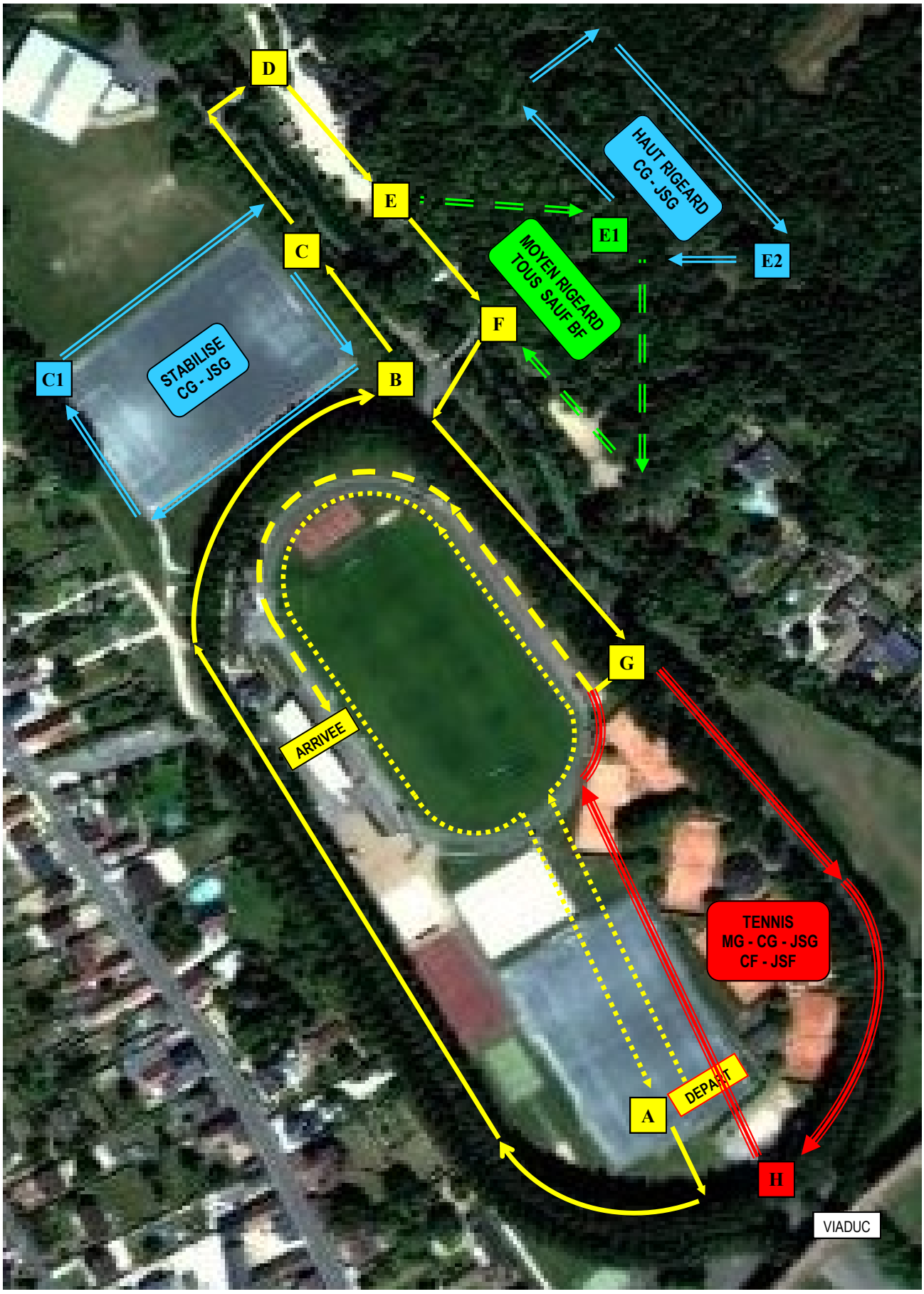CROSS DEPARTEMENTAL CIRCUITS