

APPENDIX 7: DRAINAGE REPORT OUTLINE

- (a) Report.
 - (i) Cover Sheet.
 - (A) Name of the Project.
 - (B) Owner's name and address.
 - (C) Developer's name and address.
 - (D) Engineer's name, address, Wyo PE #.
 - (E) Submittal date (and revision dates as applicable).
 - (ii) Site Location.
 - (A) Township, Range, Section, and Quarter Section.
 - (B) Existing and proposed streets, roads highways adjacent to and within the proposed development.
 - (iii) Property Description.
 - (A) Area in acres.
 - (B) Ground Cover, vegetation, site topography, and slopes.
 - (C) Soils Classification (NRCS).
 - (D) FEMA flood zones or low areas prone to flooding.
 - (E) Significant geologic features.
 - (F) Proposed land use.
 - (iv) Drainage Basins.
 - (A) On site and off site drainage basins size.
 - (B) Drainage basin characteristics, flow patterns, and paths.
 - (C) Existing and proposed land uses within basins.
 - (D) Discussion of existing channels/culverts upstream and downstream of project.
 - (v) Drainage Facility Design.
 - (A) Hydrology determined using rational method, SCS curve method, or other appropriate method approved by the Department.
 - (I) Design storm: 25-year, 24-hour.
 - (B) Drainage Channels and Swales.
 - (I) No bank or channel bottom erosion during design storm.
 - (II) Design storm contained within limits of the swale or channel. High water line must be delineated as drainage easement on plat.
 - (C) Roadside ditches.
 - (I) No ditch erosion during the design storm.
 - (II) Major design storm contained within ditch and road. No more than 8 inches of water allowed overtopping the road.
 - (D) Culverts.
 - (I) Must convey design storm with no overtopping allowed and no erosion at inlets or outlets.
 - (E) Storm drain piping/curb and gutter scenario.
 - (I) Contain design storm with no water in driving lanes.
 - (vi) Stormwater Detention.
 - (A) Historic flows for area.

- (B) Developed flows based on proposed land use for development.
 - (C) Analysis of historic vs developed flows and detention recommendations.
 - (D) Detention Facility sizing and design (if applicable).
 - (I) Allowable release rates.
 - (II) Storage required and provided.
 - (III) Water surface elevations.
 - (IV) Comparison of historic and developed discharge at critical design points on the site and downstream of site.
 - (V) Maintenance requirements of facility.
 - (VI) Developments within City of Gillette plan district boundary are required to meet all City of Gillette requirements for stormwater detention.
 - (vii) Additional Project specific information as need or as requested by the Department.
- (b) Drainage Plan exhibit.
- (i) 24" X 36" sheet(s).
 - (ii) Large scale for readability.
 - (iii) Title block and legend.
 - (iv) Limits of all drainage basins, including offsite basins if feasible.
 - (v) Existing and Proposed.
 - (A) Roads, streets, and highways.
 - (B) General drainage patterns and flow paths with arrows depicting flow direction.
 - (C) Topographic contours with 5-foot maximum intervals.
 - (D) Stormwater conveyance methods (ditches, culverts, swales, channels, etc.).
 - (vi) FEMA flood zones.
 - (vii) Proposed drainage easements.