

Spencer Creek Stormwater Improvement Projects, Project SC-5, 6 & 7

City of St. Peters, Missouri

Projects SC-5, 6 & 7 combine to form a reach of Spencer Creek beginning at Jungermann Road and flowing downstream of Willott Road. Upstream of Willott Road (SC-5 and 6), the channel stability problems include severe bank erosion, along with flooding of adjacent properties. Parking lot and yard flooding are predicted for the 10-year storm, Jungermann Road is topped during the 50-year storm, and one habitable building and a parking lot are projected to flood during the 100-year storm. Flooding hazards continue downstream of Willott Road (SC-7), as well.



Intuition & Logic provided channel stabilization design for more than 3,000 feet of tributary channel. Stabilization measures included 2,100 ft of composite revetment bank protection, re-vegetated slopes and rock grade controls to halt channel incision. At the lower end of the project, a small, incising tributary was stabilized with 2 step grade control structures, lining the channel with rock and re-vegetating the slope. Sanitary crossings were stabilized by grade control structures to prevent future incision under the crossing structures. Existing storm structure outfalls were relocated to outlet perpendicular to the stream at the toe of slope.