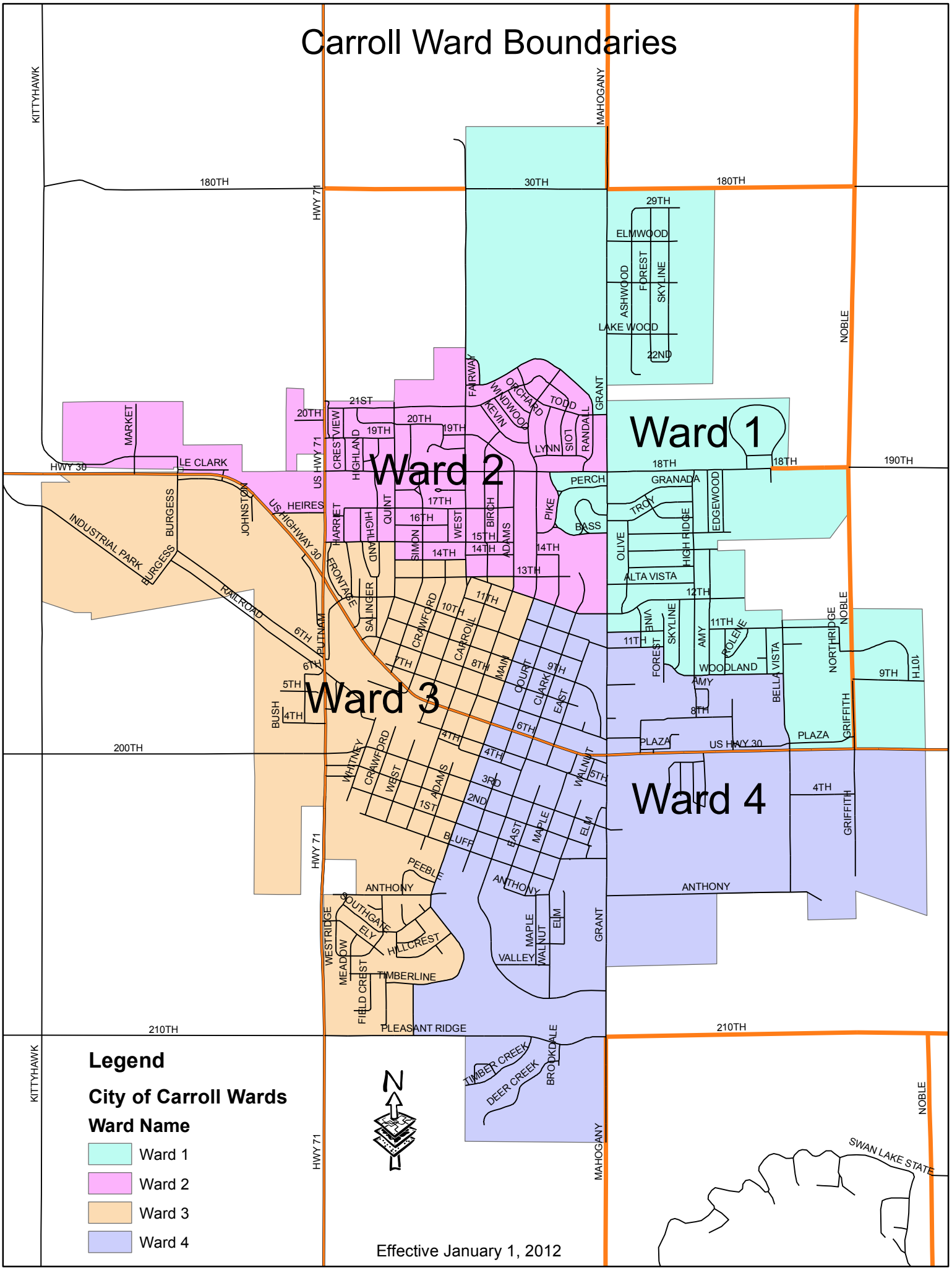Carroll Ward Boundaries