

continuous. Intersections of arterial and collector streets must be at least eight hundred (800) feet apart.

Minimum curb radius at the intersection of two (2) local streets shall be at least twenty (20) feet and minimum curb radius at an intersection involving a collector street shall be at least twenty-five (25) feet. Alley intersections and abrupt changes in alignment within a block shall have the corners cut off in accordance with standard engineering practice to permit safe vehicular movement.

Intersections shall be designed with a flat grade where practical. In hilly or rolling areas, at the approach to an intersection, a leveling area shall be provided having less than a two (2) percent slope for a distance of sixty (60) feet, measured from the nearest right-of-way line of the intersecting street.

Where any street intersection will involve earth banks or existing vegetation inside any lot corner that could create a traffic hazard by limiting visibility, the developer shall cut such ground or vegetation (including trees) in connection with the grading of the public right-of-way to the extent deemed necessary to provide an adequate sight distance. The cross-slopes on all streets, including intersections, shall be three (3) percent or less.

#### **20.19.13 Bridges**

Bridges of primary benefit to the applicant, as determined by the Planning Commission and City Council, shall be constructed at the full expense of the applicant without reimbursement from the City. The sharing of expense for the construction of bridges not of primary benefit to the applicant as determined by the Planning Commission and City Council, will be fixed by special agreement between the City Council and the applicant.

#### **20.19.14 Road Dedications and Reservations**

Street systems in new subdivisions shall be laid out to eliminate or avoid new perimeter half-streets. The City Engineer may authorize a new perimeter street, however the applicant may be required to improve half the street plus ten (10) feet and dedicate the entire required street right-of-way width.

Where a subdivision borders an existing narrow road or when the General Plan, Streets Master Plan or Zone Map indicates plans for realignment or widening a road that would require use of some of the land in the subdivision, the applicant may be required to improve and dedicate such areas for widening or realignment of such roads that are necessary and for the benefit of the subdivision. Frontage roads and streets shall be improved and dedicated at the applicant's expense to the full width as required by this Title.

#### **20.19.15 Off Site Road Improvements**

In instances where the vehicular demand of an approved development will result in additional traffic on an existing roadway facility that caused the road to drop below the adopted level of service (LOS), the applicant shall be required to complete all necessary roadway improvements to maintain an acceptable LOS. This may require improvements to the nearest arterial or collector status road facility capable of handling the anticipated volume of traffic.

Furthermore, the applicant will be required to complete any improvements necessary to accommodate all storm drainage generated by the development, construct linkages to pedestrian facilities and demonstrate connectivity to all other municipal systems.

If an applicant is unable to maintain an acceptable LOS or demonstrate connectivity, the City Council may find that the development is inappropriate which may be ground for denial of the project. (1-23-08)

### **20.20 Storm Water System**

20.20.1 Accommodation of Upstream Drainage Areas

20.20.2 Effect on Downstream Drainage Areas

20.20.3 Areas of Poor Drainage

20.20.4 Flood Plain Areas

20.20.5 Dedication of Drainage Easements

20.20.6 Lot to Lot Drainage

The Planning Commission shall not recommend approval of, and the City Council shall not approve, any Preliminary Plan that does not make adequate provision for storm or flood water runoff channels or catch basins. Plans shall be reviewed for compliance with the Standard Specifications and Standard Plans and other standards as may be adopted, and shall be adequate to handle a twenty four (24) hour, ~~twenty five (25)~~ one hundred (100) year storm event. The storm water drainage system shall be separate and independent of the sanitary sewer system. Storm sewers, where required, shall be designed by the Rational Method, or other methods as approved by the City Engineer, and a copy of design computations shall be submitted along with construction plans. Inlets shall be provided so that surface water is not carried across or around any intersection, nor for a distance of more than six hundred (600) feet in the gutter. When calculations indicate that curb capacities are exceeded, catch basins shall be used to intercept flow. Surface water drainage patterns shall be shown for each and every lot and block. ~~(11-5-14)~~ (7-1-15)

The applicant may be required, upon the recommendation

of the City Engineer, to carry away by pipe or open channel any spring or surface water that may exist either previously to, or as a result of the subdivision. Such drainage facilities shall be located in the road right-of-way where feasible, or in perpetual unobstructed easements of appropriate width, and shall be constructed in accordance with the Standard Specifications and Standard Plans. (11-5-14)

Underground storm drainage systems shall be constructed throughout the subdivision and be conducted to an approved out-fall. Inspection of facilities shall be conducted by the City Engineer. If a connection to a public storm water system will be provided the developer shall make arrangements for future storm water disposal by a public utility system at the time the plat receives final approval. Provision for such connection shall be incorporated by inclusion in the performance guarantee required for the subdivision plat.

No subdivision shall be approved unless adequate drainage will be provided to an approved drainage watercourse or facility. Applicants are encouraged to place storm water in a storm retention basin rather than sumps due to the propensity of the sumps to fail over time. Furthermore, sumps shall not be used in areas protected by the Payson City ground water protection plan. (9-1-04)

If a storm retention or detention basin is required in order to provide a system capable of handling the twenty-four (24) hour, ~~twenty five (25)~~ one hundred (100) year storm event, the applicant shall completely landscape the facility. In order to control erosion and protect the basin, the landscaping shall consist of the placement of grass sod on all slopes and the bottom of the facility together with appropriate trees and shrubs. The applicant shall submit a complete landscaping plan including the provision of an underground automatic sprinkling system. ~~(12-19-01)~~ (7-1-15)

#### **20.20.1 Accommodation of Upstream Drainage Areas**

Culverts or other drainage facilities shall be large enough to accommodate potential runoff from the entire upstream drainage area, whether inside or outside the subdivision. The developer shall hire a qualified engineer to determine the necessary size of the facility, based on the provisions of the Standard Specifications and Standard Plans assuming conditions of a one hundred (100) year storm event. The City Engineer must review and approve the design. If the facility must be enlarged to accommodate upstream development, the City shall contribute the absolute difference between the facility needed for the subdivision and the facility needed for upstream drainage. (11-5-14)

#### **20.20.2 Effect on Downstream Drainage Areas**

The developer's engineer shall also study the effect of the

subdivision on existing downstream drainage facilities outside the area of the subdivision. City storm drainage studies together with such other studies shall serve as a guide to needed improvements. Where it is anticipated that the additional runoff will overload an existing downstream drainage facility, the City Council may require the applicant to improve the facility in order to serve the subdivision.

#### **20.20.3 Areas of Poor Drainage**

When a plat is submitted for an area which is subject to flooding, the City Council upon recommendation of the City Engineer, may approve the subdivision provided that the applicant fills the affected area of the subdivision to an elevation sufficient to place the elevation of streets and lots at a minimum of two (2) feet above the elevation of the one hundred (100) year flood event, as determined by the City Engineer. The plat shall provide for an overflow zone along the bank of any stream or watercourse, in a width which shall be sufficient in time of high water to contain or move the water, and no fill shall be placed in the overflow zone nor shall any structure be erected or placed therein. The boundaries of the overflow zone shall be subject to approval by the City Engineer. Development in areas of extremely poor drainage will not be allowed.

#### **20.20.4 Flood Plain Areas**

The City Council may, upon recommendation of the City Engineer and when it deems it necessary for the health, safety, or welfare of the present and future population of the area and necessary to the conservation of water, drainage, and sanitary facilities, prohibit the subdivision of any portion of the property which lies within the one hundred (100) year flood plain of any stream or drainage course. These flood plain areas should be preserved from any and all destruction or damage resulting from clearing, grading, or dumping of earth, waste material, or stumps, except at the discretion of the City Council.

#### **20.20.5 Dedication of Drainage Easements**

Where a subdivision is traversed by a watercourse, drainage way, channel, river or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially to the lines of such watercourse, and of such width and construction adequate for the purpose. Where possible, it is desirable that the drainage be maintained by an open channel with landscaped banks and adequate width for maximum potential volume of flow.

Where topography or other conditions make the inclusion of drainage facilities within road rights-of-way impractical, perpetual unobstructed easements at least

twenty (20) feet in width for such drainage facilities shall be provided across property outside the road lines and with satisfactory access to the road. Easements shall be indicated on the Final Plat. Drainage easements shall be carried from the road to a natural watercourse or to other drainage facilities. When a proposed drainage system will carry water across private land outside the subdivision, appropriate drainage rights must be secured and indicated on the plat. (7-19-00)

The applicant shall dedicate to the City, either in fee or by drainage or conservation easement of land on both sides of existing watercourses, to a distance of fifty (50) feet, unless otherwise approved by the City Council. (11-3-10)

#### **20.20.6 Lot to Lot Drainage**

The City Engineer may require a complete drainage plan in any subdivision that the Engineer considers to potentially have lot to lot drainage problems, or potential drainage onto publicly owned property or public rights-of-way. The drainage plan shall be reviewed, at the developer's expense, by a qualified third party engineering firm to ensure that the following objectives are met:

1. Under the conditions of a twenty-four (24) hour, ~~twenty-five (25)~~ **one hundred (100)** year storm event, each lot must drain properly without causing drainage unto a downhill lot, public property or a public right-of-way. (7-1-15)
2. All necessary drainage facilities, including interior lot facilities must be provided.
3. All lot drainage must be transported to an approved storm water facility. (5-5-04)

The grading plan shall be approved as part of the subdivision and no building permit in a development with a drainage plan shall be issued unless the grading of the lot is completed in accordance with the grading plan and inspected and approved by the qualified third party engineering firm at the developer's expense. Specific lot to lot drainage requirements can be found in the Standard Specifications and Standard Plans of Payson City. (11-5-14)

### **20.21 Water Facilities**

- 20.21.1 Existing Systems
- 20.21.2 Pressurized Irrigation
- 20.21.3 Ownership of Facilities
- 20.21.4 Fire Hydrants
- 20.21.5 Proof of Water
- 20.21.6 Extension of Infrastructure

Necessary action shall be taken by the applicant to extend or create a safe water supply system for the purpose of providing a water supply capable of providing domestic water use and fire protection. All improvements, whether on-site or off-site, which provide direct benefit to the subdivision shall be constructed and paid for by the applicant. All transfer and conveyance of water and water rights shall be consistent with all applicable Payson City Resolutions and Ordinances, in particular Title 10 of the Payson City Code. No approval of a Final Plat will be issued until sufficient water for the proposed project has been transferred into the name of Payson City.

#### **20.21.1 Drinking Water System (1-18-06)**

Where a public water main is accessible, the applicant shall install adequate water facilities (including fire hydrants) subject to all relevant City and State specifications. All water mains shall be at least eight (8) inches in diameter. Water main extensions and water facility improvements shall be approved by the City Engineer and City Council. If a new water main line is required to service the new development, the applicant will be required to replace the insufficient water main line with an eight (8) inch line and connect existing users to the water main line.

Where a subdivision includes existing structures that are connected to City services, the applicant for subdivision approval shall be required to upgrade the existing connections from the main line to the meter, the meter itself, and from the meter to the dwelling to satisfy current standards. (2-7-07)

#### **20.21.2 Pressurized Irrigation**

All new subdivisions are required to install a pressurized irrigation system in accordance with City specifications, unless otherwise approved by the City Council upon finding that connection to the pressurized irrigation system is not in the best interest of the City as a whole. All water lines for the system shall be at least eight (8) inches in diameter. All facilities shall be approved by the City Engineer. Private facilities will be required to be so noted on the Final Plat and will be the responsibility of the applicant or owners of the development. (1-18-06)

#### **20.21.3 Ownership of Facilities**

Prior to approval of the Final Plat, a determination shall be made by the City Council about the location and extent of facilities to be maintained and owned by Payson City.

#### **20.21.4 Fire Hydrants**

Fire hydrants shall be required in all subdivisions. Fire