

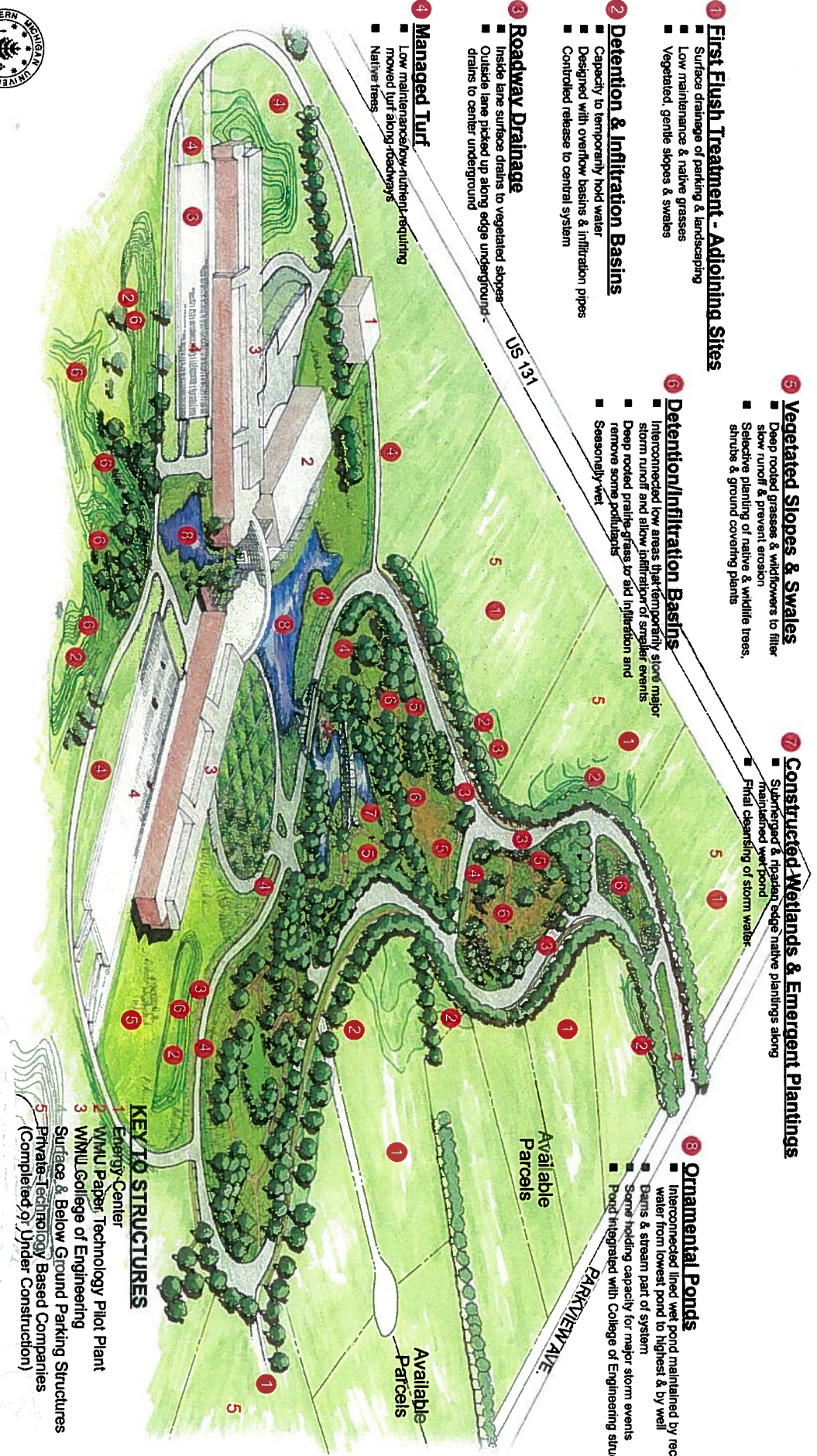


Storm Water Management Concept

Western Michigan University

College of Engineering Business Technology & Research Park

Kalamazoo, Michigan



- 1 First Flush Treatment - Adjoining Sites**
- Surface drainage of parking & landscaping
 - Low maintenance & native grasses
 - Vegetated, gentle slopes & swales

- 2 Detention & Infiltration Basins**
- Capacity to temporarily hold water
 - Designed with overflow basins & infiltration pipes
 - Controlled release to central system

- 3 Roadway Drainage**
- Inside lane surface drains to vegetated slopes
 - Outside lane picked up along edge underground drains to center underground

- 4 Managed Turf**
- Low maintenance/low-nutrient-requiring mowed turf along roadways
 - Native trees

- 5 Vegetated Slopes & Swales**
- Deep rooted grasses & wildflowers to filter slow runoff & prevent erosion
 - Selective planting of native & wildlife trees, shrubs & ground covering plants

- 6 Detention/Infiltration Basins**
- Interconnected low areas that temporarily store major storm runoff and allow infiltration of smaller events
 - Deep rooted prairie-grass for aid infiltration and remove some pollutants
 - Seasonally wet

- 7 Constructed Wetlands & Emergent Plantings**
- Submerged & riparian edge native plantings along maintained wet pond
 - Final cleansing of storm water

- 8 Ornamental Ponds**
- Interconnected lined wet pond maintained by recirculating water from lowest pond to highest & by well
 - Dams & stream part of system
 - Some holding capacity for major storm events
 - Pond integrated with College of Engineering structure

KEY TO STRUCTURES

- 1 Energy Center
- 2 WMU Paper Technology Pilot Plant
- 3 WMU College of Engineering
- 4 Surface & Below Ground Parking Structures
- 5 Private Technology Based Companies (Completed or Under Construction)

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