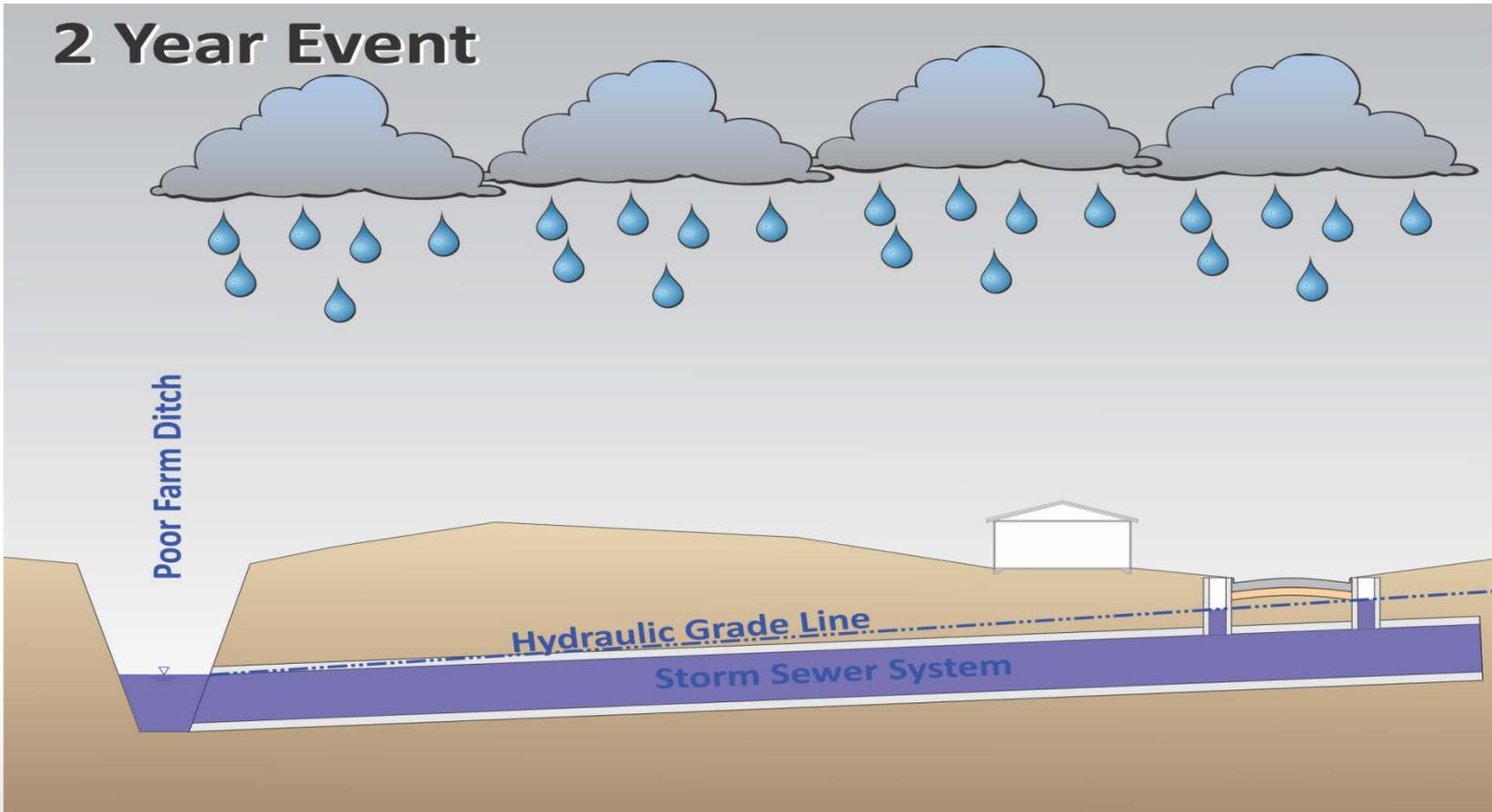


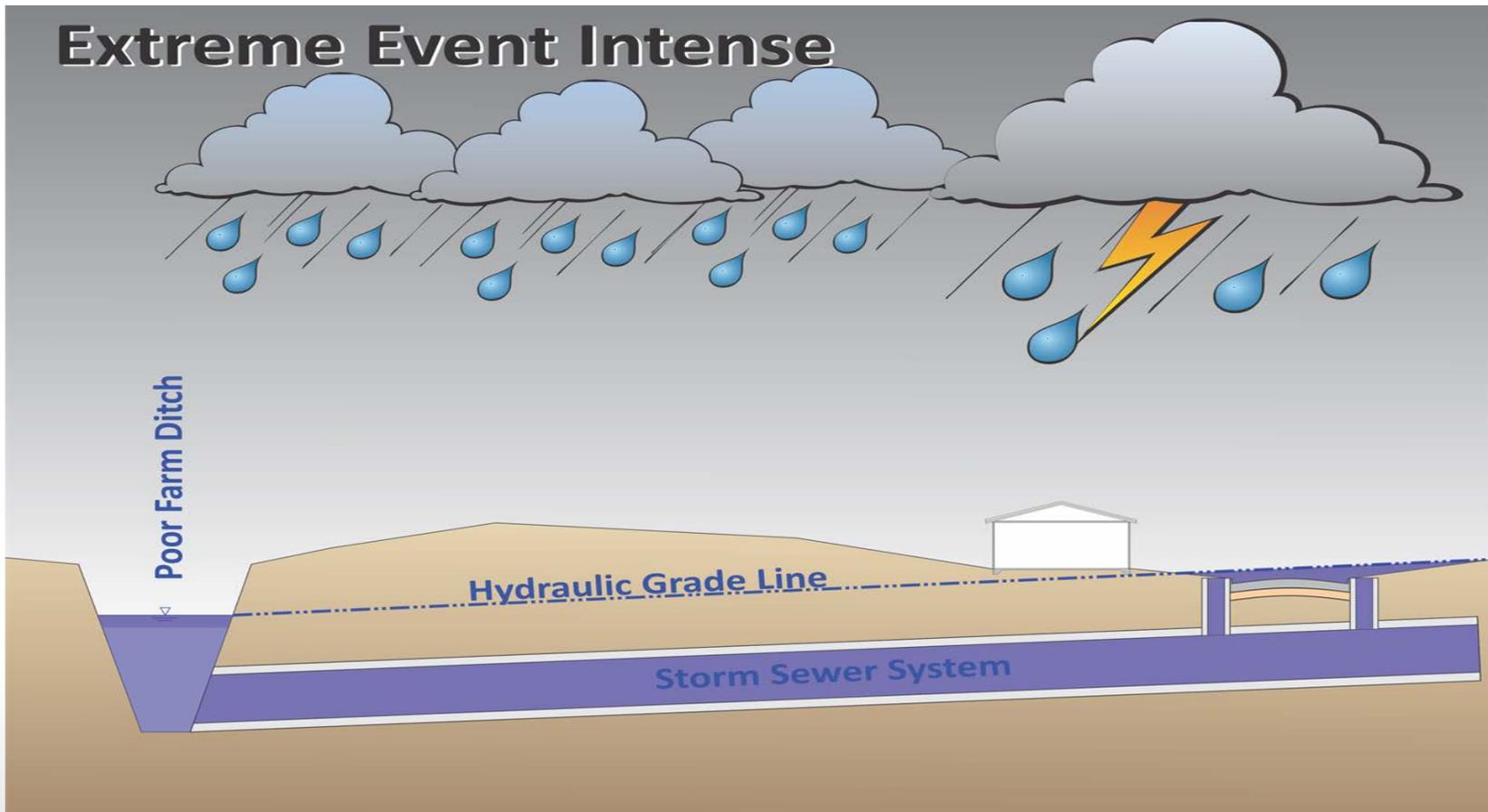
Drainage Concepts: Hydraulic Grade Line

The hydraulic grade line represents the level that water reaches along the length of a storm sewer system or channel. The hydraulic grade line elevation increases in the upstream direction. Differences in elevation are attributable to losses of energy, including friction between water and pipe as well as changes in geometry.



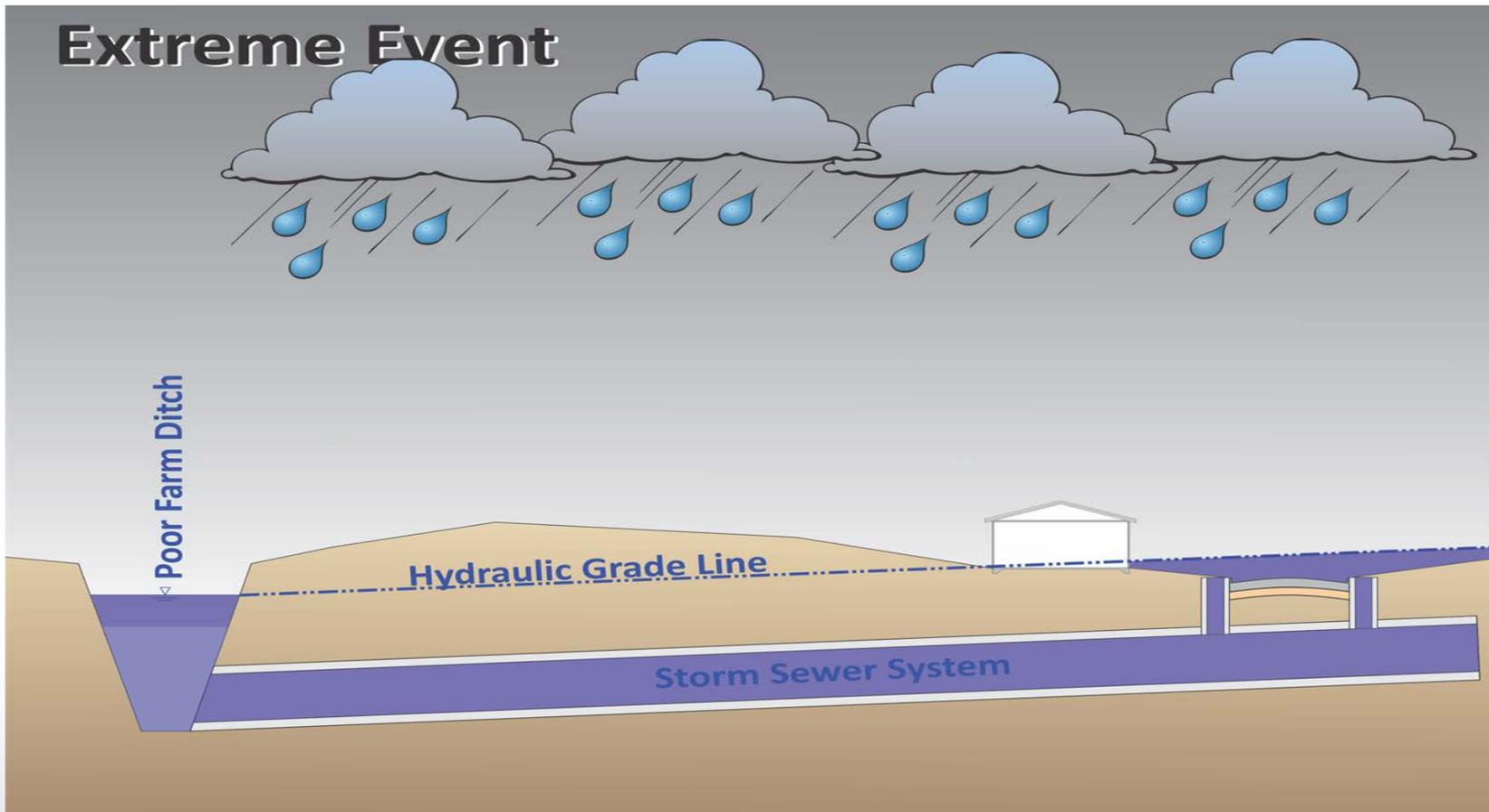
Drainage Concepts: Extreme Event

Extreme events exceed the design conditions used for a drainage system. Rainfall durations, depths, and intensities greater than the values used for system design can create ponding in streets and, in some instances, flooding of property and structures.



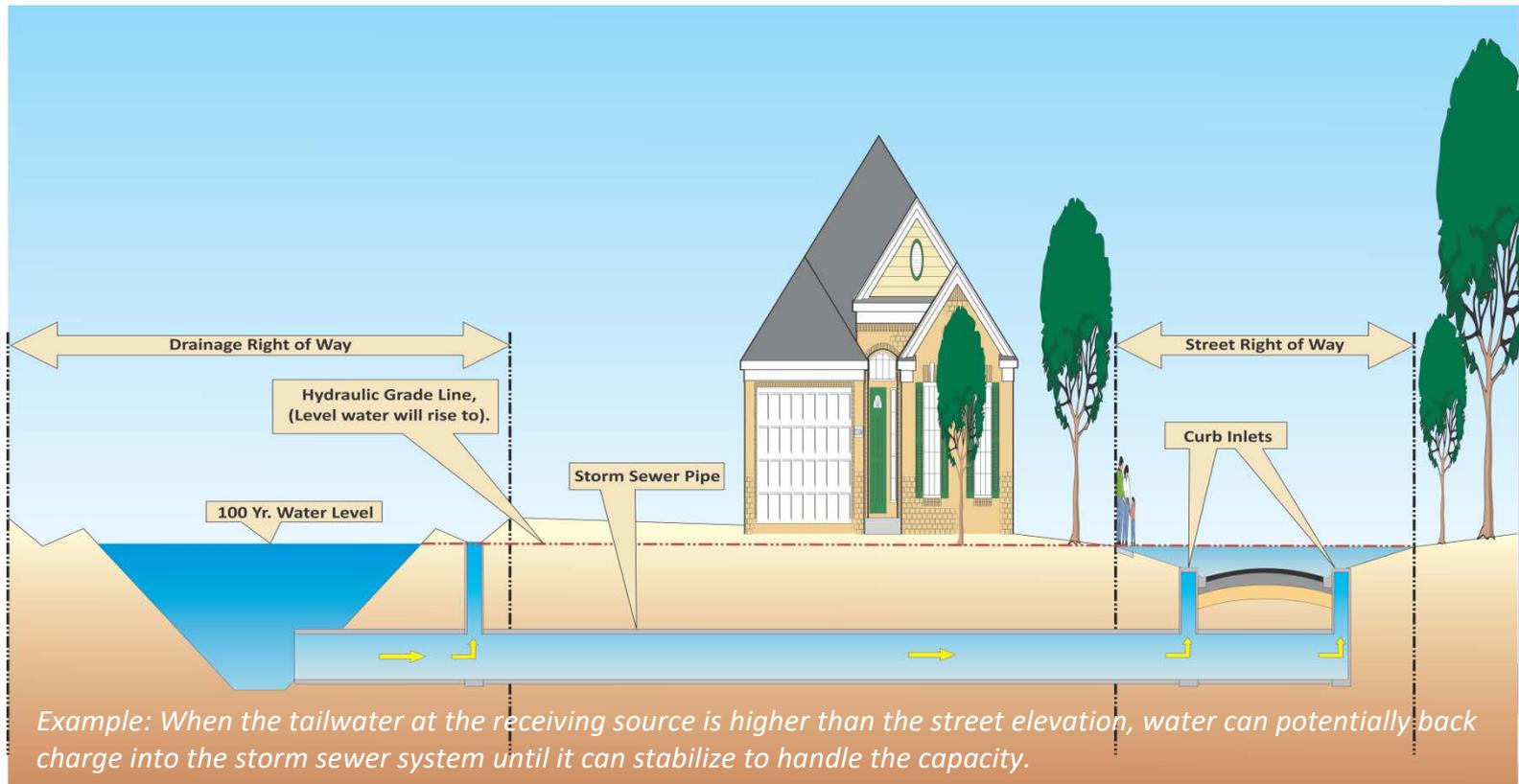
Drainage Concept: Tailwater

Tailwater refers to the level of water in a receiving stream or body of water. Increasing tailwater levels have the effect of reducing the effective capacity of a storm sewer system and increasing HGL elevations. In the project area, tailwater effects may be generated by flows in Poor Farm Ditch and Brays Bayou. Extreme tailwater may lead to significant flooding.



Drainage Concepts

Streets & Storm Sewers



Streets and storm sewers combine to drain storm runoff. Storm sewers collect and convey runoff from smaller, more frequent events. Streets convey surface runoff during more extreme, less frequent events.