



## LUDS Checklist

# Stormwater Drainage (Utility) Plan

### Purpose of the Drainage Plan

The Drainage Plan is required to provide the information needed for City staff to review the adequacy of the proposed drainage system and to evaluate possible impacts to the City's Stormwater Drainage System. The proposed drainage system must be designed to manage the amount and rate of the stormwater runoff from the site, as well as the quality of the runoff discharged from the site. The type or level of information may vary depending upon the scale, scope, or nature of the project and the components (Best Management Practices) of the proposed drainage system. The information shall be presented in sufficient detail to show dimensions, sizes and placement of all proposed drainage components.

### General Plan Requirements

- Title block with sheet number, designer contact information and dates(s) of submission/revision
- Minimum 24" x 36" sheet size, to scale:
  - For less than 3 acres, not less than 1" = 50'
  - For 3 or more acres, 1"=100'
- Scale, north arrow, and location map
- Property boundaries and property dimensions (including width, length, acreage, and frontage)
- Any existing or proposed streets
- The location, surface width, and right-of-way width of public rights-of-way, streets, drives, alleys, existing and proposed easements (including type), acceleration and deceleration lanes, pedestrian walkways, and loading areas, including relationship to existing rights-of-way

### Drainage Plan Specific Requirements

- A summary description of the proposed drainage system
- Topography on the site and within 50 feet of the site at two-foot contour intervals, referenced to a U.S.G.S. benchmark
- The location of any floodplain areas, bodies of water, wetlands, and all known natural resources or natural features to be preserved
- Building floor elevations and surface opening elevations

- The location and size of all surface and subsurface water drainage facilities, and county and/or local drainage ways, existing and proposed, with flow and runoff calculations
  - Site drainage data (pervious area, impervious area, pavement area)
  - Hydrology data (design storm, peak discharge rate, peak on-site storage volume)
  - Surface runoff storage facility data (volume, maximum depth, side slopes)
  - Runoff treatment data (runoff area being treated, peak treatment rate, treatment unit retained water volume, treatment unit surface area and flow length, and maximum sediment volume)
- The location, size, invert elevations, top elevation, and bottom elevation of existing and proposed pipes, catch basins, manhole or other drainage structures
- Emergency overland flow route from the site
- The location of all existing and proposed landscaping and vegetation, including number of trees and shrubs by species and caliper, or make reference to the Landscaping Plan
- The location of dumpsters, waste disposal areas, and loading facilities
- The approximate locations of all buildings, structures, and driveways on properties within 100 feet of any lot line of the subject properties

### Other Utility Plan Requirements

- Location of sanitary sewers and septic systems, existing and proposed
- Location and size of existing and proposed water mains, well sites, water service, storm sewer loads, and fire hydrants
- Location of above and below ground gas, electric, and telephone lines, existing and proposed
- Location of transformers and utility boxes