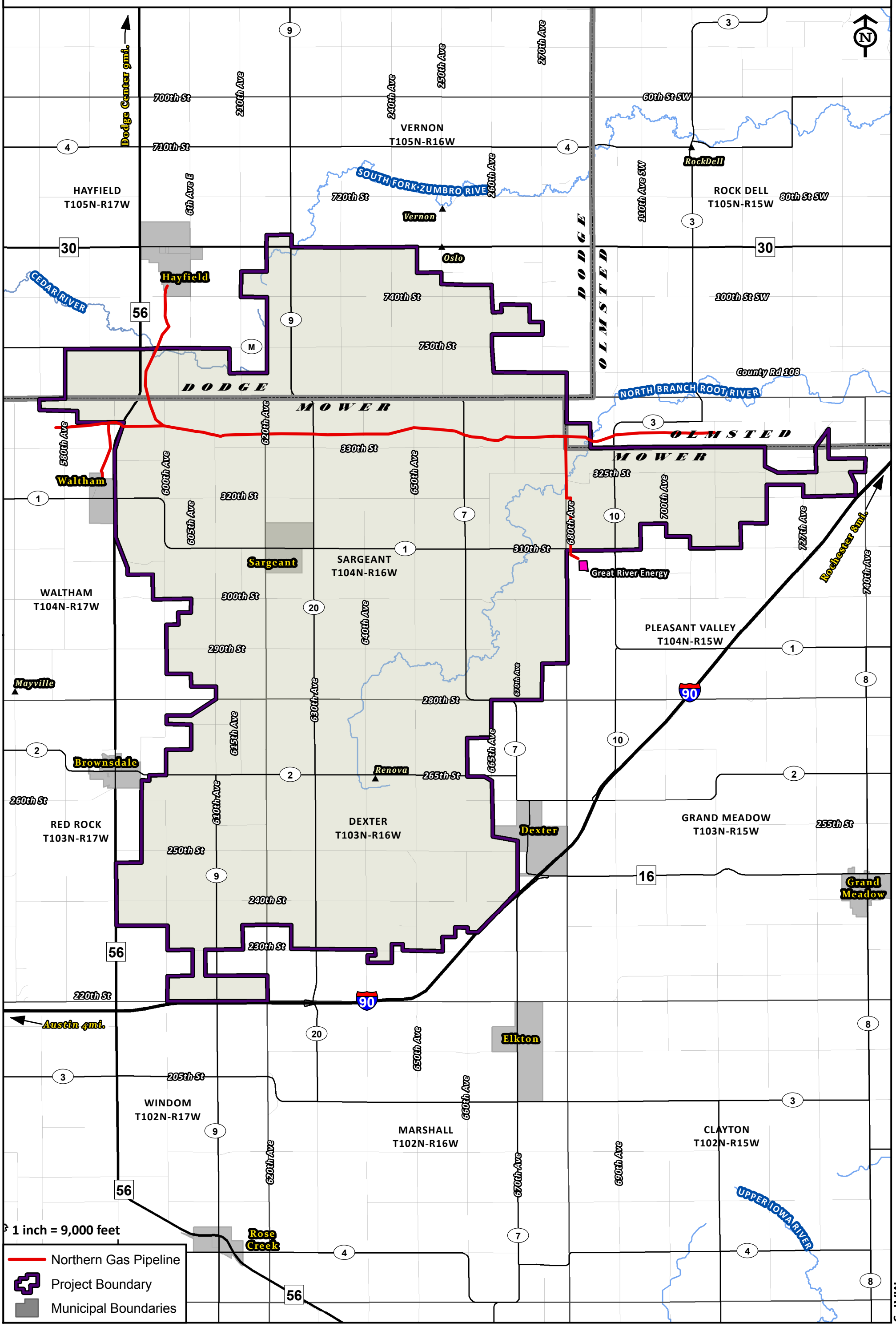MAP 9 - PIPELINE MAP