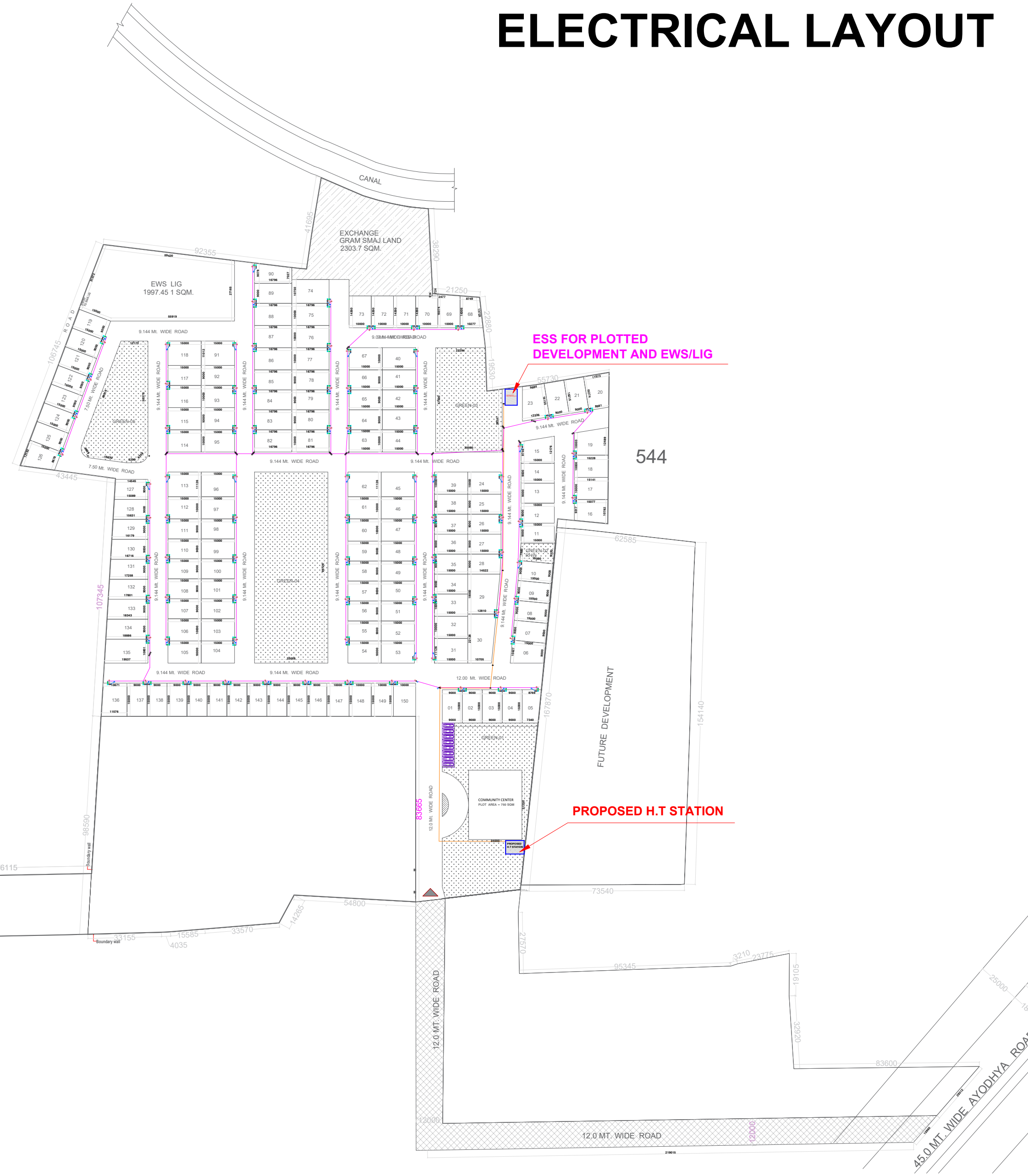ELECTRICAL LAYOUT