from the trunk line along the individual lot line to the residence.

## **Q. Utility Easements**

1. Easements shall be provided for utilities.

2. Utility easements shall be located along front and side lot lines wherever required. Lots larger than an acre also require a rear setback (see 3 below). If the easements are placed along the street, they shall be located between the edge of the roadway and the right-of-way line. Installation shall be as close to the right-of-way line as practicable, in order to provide a safe environment for traffic operation and preserve space for future roadway improvements or other utility installations.

To the extent feasible and practical, utility lines shall cross the roadway in a perpendicular manner. Utility crossings that are likely to require future servicing or expansion shall be encased or installed in conduits to permit servicing without disrupting the traffic flow or requiring open digging into the roadway surface.

On new construction, no utility shall be situated under any part of the pavement, except where it must cross the roadway. Utility poles, vent standpipes, and other above-ground utility features that would constitute hazards are not allowed within the roadway clear-zone.

3. Utility easements shall be 20 feet wide unless otherwise specified by a utility company or the governing body. This may be accomplished by 10-foot dedications along all lot lines where they can be combined for a total of a 20 feet easement along lot lines. Ten (10) foot easements along front lot lines are adequate if combined with street right-of-way. Unless otherwise specified by a utility company or the governing body, utility easements shall be designated as follows:
- a. Front: 20 feet (or when combined with a 60 foot road easement—5 feet beyond the edge of the road right-of-way).
  - b. Side: 20 feet (or 10 feet when combined with 10 foot right-of-way from adjacent lot(s)).
  - c. Rear: No rear lot line utility easements are required on lots less than 1 acre in size. For lots greater than an acre in size, the rear easement is 20 feet (or 10 feet when combined with a 10 foot easement from adjacent lot(s)). Utility easements may also be incorporated into dedicated alleys with right-of-ways of 24 feet or greater.
  - d. Where a utility easement is to be located in an existing, dedicated right-of-way, a street opening permit must be

obtained from the governing body or the Montana Department of Transportation.

- e. In addition to showing the location of the utility easement on the plat with dashed lines, the following statement shall be on the final plat:

*“The undersigned hereby grants the following unto every person, firm or corporation, whether public or private, providing or offering to provide telephone, telegraph, electric power, gas, cable television, water or sewer service to the public: The right to the joint use of (and ingress and egress to and from) an easement for the construction, maintenance, repair and removal of their lines and other facilities, in and under each area designated on this plat as “Utility Easement,” to have and to hold forever.”* No permanent structures may be placed on the easement. Features such as fencing or landscaping are subject to be torn up for maintenance needs.

4. Ditch easements shall be provided for in accordance with 76-3-504, MCA.
5. The governing body may require building setbacks from high voltage transmission lines or high-pressure gas pipelines based on the recommendation of the affected utility, in order to protect public health and safety.

## **R. Park Land, including Open Space and Conservation Areas**

1. In order to provide for the open space, conservation and recreational needs of a proposed residential development, a subdivider shall dedicate to the governing body a cash or land donation (as determined by the governing body), except as provided for in subsections 3 and 6. The amount of donation shall be equal to:
  - a. 11% of the area of the land proposed to be subdivided into parcels of one-half acre or smaller;
  - b. 7.5% of the area of the land proposed to be subdivided into parcels larger than one-half acre and not larger than 1 acre;
  - c. 5% of the area of the land proposed to be subdivided into parcels larger than 1 acre and not larger than 3 acres; and

- d. 2.5% of the area of the land proposed to be subdivided into parcels larger than 3 acres and not larger than 5 acres.
2. When a subdivision is located totally within an area for which density requirements have been adopted pursuant to a growth policy or zoning regulations, the governing body may establish park dedication requirements based on the community need for parks and the development densities identified in the growth policy or regulations. Such park dedication requirements are in-lieu of those for above and may not exceed 0.03 acres per dwelling unit.
3. A park dedication is not required for:
  - a. land proposed for subdivision into parcels larger than 5 acres;
  - b. subdivision into parcels that are all nonresidential;
  - c. a subdivision in which parcels are not created, except when that subdivision provides permanent multiple spaces for recreational camping vehicles, mobile homes, condominiums, or townhouses; or
  - d. a subdivision in which only one additional parcel is created.
4. The governing body, in consultation with the applicant and the Planning Board and/or Park Board, may determine suitable locations for parks and playgrounds. The governing body shall determine whether the park dedication must be a land donation, cash donation, or a combination of both. When a combination of land donation and cash donation is required, the cash donation may not exceed the proportional amount not covered by the land donation.
5. The governing body shall use the dedicated cash or land for development, acquisition, or maintenance of parks to serve the subdivision. The use of dedicated cash must reasonably serve the subdivision and must be in accordance with adopted plans for parks, recreation, open space, and/or conservation easements. The governing body may not use more than 50% of the dedicated cash for park maintenance.

Land dedicated for park or playground purposes shall be useable for recreation and/or conservation purposes, serve residents of the entire subdivision, are of appropriate shape and size, and shall

have reasonable access.

A waiver of right to protest inclusion into a parkland maintenance district will be required as a condition of approval for all subdivisions.

6. The governing body may waive the parkland dedication requirement if the subdivider meets the criteria provided in 76-3-621(7) and (8), MCA.
7. The term "cash donation" is the fair market value of the unsubdivided, unimproved land. The subdivider shall be responsible for providing satisfactory evidence of the fair market value. The evidence for final plat application of major and subsequent minor subdivisions shall be in the form of an appraisal of the property by a licensed real estate appraiser. The evidence for subdivision applications of major and subsequent minor subdivisions shall be in the form of a market-based analysis or an appraisal of the property by a licensed real estate appraiser. In both applications, such evidence must be less than six months old. After consideration of all pertinent evidence, the determination of fair market value shall be made by the governing body. If the subdivider and governing body are unable to agree upon the fair market value, the governing body may require the fair market value be established by an appraisal done by a licensed real estate appraiser mutually acceptable to the applicant and the governing body. The appraisal fee shall be paid by the subdivider.
8. Parkland ownership status must be specified at the time of preliminary plat approval and must be shown on the final plat.
9. All common areas must be identified on the plat during the first phase of development, and developed as scheduled.
10. The governing body may, in consultation with the subdivider and the Planning Board and/or Parks Board, accept non-motorized public access trail easements and linear parks for parkland dedication. Based on the Helena Transportation Plan, plans for non-motorized trails may require additional easement be reserved and the additional easement shall not be figured into the parkland dedication.
11. When required or proposed, all non-motorized trails shall meet the latest edition of American Association of State Highway and Transportation Officials (AASHTO) *Guide for the Development of Bicycle Facilities* design standards. By this reference the related

AASHTO standards are incorporated into and made a part of these regulations. Unless defined elsewhere in these regulations, the terms used in these standards will have the meanings assigned to them by AASHTO.

Design plans for non-motorized trails shall be submitted to the Lewis and Clark County Community Development and Planning and Public Works Departments for review and recommendation. The Lewis and Clark County Community Development and Planning and Public Works Departments shall approve plans prior to construction.

## **S. Fire Protection**

All subdivisions must be designed to avoid or mitigate any significant adverse impacts on fire protection and structures are prohibited at the apex or head of draws in designated high fire hazard areas, or in severe fire hazard areas identified in the Growth Policy.

All subdivisions shall be planned, designed, constructed, and maintained to minimize the risk of fire and to permit the effective and efficient suppression of fires in order to protect persons, property, and forested areas.

## **T. Agriculture**

All subdivisions must be designed to avoid or mitigate any significant adverse impacts on agriculture, agricultural water users, or agricultural water facilities.

Adjacent agricultural lands identified as prime farmland shall be protected from adverse impacts by requiring a 200-foot non-development buffer between the adjacent prime farmland and any residential structure in the subdivision.

To mitigate impacts of residential uses in an agricultural area, the sub-divider shall provide restrictive covenants addressing agriculture-related issues that will accompany the final plat. Issues addressed in the covenants shall include the following: the presence of nearby agricultural operations (and a listing of potential impacts such as odors and noise); existence of irrigation facilities and easements; protection of existing water rights; rights of the irrigation facility operator to perform maintenance; control of domestic pets; weed management responsibilities; and other agriculture-related factors that may be present.

## **U. Weed Control**

Pursuant to Section 7-22-2121, MCA of the County Weed Law, anyone significantly disturbing soil must obtain a written weed management and re-

vegetation plan to the County Weed District. The plan shall be submitted to, approved, and certified by the County Weed Board prior to final plat approval. All requirements and specifications of an approved plan shall be met prior to approval of the final subdivision plat. An approved weed management plan shall remain in effect for the five-year management period, regardless of any changes in property ownership.

## **V. Erosion and Sediment Control**

Pursuant to the Lewis and Clark County Sediment Control Ordinance, any person planning to engage in construction or subdivision activities shall submit an erosion and sediment control plan to the County Conservation District. The plan shall be submitted to and approved by the Conservation District Board of Supervisors prior to any disturbance of the land. All requirements and specifications of an approved plan shall be met prior to final subdivision plat approval.

In addition to the above, any subdivider causing more than one (1) acre of ground disturbance is required to contact the Department of Environmental Quality (DEQ) to obtain a Montana Pollution Discharge Elimination System (MPDES) permit.

## **W. Waterbody Setbacks and Buffer Areas**

Policy 1.8 of Issue A of the Natural Environment Issues, Goals and Policy section of the Lewis and Clark Growth Policy recommends the development of residential, and non-residential setback requirements along streams, rivers, lakes, reservoirs, minor water courses and wetlands to preserve water quality and other natural resources, viewsheds and recreational uses.

Waterbodies, watercourses, wetlands and riparian areas provide benefits to the economy, environment, and quality of living of people in the County. Among the benefits enjoyed are protection of sensitive fish and wildlife habitat, protection of valuable water recharge areas, improved surface and ground water quality, flood prevention, scenic beauty and recreational opportunities. Protection of surface water resources can be accomplished through a variety of tools, including the establishment of setback and buffer zones to encourage development away from critical water resources.

1. Definition of Key Terms
  - a. Ordinary High Water Mark: For the purposes of these regulations, the ordinary high water mark is defined as the line that water impresses on land by covering it for sufficient periods to cause physical characteristics that distinguish the

area below the line from the area above it. Characteristics of the area below the line may include (but not be limited to) deprivation of the soil of substantially all terrestrial vegetation and destruction of its agricultural value. A flood plain adjacent to surface waters is not considered to lie within the surface water's high water marks.

- b. Setback: The distance from the ordinary high water mark within which the structures and uses defined in 3-a below are not allowed. Setback and buffer distances are measured on a horizontal plane.
- c. Buffer: Buffer zones are not additional setback distances, but rather the portion of the setback that is designated to remain undisturbed. Buffers are areas where all natural vegetation, rocks, soil, and topography shall be maintained in their original state, or enhanced by the additional planting of native plants. The structures and uses defined under 3-a below are not permitted.

2. Applicability and Water Course Descriptions

Setbacks and buffers are horizontal distances from the ordinary high water mark, and are designated as follows (see Appendix L for a detailed listing of water bodies under each of the classifications):

<u>Water Course Designation</u>	<u>Setback</u>	<u>Buffer</u>
Type I	250 feet	100 feet
Type II	200 feet	75 feet
Type III	100 feet	50 feet
Type IV	50 feet	30 feet

Setback and buffer areas must be established from the boundaries of wetlands identified by the County, the Army Corps of Engineers, DEQ, U.S. Fish and Wildlife Services, DNRC or FWP. If a subdivision application reveals a potential wetland on the site then the applicant is responsible for delineating the wetland's boundaries on maps, plats, and site plans submitted as part of the subdivision application. Setback and buffers areas from wetland boundaries may not contain structures and improvements, except for those for educational or scientific purposes.

For the purposes of this section, riparian areas subject to these regulations shall include the following:

- a. Parcels within 250 feet of the ordinary high water mark of

type I water courses. These are defined as the Missouri River (excluding the reservoirs); Dearborn River; Sun River; and the Big Blackfoot River.

- b. Parcels within 200 feet of the ordinary high water mark of type II water courses, generally defined as all main tributaries of type I water courses.
- c. Parcels within 100 feet of the ordinary high water mark of type III water courses, generally defined as all tributaries of type II water courses; all intermittent streams; Missouri River Reservoirs; Lake Helena; Helena Valley Regulating Reservoir; and wetlands (as defined by the current edition of the Federal Manual for Identifying and Delineating Wetlands).
- d. Parcels within 50 feet of type IV water-courses, which for these purposes are considered the Helena Valley Irrigation District canals, Prickly Pear Water Users canals, and ditches or canals specifically designed to carry storm-water or surface water.

All other water-courses, such as swales and ephemeral drainages, shall be addressed in the storm-water drainage plans for each subdivision proposal per the requirements of the Subdivision Regulations. Consulting engineers should work closely with County Planning Staff to ensure that any improvements within a subdivision or alteration of any drainage within a subdivision will provide for adequate storm-retention on-site and any for necessary setbacks. Setbacks for these drainages shall be defined by the calculated volume of storm-water in the drainage and the depth of flow based upon a 100-year storm event. An engineer registered in the State of Montana shall calculate the volume of storm-water.

Large, well-defined ephemeral drainages within subdivisions should be protected with non-disturbance easements and setbacks in order to provide for storm-water retention and wildlife habitat.

- e. These requirements apply throughout Lewis and Clark County. However, a special zoning district may adopt regulations that exceed these requirements.

3. General Provisions
  - a. Structures and uses prohibited under the setback and buffer standards include the following:
    - i. any type of building and accessory structure related to residential, commercial, and industrial uses;
    - ii. manufactured and prefabricated buildings or accessory structures;
    - iii. septic tanks and septic tank drain fields;
    - iv. barns, feed lots, and corrals;
    - v. communication towers; and
    - vi. roads, road easements, road rights-of-way and driveways that are within the setback and buffer area and are parallel to the watercourse.
  - b. All setbacks must extend to the edge of adjacent wetlands and the 100-year floodplain, if designated. In cases where identified wetlands or the 100-year flood plain extend beyond the setback, the setback width will be extended accordingly.
  - c. The buffer is required on 75% of the linear footage along the affected water bodies. The maximum lineal footage allowed as part of this 25% is 100 feet. Docks, walkways, lawns or other improvements not otherwise prohibited by these regulations are allowed on the remaining 25% of the footage, which must be identified on the preliminary plat. Applicants are encouraged, however, to keep the entire shoreline in a natural state.
  - d. Equipment and infrastructure directly related to agricultural production (e.g., pumps, irrigation equipment, hay storage and harvesting facilities, canals, and storage sheds less than 150 square feet in floor area and under 10 feet in height) are exempt from the setback and buffer requirements.
  - e. Structures and infrastructure related to water-related recreation such as docks, boat ramps, fishing access sites, and boat houses are exempt from the setback and buffer requirements (providing they are in the identified 25% of the area open to such development).

- f. Fencing is exempt from the setback and buffer requirements. Depending on wildlife issues that are identified, the BOCC may condition that “wildlife friendly” fencing be required (see fencing standards under Section “X” in this chapter).
  - g. Pre-existing parking lots, streets, trails or other impervious surfaces located inside the buffer must be quantified and excluded from being counted as part of the buffer distance.
4. Other Provisions
- a. The BOCC may issue variances for nonconforming uses that would otherwise violate the setback and buffer regulations, if compliance would result in unnecessary or undue hardship to the applicant. Financial hardships or those created by the applicant are not valid reasons for a variance. Any variance granted shall be the minimum relief from these regulations necessary to allow a reasonable financial use of the property. Setback requirements may be reduced to not less than half the distance from the shoreline to the opposite property line.
  - b. Frontage: No minimum lot frontage is required, except that lot design shall not exceed the length-width ratio of 3:1. (In this case, the length is defined as the distance running roughly perpendicular to the shoreline, while the width is approximately parallel to it.) No new lots abutting shorelines shall be created that do not conform to the length-width ratio or minimum setbacks. Common areas not in conformance with the 3:1 lot ratio can be considered for exemption.
  - c. Public trails along a stream, river, lake, or wetland may be constructed within the required buffer zones, provided they are solely for non-motorized use, and subject to the following provisions:
    - i. trails shall not be constructed within 15 feet of the ordinary high water mark of a stream, river, lake, or wetland. Existing trails inside this zone will be considered to be a legal, non-conforming use;
    - ii. construction of trails shall follow the natural topography to the maximum extent feasible to prevent excessive cut and fill; and

- iii. natural vegetation shall be retained to the maximum extent possible.
- d. Campgrounds, R.V. parks, and marinas shall meet the setback and buffer requirements for type IV watercourses, although the setback and buffer for tent sites may be halved. Existing campgrounds, marinas, and R.V. parks that do not meet these requirements may continue as legal, non-conforming uses. However, the addition of new sites after the establishment of these regulations will be required to meet the requirements.
- e. Nothing in this setback and buffer regulation shall prohibit repairs or improvements to existing roads, ditches, utilities or utility lines, bank maintenance, or stream stabilization/enhancement measures otherwise allowable under federal or state laws. The following uses or activities are authorized to occur within the setback area:
  - i. a utility line;
  - ii. roads, road easements, road rights-of-way and driveways that are perpendicular to the watercourse and within the setback are permitted;
  - iii. an outlet for stormwater facilities;
  - iv. an agricultural use or activity that is not a new agricultural building or addition to an existing building;
  - v. an existing legal, non-conforming structure, use, or activity;
  - vi. an activity that is required in an approved noxious weed control plan; and/or
  - vii. an activity related to the planting of native vegetation.
- f. Routine maintenance of existing dwellings or accessory structures would be allowed inside the setback. Expansions or improvements of up to 50% of the total square footage of the dwelling or accessory structure are permitted, provided they do not encroach any further into the setback, and meet other applicable regulations.

- g. Subdivision applicants must identify a building envelope outside the setback on the sketch plan they bring to their pre-application conference. Setback and buffer boundaries must be illustrated on the preliminary and final plats.

## **X. Standards for Protecting Wildlife**

Depending on wildlife issues raised during their review of the preliminary plat application, the BOCC may require “wildlife friendly” fencing as a condition of approval. While not applicable in all situations, hedges or other vegetative barriers are preferable from a wildlife perspective.

## **Y. Non-Residential Development Standards**

The following apply to subdivisions that include commercial and/or industrial components:

- 1) All roads within non-residential areas must be paved.
- 2) Streets for non-residential subdivisions (and accessory parking areas) shall be connected with arterial streets, so that traffic is not generated on local streets. Intersections of parking area access with arterials or collector streets shall be designed to cause the least possible interference with traffic movement.
- 3) Collector streets for non-residential subdivisions shall be planned to serve industrial areas exclusively, and shall connect to arterials or non-residential collectors. The intersections of parking area service streets with arterials or collector streets shall be at least one hundred and twenty five (125) feet apart.
- 4) Provisions shall be made for service access (e.g., off-street loading or unloading, and parking) that are adequate for the uses proposed. Provision of such service access shall be determined by Institute of Transportation Engineer (ITE) standards.
- 5) In order to reduce noise and visual impacts non-residential developments located in or adjacent to residential or agricultural areas shall provide natural screening around parking areas and lot line perimeters. Screening shall be accomplished through the use of trees or shrubs planted to provide a continuous barrier.
- 6) See Appendix B for additional supplements for non-residential units.

## **Z. Outdoor Lighting Control**

All outdoor lighting fixtures shall be designed and constructed in a manner to ensure that:

1. Any exterior lighting shall be arranged and directed downward to minimize illumination beyond the property lines.
2. All street lighting must be configured with a horizontal cutoff, and positioned so as to minimize any objectionable direct glare source and not create light trespass.

## **AA. Ridgeline and Hillside Development**

1. Design Standards for the Subdivision of Hillside and Ridgeline Land
  - a. Subdivision applications on hillside land shall comply with each of the following design standards:
    1. Building envelopes shall be required for all proposed lots. The building envelope defines the portion of each lot within which all improvements must be located. Improvements shall include all buildings and garages. Decks, patios, terraces, retaining walls, fences, recreational facilities and site access may be located outside of the building envelope.
    2. Building envelopes on ridgelines shall be sited such that the future development of the building envelope can be accomplished without breaking the natural silhouette created by the prominent ridgeline and the sky. For the purposes of these guidelines, a canopy of existing trees located on the top of a ridgeline shall be considered a part of the prominent ridgeline.
2. Review Criteria for the Subdivision of Hillside and Ridgeline Land
  - a. The following design criteria shall be used by the Board of County Commissioners for subdivision applications on hillside land. It shall be the burden of the applicant to demonstrate that the proposed subdivision complies with each of the following criteria, that one or more of the criteria are not applicable, or that a practical solution consistent with the purpose of this section has been achieved.

1. Building envelopes shall be sited to utilize existing vegetation and natural topography of the site in order to integrate the building with the site and to minimize the visibility of the building from existing highways (public roads).
2. Building envelopes shall be sited such that future access to the envelope can be integrated with the natural characteristics of the site in a manner that will require a minimal amount of site grading, cuts and fills, retaining walls and loss of vegetation.

## **BB. Water Course and Irrigation Easements**

Except as noted below, the subdivider shall establish within the subdivision ditch easements that:

- a. are in locations of appropriate topographic characteristics and sufficient width to allow the physical placement and unobstructed maintenance of open ditches or below ground pipelines for the delivery of water for irrigation to persons and land legally entitled to the water under an appropriated water right or permit of an irrigation district or other private or public entity formed to provide for the use of the water right on the subdivision lots;
- b. are a sufficient distance from the centerline of the ditch to allow for construction, repair, maintenance and inspection of the ditch; and
- c. prohibit the placement of structures or the planting of vegetation other than grass within the ditch easement without the written permission of the ditch owner.

The subdivider need not establish irrigation easements as provided above if:

- a. the average lot in the proposed subdivision will be one acre or less and the subdivider provides for disclosure, in a manner acceptable to the governing body, notifying potential buyers that lots within the subdivision are classified as irrigated land and may continue to be assessed for irrigation water delivery event though the water may not be deliverable to the lots; or
- b. the water rights have been removed from the land within the subdivision or the process has been initiated to remove the water rights from the subdivided land; and

- c. the fact the water rights have been or will be removed from the land within the subdivision is denoted on the preliminary plat after removal of water rights has not been completed at the time the final plat is filed, the subdivider shall provide written notification to prospective buyers of the subdivider's intention to remove the water right and shall document that intent, when applicable, in agreements and legal documents for related sales transactions.

The subdivider shall, unless otherwise provided under separate written agreement or filed easement, show on the preliminary and final plat, and file and record with the county clerk and recorder, ditch easements for the unobstructed use and maintenance of existing water delivery ditches, pipelines, and facilities in the proposed subdivision that are necessary to convey water through the subdivision to lands adjacent to or beyond the subdivision boundaries in quantities and in a manner that are consistent with historic and legal rights. A minimum width of 10 feet is required on each side of irrigation canals and ditches for maintenance purposes.

## **CC. Disposition of Water Rights**

If a subdivision will create lots averaging less than five acres in size, the subdivider shall submit evidence with the final plat that the subdivider has:

- a. reserved all or a portion of the appropriation water rights owned by the owner of the land to be subdivided and transfer these water rights to a single entity for use by landowners with the subdivision who have a legal right to the water and reserved and severed any remaining surface rights from the land; and
- b. if the land to be subdivided is subject to a contractor interest in a private or public entity formed to provide for the use of a water right on the subdivision lots, established a landowner's water use agreement administered through a single entity, this agreement must specify how the water rights will be administered and described the rights and responsibilities of landowners with in the subdivision who have a legal right and access to water; or reserved and severed all surface water rights from the land proposed for subdivision.

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