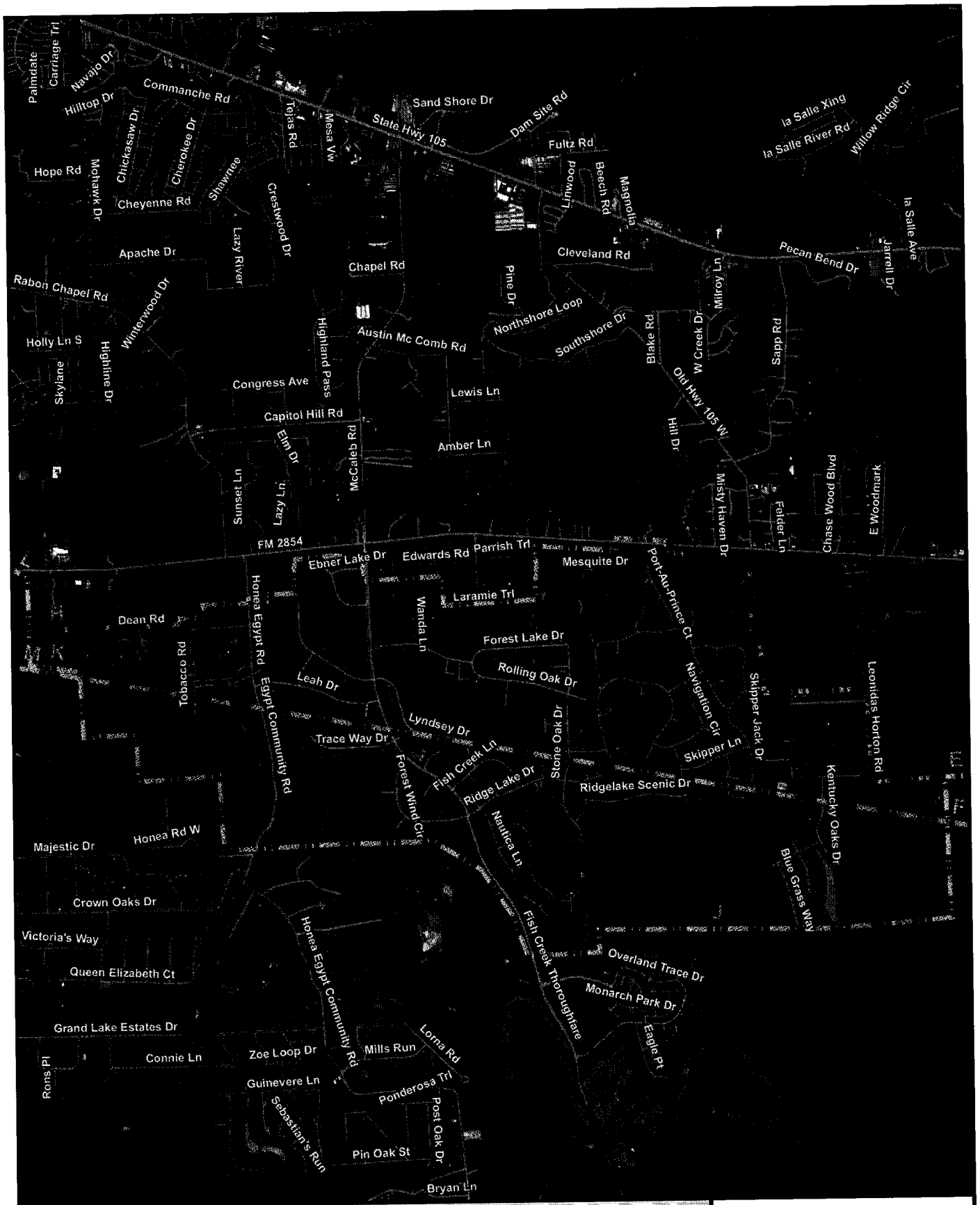


Figure 6-19
Link H Modification
Following Open House
Ponderosa to Grimes
230 kV Transmission
Line Project

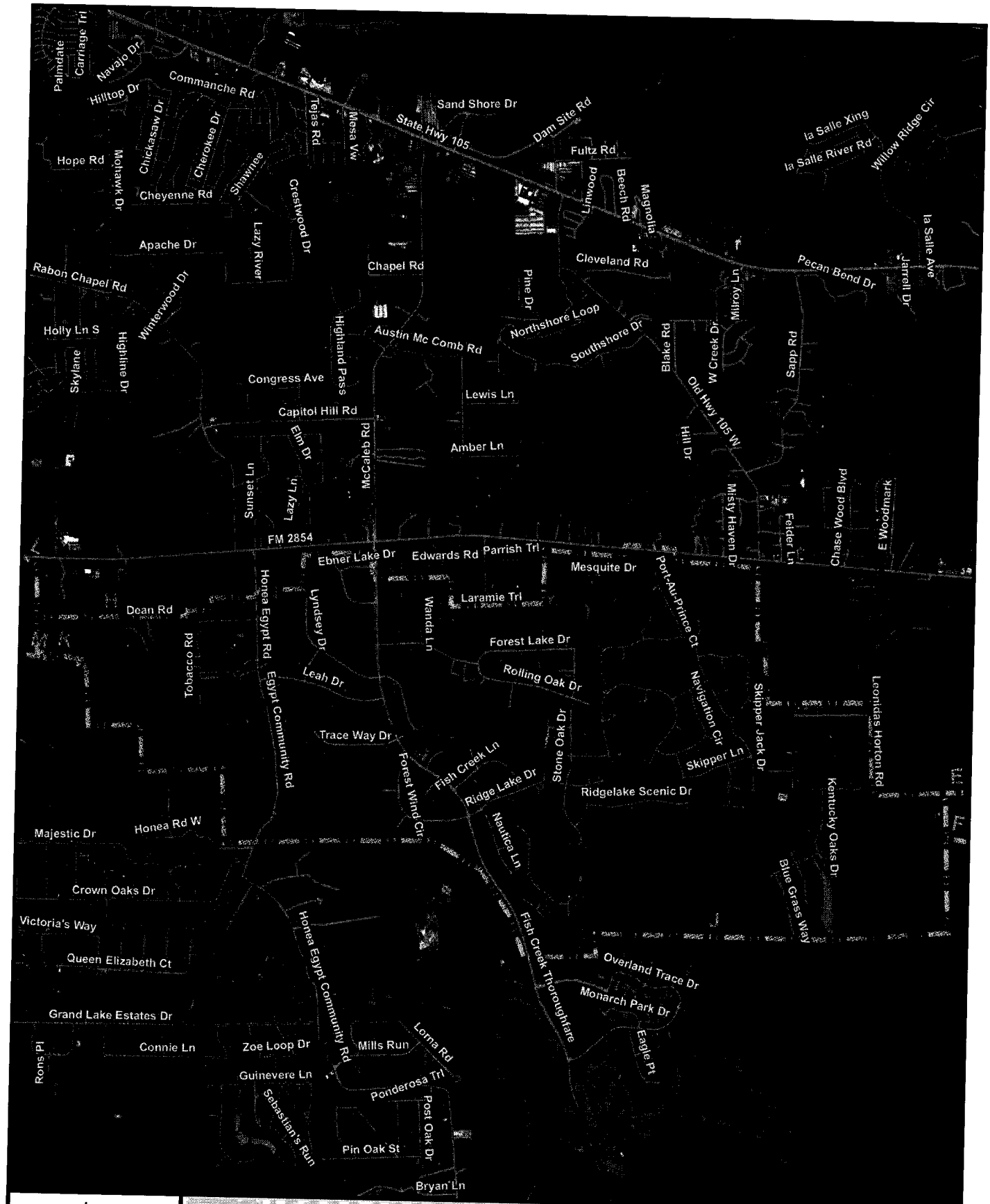


Figure 6-20
Link I Modification
Following Open House
Ponderosa to Grimes
230 kV Transmission
Line Project



149

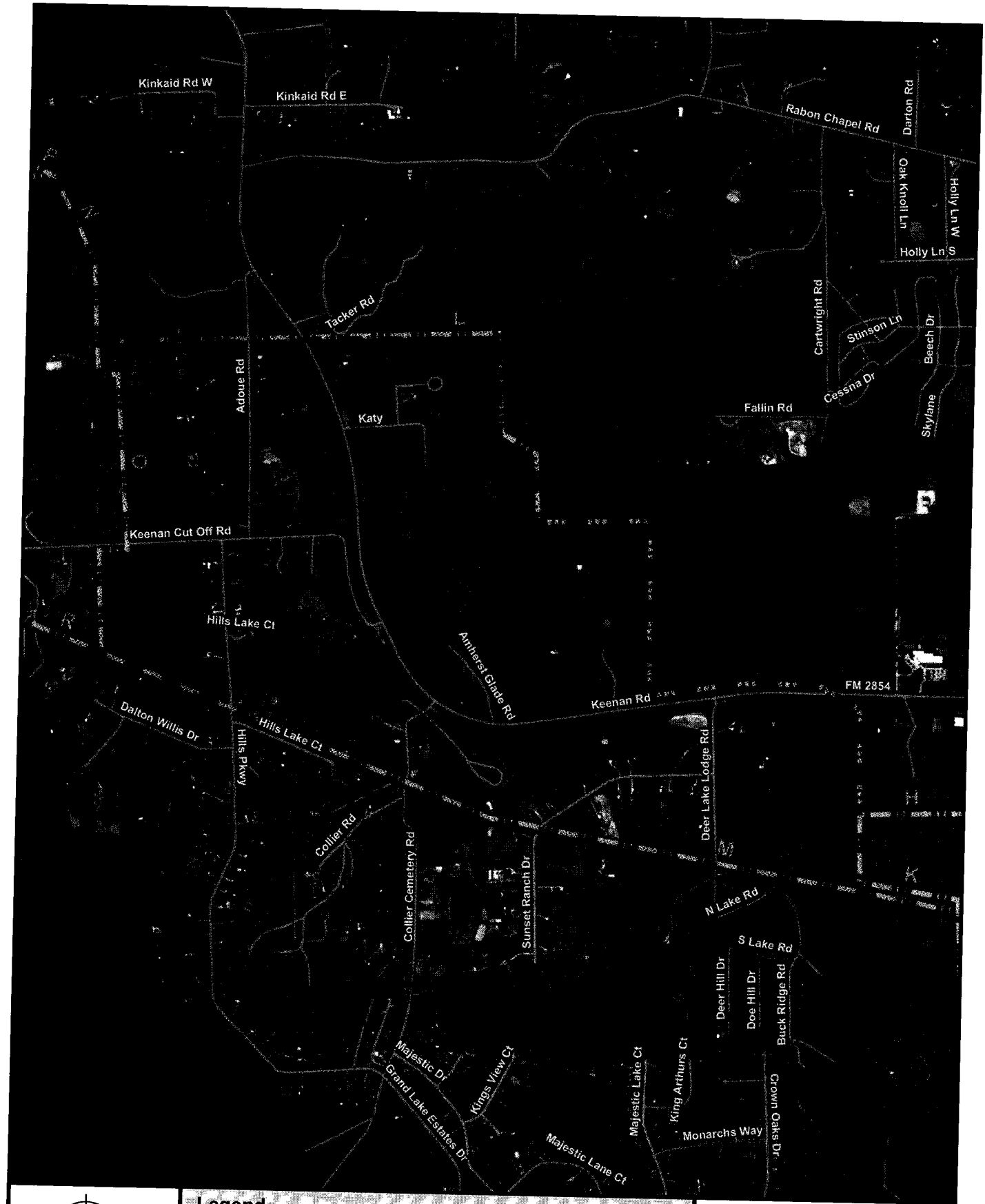


Figure 6-21
Link L Modification
Following Open House
Ponderosa to Grimes
230 kV Transmission
Line Project



150

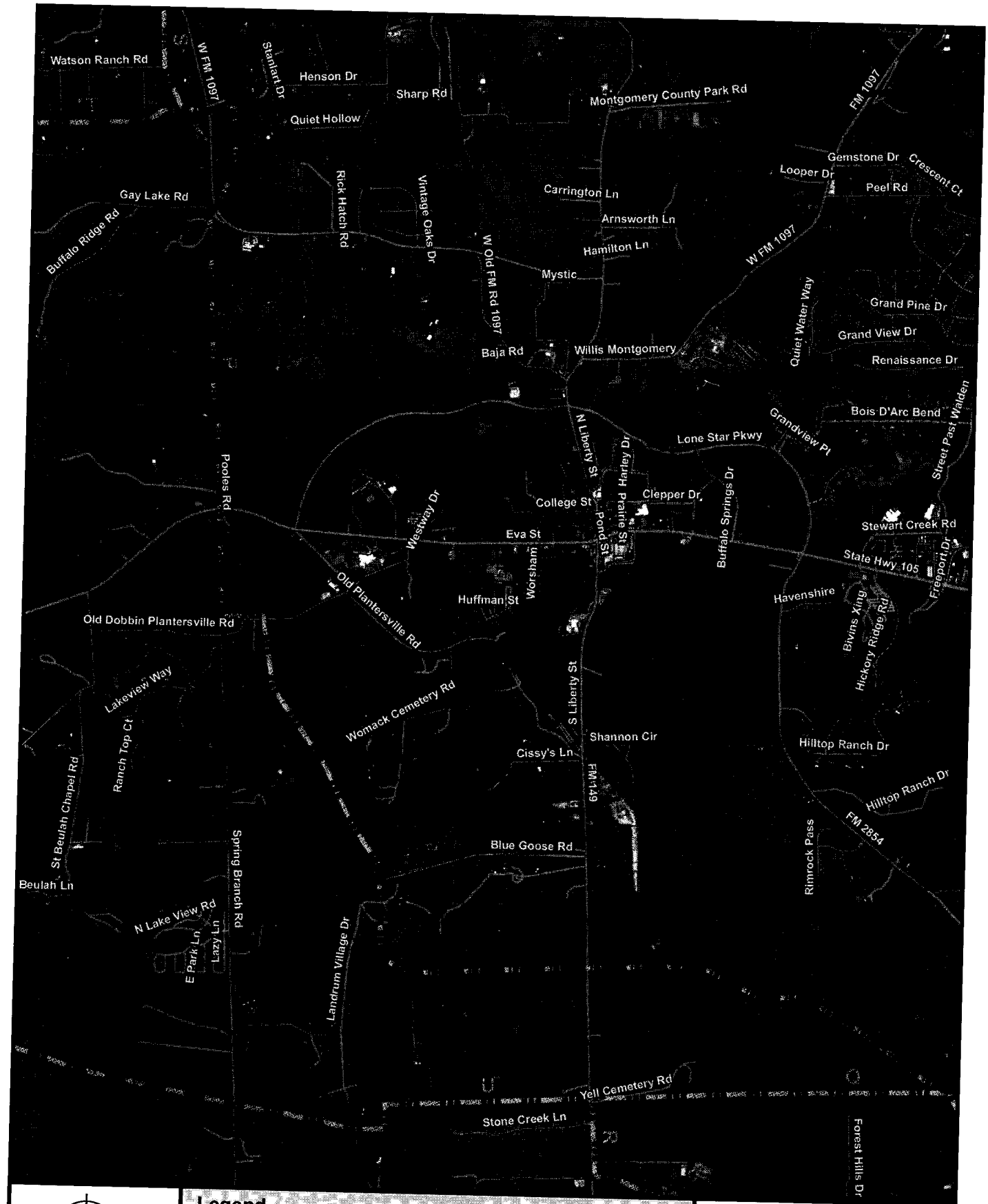


Figure 6-22
Link P Modification
Following Open House
Ponderosa to Grimes
230 kV Transmission
Line Project



151

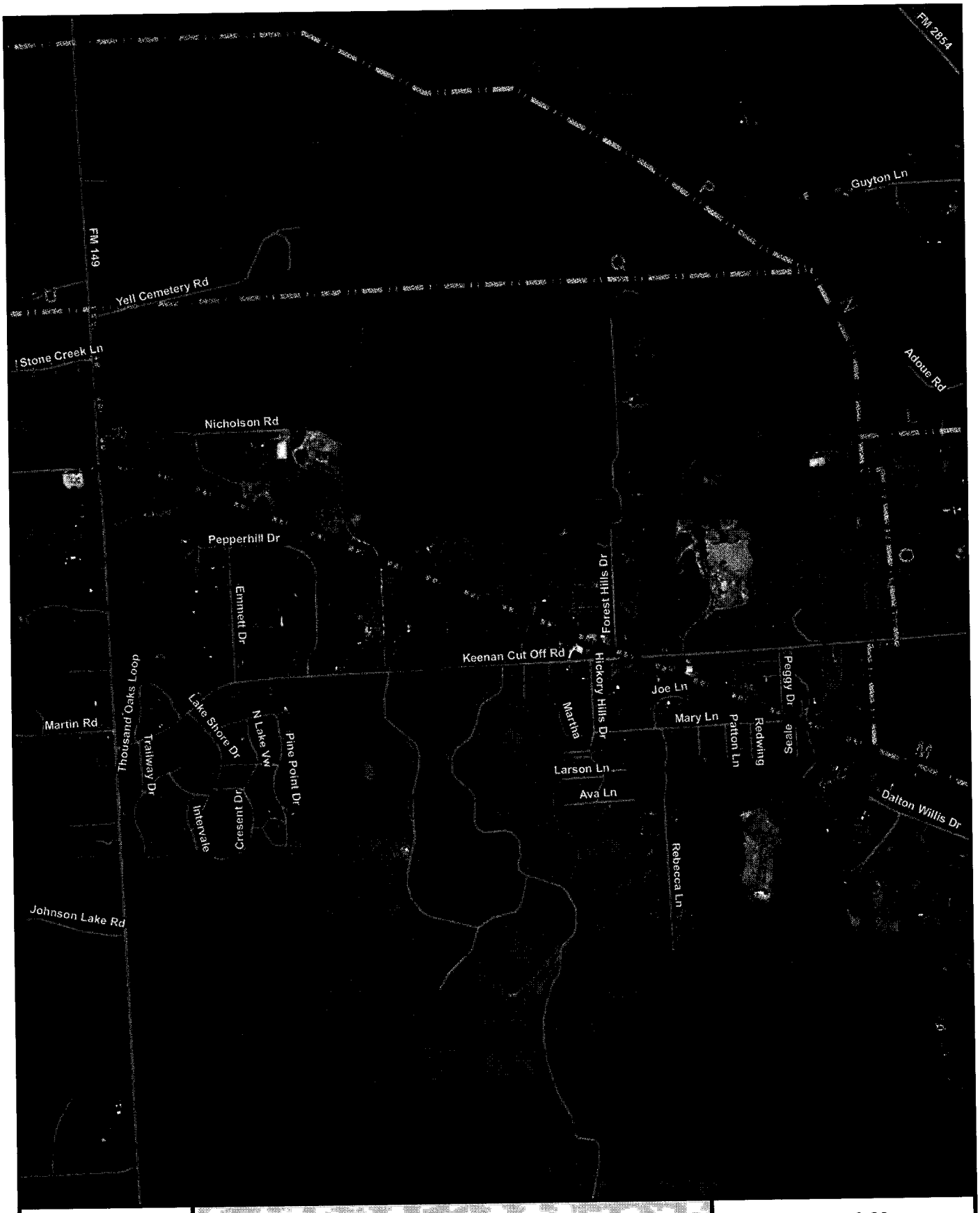


Figure 6-23
Link R Modification
Following Open House
Ponderosa to Grimes
230 kV Transmission
Line Project

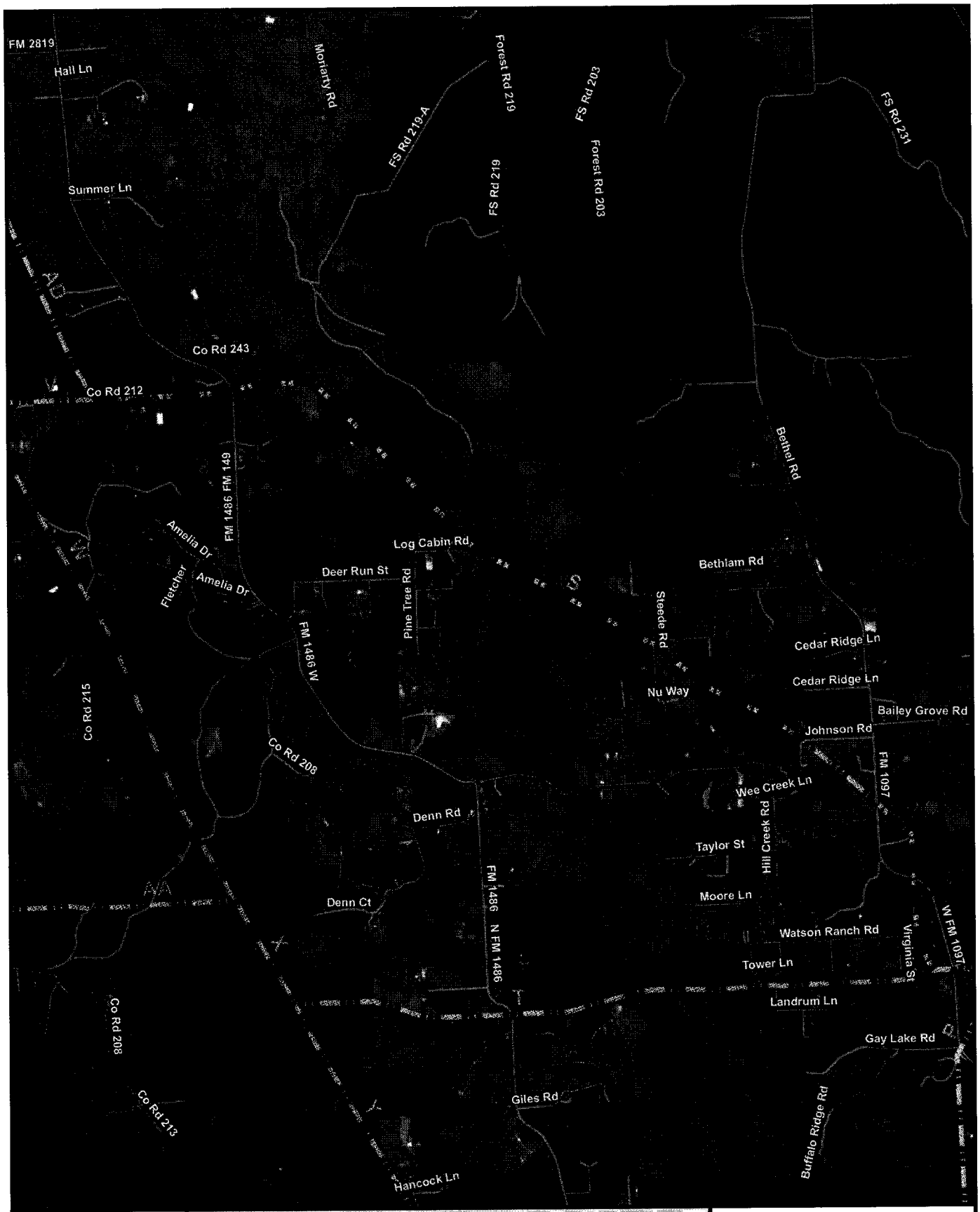


Figure 6-24
Link S Modification
Following Open House
Ponderosa to Grimes
230 kV Transmission
Line Project

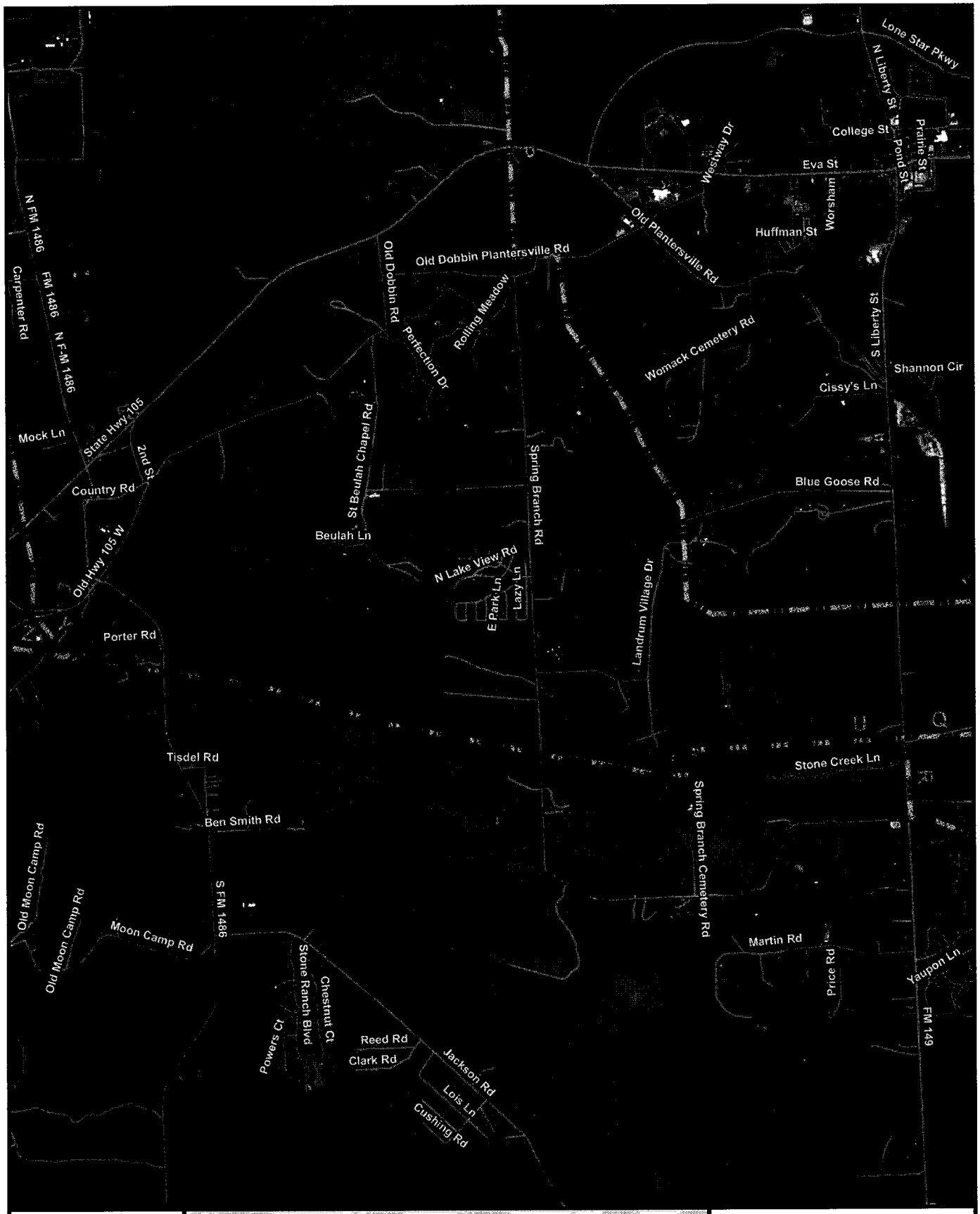


Figure 6-25
Link U Modification
Following Open House
Ponderosa to Grimes
230 kV Transmission
Line Project



154

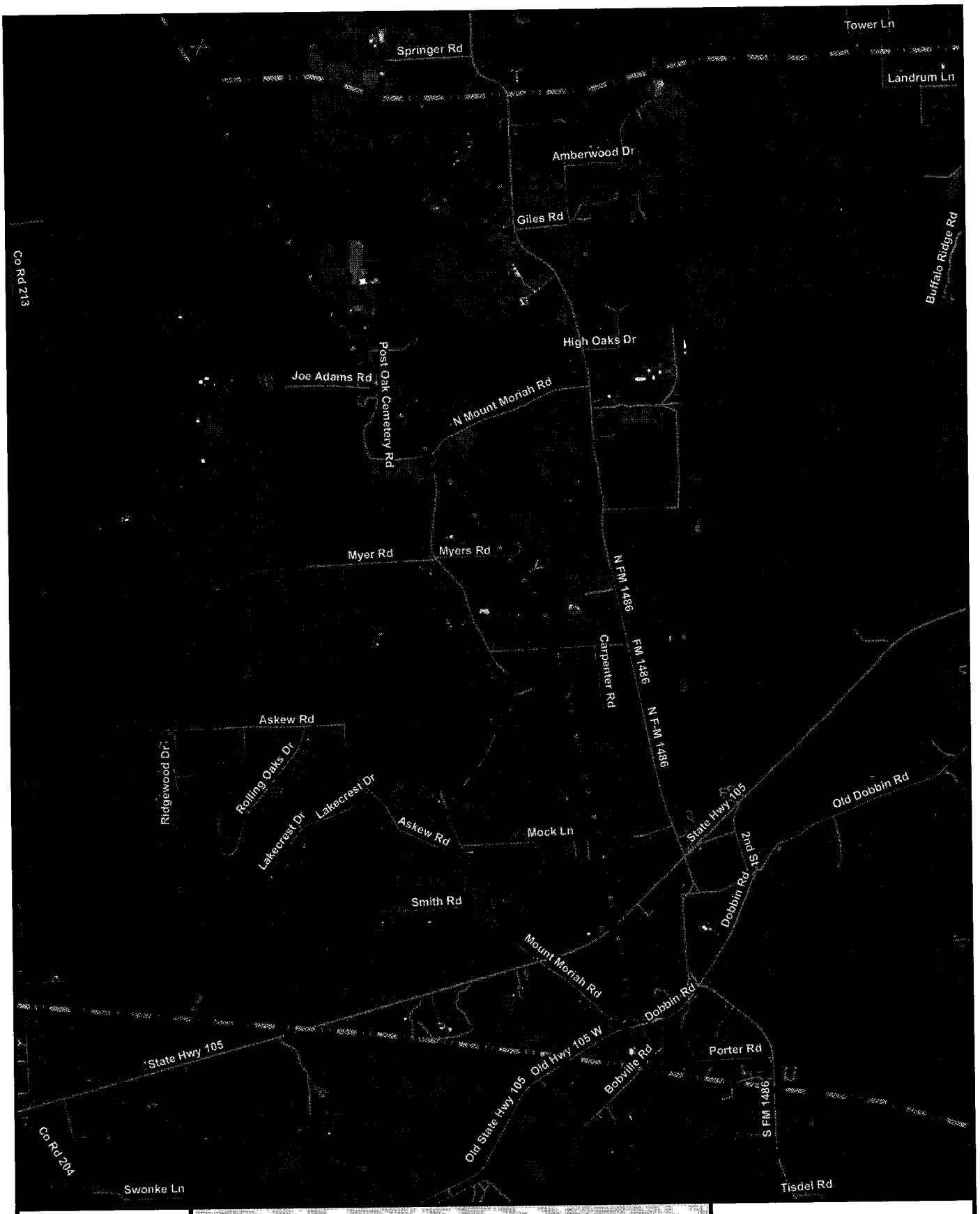


Figure 6-26
Link Y Modification
Following Open House
Ponderosa to Grimes
230 kV Transmission
Line Project



155

**Table 6-1: Composition of the Alternative Routes**

| Route | Route Links |
|---|---|
| 1 | A,C1,BD,C3,F,I1,I2,M,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 2 | A,C1,BD,C3,F,I1,I2,M,R1,BB,U2,Z,AB,AO |
| 3 | A,B,BI,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 4 | A,C1,BD,C3,F,I1,I2,M,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 5 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 6 | A,C1,BD,C3,F,I1,BL,M,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 7 | A,B,BI,BK,BN,L2,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 8 | A,B,BI,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 9 | A,B,BI,BK,BN,L2,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 10 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 11 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 12 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV, AX |
| 13 | A,B,D,F,I1,I2,M,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 14 | A,B,BI,BK,BM,H5,K1,M,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 15 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV, AX |
| 16 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV, AX |
| 17 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 18 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 19 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 20 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 21 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 22 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 23 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 24 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 25 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 26 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 27 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 28 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 29 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT, AX |
| 30 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 31 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 32 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 33 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 34 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 35 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 36 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 37 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |

| Route | Route Links |
|---|---|
| 38 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,O,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 39 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 40 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 41 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 42 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 43 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 44 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 45 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 46 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 47 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 48 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 49 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 50 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 51 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 52 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 53 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 54 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 55 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 56 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,O,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 57 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 58 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 59 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 60 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 61 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 62 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 63 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 64 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 65 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 66 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 67 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 68 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 69 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 70 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 71 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 72 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 73 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 74 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 75 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 76 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 77 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,O,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 78 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 79 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |

| Route | Route Links |
|---|---|
| 80 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 81 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 82 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 83 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 84 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 85 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 86 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 87 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 88 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 89 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 90 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 91 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 92 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 93 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 94 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 95 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 96 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 97 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 98 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 99 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 100 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 101 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 102 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,O,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 103 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 104 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 105 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 106 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT, AX |
| 107 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 108 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 109 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 110 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 111 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 112 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 113 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 114 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 115 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 116 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 117 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 118 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 119 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 120 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |

| Route | Route Links |
|---|---|
| 121 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 122 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 123 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 124 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,O,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 125 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 126 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 127 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 128 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 129 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 130 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 131 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 132 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 133 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 134 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 135 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 136 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 137 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 138 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 139 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 140 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 141 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,O,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 142 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 143 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 144 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 145 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 146 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 147 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 148 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 149 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 150 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 151 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 152 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 153 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 154 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 155 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 156 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 157 | A,B,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 158 | A,B,D,F,I1,BL,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 159 | A,B,D,F,I1,I2,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 160 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 161 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 162 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |

| Route | Route Links |
|---|---|
| 163 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 164 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 165 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 166 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 167 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 168 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 169 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,O,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 170 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 171 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 172 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 173 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 174 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 175 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 176 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 177 | A,B,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 178 | A,B,D,F,I1,BL,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 179 | A,B,D,F,I1,I2,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 180 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 181 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 182 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 183 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 184 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 185 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 186 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 187 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 188 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 189 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 190 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 191 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 192 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,O,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 193 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,O,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 194 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 195 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 196 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 197 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 198 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 199 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 200 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 201 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 202 | A,B,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 203 | A,B,D,F,I1,BL,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 204 | A,B,D,F,I1,I2,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |

| Route | Route Links |
|---|---|
| 205 | A,B,BI,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 206 | A,B,D,F,I1,BL,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 207 | A,B,D,F,I1,I2,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 208 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 209 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 210 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 211 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 212 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 213 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 214 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 215 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 216 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 217 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,O,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 218 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 219 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,Q,U1,U2,Z,AB,AO |
| 220 | A,B,BI,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 221 | A,B,D,F,I1,BL,M,O,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 222 | A,B,D,F,I1,I2,M,O,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 223 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 224 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 225 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 226 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 227 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ, AU,AV,AX |
| 228 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 229 | A,B,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 230 | A,B,D,F,I1,BL,M,O,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 231 | A,B,D,F,I1,I2,M,O,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 232 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 233 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 234 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 235 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 236 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 237 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 238 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 239 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 240 | A,C1,BD,C3,D,BI,BK,BN,L2,O,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 241 | A,B,D,F,I1,BL,K1,L1,L2,O,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 242 | A,B,D,F,I1,I2,K1,L1,L2,O,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 243 | A,C1,BD,C3,D,BI,BK,BN,L2,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 244 | A,B,D,F,I1,BL,K1,L1,L2,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 245 | A,B,D,F,I1,I2,K1,L1,L2,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |

| Route | Route Links |
|---|---|
| 246 | A,C1,BD,C3,F,I1,BL,M,O,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 247 | A,C1,BD,C3,F,I1,I2,M,O,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 248 | A,B,BI,BK,BM,H5,K1,M,O,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 249 | A,B,BI,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 250 | A,B,D,F,I1,BL,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 251 | A,B,D,F,I1,I2,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 252 | A,B,BI,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 253 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 254 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 255 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 256 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 257 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 258 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 259 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 260 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 261 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 262 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,O,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 263 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 264 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 265 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,O,R1,BB,U2,Z,AB,AO |
| 266 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,Q,U1,U2,Z,AB,AO |
| 267 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,Q,U1,U2,Z,AB,AO |
| 268 | A,B,BI,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 269 | A,B,BI,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 270 | A,B,D,F,I1,BL,M,O,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 271 | A,B,D,F,I1,I2,M,O,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 272 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 273 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 274 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 275 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 276 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 277 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 278 | A,B,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 279 | A,B,D,F,I1,BL,M,O,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 280 | A,B,D,F,I1,I2,M,O,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 281 | A,B,BI,BK,BM,H5,L1,L2,O,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 282 | A,B,BI,BK,BM,H5,L1,L2,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 283 | A,B,D,F,I1,BL,M,O,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 284 | A,B,D,F,I1,I2,M,O,N,Q,U1,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 285 | A,B,BI,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 286 | A,B,BI,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,AV,AX |
| 287 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |

| Route | Route Links |
|---|---|
| 288 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 289 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 290 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 291 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 292 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 293 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 294 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 295 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 296 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 297 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 298 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 299 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 300 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 301 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,O,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 302 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 303 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,R1,BB,U2,Z,AB,AO |
| 304 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,O,R1,BB,U2,Z,AB,AO |
| 305 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,Q,U1,U2,Z,AB,AO |
| 306 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT, AX |
| 307 | A,B,BI,BK,BN,L2,N,P1,P2,BE,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 308 | A,B,BI,BK,BM,H5,L1,L2,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 309 | A,B,D,F,I1,BL,M,O,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 310 | A,B,D,F,I1,I2,M,O,N,P1,AZ,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 311 | A,C1,BD,C3,F,I1,BL,M,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 312 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ, AU,AV,AX |
| 313 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU,A V, AX |
| 314 | A,B,BI,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 315 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 316 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 317 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 318 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 319 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 320 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 321 | A,B,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 322 | A,B,D,F,I1,BL,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 323 | A,B,D,F,I1,I2,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 324 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 325 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 326 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 327 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |

| Route | Route Links |
|---|---|
| 328 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 329 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 330 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 331 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 332 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 333 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 334 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 335 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 336 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,O,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 337 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,O,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 338 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 339 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 340 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,R1,BB,U2,Z,AB,AO |
| 341 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,O,R1,BB,U2,Z,AB,AO |
| 342 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BN,L2,N,Q,U1,U2,Z,AB,AO |
| 343 | A,B,BI,BK,BN,L2,N,P1,AZ,BF,P4,T,X,W,AC,AG,AK,AP,AT,AX |
| 344 | A,B,BI,BK,BN,L2,N,P1,P2,BE,BC,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 345 | A,B,D,F,I1,BL,M,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 346 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP,AT,AX |
| 347 | A,B,BI,BK,BN,L2,O,R1,BB,U2,Y1,Y2,X,W,AC,AG,AK,AP,AT,AX |
| 348 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 349 | A,B,BI,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 350 | A,B,D,F,I1,BL,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 351 | A,B,D,F,I1,I2,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 352 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 353 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 354 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 355 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 356 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 357 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 358 | A,B,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 359 | A,B,D,F,I1,BL,M,O,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 360 | A,B,D,F,I1,I2,M,O,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 361 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 362 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 363 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 364 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 365 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 366 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 367 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 368 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |

| Route | Route Links |
|---|---|
| 369 | A,C1,BD,C3,D,BI,BK,BN,L2,O,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 370 | A,B,D,F,I1,BL,K1,L1,L2,O,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 371 | A,B,D,F,I1,I2,K1,L1,L2,O,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 372 | A,C1,BD,C3,D,BI,BK,BN,L2,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 373 | A,B,D,F,I1,BL,K1,L1,L2,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 374 | A,B,D,F,I1,I2,K1,L1,L2,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 375 | A,C1,BD,C3,F,I1,BL,M,O,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 376 | A,C1,BD,C3,F,I1,I2,M,O,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 377 | A,B,BI,BK,BM,H5,K1,M,O,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 378 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,O,R1,BB,U2,Z,AB,AO |
| 379 | A,B,D,F,G,H1,H2,H3,BJ,BK,BN,L2,N,Q,U1,U2,Z,AB,AO |
| 380 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,O,N,Q,U1,U2,Z,AB,AO |
| 381 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 382 | A,B,BI,BK,BN,L2,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AR,AY |
| 383 | A,B,BI,BK,BM,H5,L1,L2,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 384 | A,B,D,F,I1,BL,M,O,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 385 | A,B,D,F,I1,I2,M,O,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 386 | A,C1,BD,C3,D,BI,BK,BN,L2,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 387 | A,B,D,F,I1,BL,K1,L1,L2,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 388 | A,B,D,F,I1,I2,K1,L1,L2,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 389 | A,C1,BD,C3,F,I1,BL,M,O,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 390 | A,C1,BD,C3,F,I1,I2,M,O,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 391 | A,B,BI,BK,BM,H5,K1,M,O,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 392 | A,B,BI,BK,BM,H5,L1,L2,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 393 | A,B,D,F,I1,BL,M,O,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 394 | A,B,D,F,I1,I2,M,O,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 395 | A,B,BI,BK,BM,H5,L1,L2,O,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 396 | A,B,BI,BK,BM,H5,L1,L2,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 397 | A,B,D,F,I1,BL,M,O,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 398 | A,B,D,F,I1,I2,M,O,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 399 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,O,R1,BB,U2,Z,AB,AO |
| 400 | A,C1,BD,C3,D,BI,BK,BM,H5,L1,L2,N,Q,U1,U2,Z,AB,AO |
| 401 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AF,AH,AL,AP, AT,AX |
| 402 | A,B,BI,BK,BN,L2,N,P1,P2,BE,BF,P4,T,X,AA,AB,AO |
| 403 | A,B,BI,BK,BM,H5,L1,L2,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 404 | A,B,D,F,I1,BL,M,O,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 405 | A,B,D,F,I1,I2,M,O,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 406 | A,B,D,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU, AV,AX |
| 407 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,AZ,BF,P4,S1,BG,S3,AD,AI,AN1,BH,AQ,AU, AV,AX |
| 408 | A,B,BI,BK,BM,H5,K1,M,R1,BB,U2,Y1,Y2,X,AA,AB,AO |

| Route | Route Links |
|---|---|
| 409 | A,C1,BD,C3,D,BI,BK,BM,H5,K1,M,R1,BB,U2,Z,AB,AO |
| 410 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,O,R1,BB,U2,Z,AB,AO |
| 411 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,O,R1,BB,U2,Z,AB,AO |
| 412 | A,C1,BD,C3,F,I1,BL,K1,L1,L2,N,Q,U1,U2,Z,AB,AO |
| 413 | A,C1,BD,C3,F,I1,I2,K1,L1,L2,N,Q,U1,U2,Z,AB,AO |
| 414 | A,B,BI,BK,BN,L2,N,P1,AZ,BF,P4,T,X,AA,AB,AO |
| 415 | A,B,BI,BK,BN,L2,N,P1,P2,BE,BC,Y2,X,AA,AB,AO |
| 416 | A,B,D,F,I1,BL,M,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 417 | A,B,D,F,I1,I2,M,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 418 | A,B,BI,BK,BN,L2,O,R1,BB,U2,Y1,Y2,X,AA,AB,AO |
| 419 | A,B,BI,BK,BN,L2,N,Q,U1,U2,Y1,Y2,X,AA,AB,AO |
| 420 | A,C1,BD,C3,D,BI,BK,BN,L2,O,R1,BB,U2,Z,AB,AO |
| 421 | A,B,D,F,I1,BL,K1,L1,L2,O,R1,BB,U2,Z,AB,AO |
| 422 | A,B,D,F,I1,I2,K1,L1,L2,O,R1,BB,U2,Z,AB,AO |
| 423 | A,C1,BD,C3,D,BI,BK,BN,L2,N,Q,U1,U2,Z,AB,AO |
| 424 | A,B,D,F,I1,BL,K1,L1,L2,N,Q,U1,U2,Z,AB,AO |
| 425 | A,B,D,F,I1,I2,K1,L1,L2,N,Q,U1,U2,Z,AB,AO |
| 426 | A,C1,BD,C3,F,I1,BL,M,O,N,Q,U1,U2,Z,AB,AO |
| 427 | A,C1,BD,C3,F,I1,I2,M,O,N,Q,U1,U2,Z,AB,AO |
| 428 | A,B,BI,BK,BM,H5,K1,M,O,N,Q,U1,U2,Z,AB,AO |
| 429 | A,B,BI,BK,BN,L2,N,P1,AZ,BC,Y2,X,AA,AB,AO |
| 430 | A,B,BI,BK,BM,H5,L1,L2,O,R1,BB,U2,Z,AB,AO |
| 431 | A,B,BI,BK,BM,H5,L1,L2,N,Q,U1,U2,Z,AB,AO |
| 432 | A,B,D,F,I1,BL,M,O,N,Q,U1,U2,Z,AB,AO |
| 433 | A,B,D,F,I1,I2,M,O,N,Q,U1,U2,Z,AB,AO |
| 434 | A,C1,BD,C3,F,I1,BL,M,R1,BB,U2,Z,AB,AO |
| 435 | A,C1,BD,C3,F,G,H1,H2,H3,BJ,BK,BM,H5,K1,M,O,N,P1,P2,BE,BF,P4,S1,BG,S3,V,AC,AG,AK,AP,AT,AX |
| 436 | A,B,BI,BK,BM,H5,K1,M,R1,BB,U2,Z,AB,AO |
| 437 | A,B,D,F,I1,BL,M,R1,BB,U2,Z,AB,AO |
| 438 | A,B,D,F,I1,I2,M,R1,BB,U2,Z,AB,AO |
| 439 | A,B,BI,BK,BN,L2,O,R1,BB,U2,Z,AB,AO |
| 440 | A,B,BI,BK,BN,L2,N,Q,U1,U2,Z,AB,AO |

# 7.0 ENVIRONMENTAL IMPACTS OF THE ALTERNATIVE ROUTES

Burns & McDonnell completed a screening methodology using the 36 quantified route criteria shown in Appendix C for each of the identified 440 potential alternative routes. The routing criteria included differing units of measure such as length, acres, and total number of particular resources. In addition, no single route had the lowest impact value for all of the measured criteria. For example, while a particular route may have been the shortest, it may have ranked higher in other criteria. With this level of complexity resulting from the number of routes and variations on the individual criteria measurements, it is difficult to conduct a route-by-route comparison to identify a particular route or routes that would minimize overall potential impacts. Therefore, as part of an overall evaluation to compare all of the routes and variable criteria together, Burns & McDonnell used a statistical z-score analysis to transform the variable measurements into comparable units, to screen the route alternatives, and to identify a set of proposed routes warranting further investigation and comparison.

Once the criteria totals for each route were determined, a z-score was calculated for each criterion for each route. The z-score analysis uses the mean (or average) value within a set of data to compare with each individual route value, and to determine the degree of difference (standard deviation) each route value is from the mean. For example, the total length of all the routes would be quantified and the mean value for the entire set of route lengths would be determined. Next, the total length for each route would be compared to that mean value. If the individual route length was equal to the mean value, the z-score would be zero, as there would be no difference. If the total length was greater than the mean, the z-score would be a positive number; if the total length was less than the mean, the z-score would be a negative number. In addition, the further below or above the mean a route value is for a particular criterion, the more negative/positive the corresponding z-score. Z-scores were determined for each criterion of each route.

Following calculation of the z-scores, which transformed the data into like, or comparable, units, Burns & McDonnell developed a total route score by adding all of the z-scores for the 36 criteria together. Both positive and negative z-scores were included in the total z-score. In the resulting route z-scores, positive total z-scores would indicate that the overall route would have a greater environmental impact than the average for all routes, while negative total z-scores would have a smaller than average overall environmental and social impact. This analysis allowed Burns & McDonnell to identify 14 routes within 3 corridors that warranted further evaluation. The resulting total z-scores for the 14 alternative routes ranged from a low of -17.85 to a high of 3.8.

Using the total route z-scores, Burns & McDonnell was able to rank all 440 alternative routes and then identify the top-ranking Northern/Eastern, Southern/Western and Central routes. This resulted in a total of 14 routes comprised of only 31 links (out of 69 remaining links). These 14 routes (proposed routes) are listed in Table 7-1 with their corresponding route data for all 36 analyzed criteria.

Following is a description of the evaluation of the potential impacts to the natural, environmental, and human resources in the study area from the construction and operation of the proposed project. Alternative routes indicated below were discussed in Section 4.0. For the purpose of evaluating the routes, the alternative routes were grouped into five main corridors (Northern/Eastern, Southern/Western and Central). Route 1 and Route 13 comprise the Southern/Western and Central corridors (Figures 7-1 and 7-13). Route 2 comprises follows the Southern/Western corridors (Figure 7-2). Route 3 comprises the Northern/Eastern corridors, and Route 4 and Route 6 comprises, part of the Central, and the (using the connecting Link AA) Northern/Eastern corridor (Figures 7-3, 7-4, and 7-6). Route 5 follows the Southern/Western, Northern/Eastern, and then uses connecting Link T to follow the Central corridor (Figure 7-5). Route 7 follows the Northern /Eastern corridor, then uses connecting Link U1 to follow the Southern/Western and then Central corridors (Figure 7-7). Route 8 and Route 12 follow the Northern/Eastern corridors then use the connecting Link V to follow the Central corridor (Figure 7-8 and 7-12). Route 9 uses Northern/Eastern and Central corridors (Figure 7-9). Route 10 uses the Southern/Western and Northern/Eastern corridors (Figure 7-10). Route 11 uses the Southern/Western and Northern/Eastern corridors to connecting Link AF, and then uses the Central corridor (Figure 7-11). Route 14 uses the part of the Northern/Eastern corridor then uses Link BM, Link H5, and Link K1 to cross to the Southern/Western corridor. Route 14 continues along the Southern/Western corridor and uses the Central corridor to reach Grimes Substation (Figure 7-14). Appendix C summarizes the environmental and land use data evaluated by Burns & McDonnell professionals with expertise in the different environmental and land use disciplines. Although every potential connector link may not have been included in the above described geographic grouping of the alternative routes, Appendix C includes environmental and land use data for all links and the 14 alternative routes.

# OVERSIZED DOCUMENT(S)

**TO VIEW**

**OVERSIZED DOCUMENT(S)**

**PLEASE GO TO**

**CENTRAL RECORDS**

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## 7.1 Natural Resources

### 7.1.1 Topography

Land cover impacts along the alternative routes have been broken down into three categories, agricultural rangeland, agricultural cropland, and wooded areas. Wetlands and open water have been taken into consideration for land cover, but are discussed in the wetlands section that follows. Existing Entergy ROW has also been taken into consideration for land cover, as this will involve little to no land cover impacts in areas where the ROW has been well maintained. These land cover impacts were determined based primarily on a review of aerial photography and field reconnaissance.

Agricultural rangeland is the most desirable land cover for transmission line routing based on the low potential for impacts. Agricultural croplands are the next desirable land cover, and wooded areas are the least desirable as these areas would have to be cleared within the ROW. When evaluating wooded land cover, Routes 1, 2, 4, 6, and 13 have the shortest length through wooded land, with a total crossing ranging from 5.1 miles to 7.9 miles. The remaining routes have a total wooded land cover crossing ranging from 9.8 miles to 17.4 miles. Route 2 has the least woodland cover overall at 5.1 miles; Route 12 has the most woodland cover overall at 17.4 miles.

Construction and operation of the transmission line would not result in any significant impacts to the existing physiography. Land clearing would consist only of tree and shrub removal. Any impact to topography would be from the use of heavy construction equipment and excavation required for the construction of new foundations and support structures, which would be minimal and temporary in nature.

Utilizing existing Entergy ROW, where possible, is most desirable based on the low potential for impacts in areas that already have a well-maintained ROW. Using existing ROW prevents the need for additional clearing of wooded land. When evaluating routes for percentage of existing Entergy ROW utilized, Routes 1, 7, 13, and 14 have the highest percentages, with total percentages ranging from 70.9% to88.1%. The remaining routes have a percentage of existing ROWs ranging from 3.6% to 56.1 %. Route 10 and Route 11 have the lowest percentage of total length within existing ROW, both at 3.6%; Route 13 has the highest percentage of total length within existing ROW at 88.1%.

### 7.1.2 Soils

The project would result in temporary, minor adverse impacts to the soils within the ROW during construction activities; thus, no significant impacts to soils are anticipated along any of the alternative routes. The primary impacts to soils would result from the use of heavy construction equipment and

excavation required for construction of new foundations and support structures. These activities, only temporary in nature, could cause soil compaction, ruts or tracks from vehicle movement, and mixing of the soil profile.

During construction of the proposed transmission line, some erosion could occur within the cleared ROW, resulting in localized increases in soil loss and perhaps sedimentation of area streams. In order to minimize erosion and sedimentation a storm water pollution prevention plan (SWPPP) and any applicable permits will be obtained prior to any soil disturbance.

Erosion control measures employed during construction would include seeding, placement of staked straw bales or silt fences on sloped areas, and other appropriate best management practices to control erosion and runoff. To the extent possible, construction crews would avoid soil-disturbing activities during excessively wet weather.

Only a small portion of the study area is considered prime farmland by the USDA. All of the alternative routes traverse soils that are considered by the USDA as prime farmland. Routes 1, 2, and 6 traverse the most prime farmland, and Route 5 traverses the least amount of prime farmland. Aside from potential construction-related erosion, impacts to prime farmland soils are anticipated to be minor and occur only at the base (a small footprint) of transmission line structures. Transmission lines are not considered to be a conversion of farmland because the land can still be used after construction.

### 7.1.3 Hydrology

Hydrology impacts along the alternative routes were considered and evaluated by the number of streams and rivers crossed by each route and the length of streams parallel to the routes (within 100 ft). These potential impacts were determined using digital hydrology data from the USGS National Hydrology Dataset (NHD 2012).

Every route crosses Lake Creek, identified by TPWD as being an Ecologically Significant Stream Segment (ESSS). No other ESSS's exist within the study area. The transmission line is anticipated to be able to span all creeks. If structures are required to be placed within any creek, placement would be designed to minimize any impacts. Entergy will also obtain a SWPPP and any associated permits prior to any soil disturbance to reduce the chance of impacting the water quality of these streams during construction.

Routes 10 and 12 generally cross the fewest number of streams and rivers. Both have 42 total crossings and parallel between 3,759 and 4,312 ft of streams. Routes 1, 5, 7, 8, 13, and 14 parallel streams for the

shortest lengths, between 1313 and 1515ft, and these routes cross between 43 and 51 total streams. Routes 2, 3, 4, 6, 9, and 11 cross between 46 and 56 total streams and parallel between 2,456 ft and 5,861 ft of streams.

Construction and operation of the project would not significantly impact surface water features along the proposed transmission line. Short-term, minor water quality impacts may occur during the construction of the proposed project. Such impacts would be associated with soils from disturbed areas being transported into adjacent surface waters during storm events. Appropriate measures will be taken to reduce these impacts. Entergy would obtain the appropriate permits from the USACE for any work crossing streams and rivers.

Impacts to groundwater and aquifers are not expected to occur from construction of the proposed project. Precautions will be taken during construction to ensure the proper control and handling of any petroleum products or other chemicals that may be needed during construction.

If structures of the approved route would be located in a Federal Emergency Management Agency (FEMA)-designated 100-year floodplain, planning, structure siting, engineering design, and any necessary permitting will help mitigate construction activities impacting flood channels and therefore should not significantly affect flooding. FEMA indicated that floodplain coordination and permitting will be required prior to construction (Appendix A)

TPWD indicated in its April 8, 2013, letter to Burns & McDonnell (Appendix A) that routes should avoid multiple crossings of creeks, streams, and rivers and paralleling waterways in order to minimize impacts to riparian areas. This was taken into account when evaluating the alternative routes, all routes cross or parallel a stream, however, multiple crossings as well as the length parallel to waterways will be avoided where reasonably possible.

### 7.1.4 Vegetation

Construction and operation of the project would result in the loss of vegetation within the transmission line ROW due to clearing. The majority of the vegetation that would be impacted by the proposed project consists of post oak, willow oak, water oak-blackgum forest, elm-hackberry woods, the bald cypress-water tupelo swamp, the young forest/grassland, and the pine-hardwood forest. Generally, clearing in these areas would be limited to providing access for construction and maintenance unless the vegetation could grow tall enough to interfere with the lines. Tree species, such as oaks, sumac, and juniper, which can grow tall enough to interfere with the lines, and occur in or immediately adjacent to the transmission

line ROW would have to be cleared and/or trimmed to protect the integrity of the line. Minimal impacts from the placement of structures would occur in cultivated areas.

TPWD indicated in its April 8, 2013, letter (Appendix A) that impacts to native vegetation should be minimized to the extent feasible during construction. If native vegetation must be impacted, TPWD recommends mitigating for the loss by revegetating areas disturbed by project activities with site-specific native species. Routes were identified that utilize or parallel existing, cleared ROW reducing the potential impacts to vegetation.

### 7.1.5 Threatened and Endangered Plant Species and Communities

Potential impacts to federally listed threatened or endangered plant species are not anticipated. TPWD listed Navasota ladies'-tresses (*Spiranthes parksii*), Navasota false foxglove (*Agalinis navasotensis*), Texas meadow rue (*Thalictrum texanum*), and branched gayfeather (*Liatris cymosa*) as species that occur within 10 miles of the study area. TPWD-listed Navasota ladies'-tresses and Texas meadow rue are also known to occur within the study area, but are not known to exist within the proposed ROW of any of the alternative routes. Three natural plant communities, little bluestem Indiangrass series, loblolly pine-post oak-blackjack oak/farkleberry forest series, and overcup oak series are known to be within 10 miles of the study area, but are not known to exist within the proposed ROW of any of the alternative routes. Therefore, effects to state-listed plants or plant communities are not anticipated.

### 7.1.6 Wetlands

Potential wetland impacts along the alternative routes have been broken down into three categories, forested/scrub-shrub, emergent, and open water (lakes, ponds, and playas). These potential areas were determined based on a review of aerial photography, USFWS NWI maps, USDA NAIP infrared imagery, and topography maps.

From a wetlands perspective, Route 3 and Route 8 have the least potential impacts with a total of approximately 545 ft across forested/scrub-shrub wetlands, emergent wetlands, and open water. Route 12 crosses approximately 693 ft of wetlands, and Route 10 and Route 11 cross 720 ft. The remaining routes have the greatest length across a wetland, ranging from approximately 2,309 ft to 5,375 ft.

To minimize impacts to wetlands areas, the transmission line will be designed to avoid or span wetland areas to the extent possible. Very few of the wetlands along the routes exceed the typical span of the transmission structures. Entergy would obtain the appropriate permits from the USACE for any work within wetlands.

### 7.1.7 Wildlife

Construction and operation of the transmission line could result in some temporary adverse impacts to wildlife, primarily from the removal of large trees within or near the proposed project that could provide feeding, shelter, or nesting habitat for some species. Impacts to most species would be temporary and short-term during construction and would consist primarily of displacement and disturbance. Some less mobile species occurring along the transmission line could be directly impacted and movements between segmented habitats could be temporarily impeded due to noise and human presence. Additional temporary disturbance could occur during future maintenance of the transmission line. To the extent possible, waterways will be spanned or avoided to minimize impacts to aquatic species.

TPWD indicated in its April 8, 2013, letter (Appendix A) that transmission lines should be located as far from wetlands and open water as possible to avoid potential collisions by waterfowl and other bird species. TPWD also indicated that transmission lines adjacent to these areas should be buried when feasible, and bird flight diverter markings should be installed when overhead lines are used. There are no nearby waterfowl areas along any of the alternative routes and thus no significant impact is expected to these species.

### 7.1.8 Threatened and Endangered Animal Species

Potential impacts to threatened and endangered animal species were determined by reviewing data from the Texas Natural Diversity Database (TXNDD 2012), operated by TPWD, as well as discussions with both USFWS and TPWD personnel. Correspondence letters from TPWD can be found in Appendix A of this document. Within 10 miles of the study area there have been several documented sightings of the red-cockaded woodpecker and one documented sighting of a bald eagle. Within the study area there are several documented sightings of the red-cockaded woodpecker, four sightings of bald eagles, and one sighting of the Louisiana pine snake. Throughout construction, appropriate measures will be taken to avoid any disturbance of these species.

None of the routes cross documented areas of federally threatened or endangered species and no impacts to any federally threatened or endangered species are anticipated from construction of the proposed project along any of the alternative routes.

TPWD made several recommendations in its April 8, 2013, letter (Appendix A) pertaining to threatened and endangered animal species. As a generality, TPWD recommends the avoidance of impacts to all threatened and endangered wildlife, habitat, and food supply. Entergy will implement this recommendation.

For the whooping crane, TPWD recommends precautions are taken to avoid potential impacts. TPWD also recommends that construction of lines near wetlands or other potential stopover sites should be avoided. They state, if placement of lines near potential stopover sites is unavoidable, lines placed in areas that are or could be frequently used by cranes should be marked with bird flight diverters. There are no known areas along any of the alternative routes that are frequented by whooping cranes and thus no impact to the species is anticipated.

For the interior least tern, TPWD recommends bird flight diverter markings be used in order to minimize bird strikes where impacts are unavoidable. Entergy would use bird flight diverter markings in areas where interior least terns may be found.

For alternative routes within or near colonial waterbird rookeries, TPWD recommends construction activities should be scheduled when the birds are not present, particularly after nesting activities have ceased, where impacts are unavoidable. TPWD recommends surveys should be conducted prior to construction to determine if any colonial waterbird rookeries exist within or near the approved route ROW. TPWD also states that with proper construction timing, construction impacts to colonial waterbirds are expected to be minimal and the use of bird flight diverter markings would reduce the chance of bird strikes on the line following construction.

## 7.2 Summary of Natural Resources

Several natural resources have been evaluated to determine both the possibility of ecological and natural resource impacts from the proposed transmission project. Considering natural resources as a whole, Route 1 and Route 13 cross the least amount of woodland, they have the least number of streams crossed, and the shortest amounts parallel to streams/rivers when compared to the other alternative routes. These alternative routes fall in the middle of the evaluation for length through forested/shrub-scrub wetlands, through emergent wetlands, and open water, but these factors do not outweigh the other benefits of the routes. Route 13 has the greatest length within existing Entergy ROW at 88.1%, and Route 1 follows with 87.7%. Although these routes have the least potential to impact natural resources, it is not anticipated that use of any of the alternative routes would significantly impact or alter the natural resources within the study area.

## 7.3 Impacts on Human Resources

This section contains a discussion of the potential impacts of the project on the human resources found along the alternative routes including land use, infrastructure, and socioeconomics. The primary criteria considered to measure potential land use impacts from this project included overall route length, length

within existing ROW, potential impacts to agriculture, proximity to habitable structures, length parallel to existing corridors (including apparent property boundaries), and potential impacts to park/recreational areas.

### 7.3.1 Community Values and Community Resources

Community resources can be impacted directly, where construction of a transmission line, support structures, or ROW would result in restricted access to, or removal of said resource, or indirectly, where the intrinsic value of the resource, usually aesthetic, would be diminished. Impacts to community values and community resources are discussed in detail in the below sections.

#### 7.3.1.1 Land Use and Development Patterns

Land use impacts from transmission line construction are determined by the amount of land (of whatever use) displaced by the actual ROW and by the compatibility of electric transmission line ROW with adjacent land uses. During construction, temporary impacts to land uses within the ROW could occur due to the movement of workers and materials through the area. Construction noise and dust, as well as temporary disruption of traffic flow, may also temporarily affect the area immediately adjacent to the ROW. Coordination between Entergy, their contractors, and landowners regarding access to the ROW and construction scheduling should minimize these disruptions. Most existing land uses may continue during construction.

PUCT Substantive Rule § 25.101 requires that the PUCT consider whether new transmission line routes parallel existing compatible ROWs, property lines, or other natural or cultural features. In general, all of the alternative routes parallel existing corridors (including apparent property boundaries) for a significant amount of their length. In addition, all of the alternative routes have lengths where they could use existing Entergy ROW, which would minimize the clearing of new ROW.

Routes 1, 7, 13, and 14 are the routes that utilize the highest percentage of existing Entergy ROW ranging from 39.5 to 41.4 miles in total length, with an average of approximately 82.9% of their total length within Entergy's existing ROW. These routes also parallel existing corridors for 98.2%, 89.0%, 99.4%, and 95.5% of their total lengths, respectively.

Routes 4, 5, 6, and 9 are the routes that utilize the second highest percentage of existing Entergy ROW ranging from 39.7 miles to 47.1 miles in total length, with an average of approximately 49.0% of their total length within Entergy's existing ROW. These routes also parallel existing corridors for 92.7%, 93.4%, 78.7%, and 90.0% of their total lengths, respectively.

The remaining routes, Routes 2, 3, 8, 10, 11, and 12 are the routes that utilize the least amount of existing Entergy ROW ranging from 42.0 miles to 45.8 miles in total length, with an average of approximately 17.3% of their total length within Entergy's existing ROW. These routes also parallel existing corridors for 82.1, 68.3%, 76.9, 49.8%, 53.2%, and 78.2% of their total lengths, respectively. While Routes 2, 3, 8, 10, 11, and 12 parallel existing corridors for the least amount of their total lengths, they do parallel apparent property boundaries for the longest percentage of all the routes. These alternative routes also generally follow more highways, railroads, and property boundaries while the other routes tend to follow more existing utility ROW's.

By paralleling existing corridors, potential impacts to property, community values and community resources, and view sheds are typically minimized due to the already disturbed nature of the area crossed by the existing facility/corridor and are therefore normally considered to be preferable versus creating a completely new corridor. Routes 1, 5, 13, and 14 generally have the highest percentage of their total length parallel to existing corridors.

#### 7.3.1.2 Agriculture

The evaluation of potential impacts to agricultural resources was determined by examining aerial photography and results of field reconnaissance surveys, input from the public, and then separating those findings into the categories of agricultural rangeland, agricultural cropland, and woodland.

Routes 2, 4, 5, and 6 cross a minimum of 20.7 miles of rangeland and 1,568 ft of cropland. These routes do not cross land with mobile irrigation systems. The maximum amount of agricultural land crossed by Routes 2, 4, 5, and 6would be 27.9 miles of rangeland, and 3,131 ft of cropland.

Routes 1, 10, 11, 12, and 13 cross a minimum of 17.5 miles of rangeland and 1,984 ft of cropland. These alternative routes do not cross land with mobile irrigation systems. The maximum amount of agricultural land crossed by Routes 1, 10, 11, 12, and 13 would be 19.1 miles of rangeland and 2,802 ft of cropland.

Routes 3, 7, 8, 9 and 14 cross a minimum of 14.1 miles of rangeland and 1,984 ft of cropland. These routes do not cross land with mobile irrigation systems. The maximum amount of agricultural land crossed by Routes 3, 7, 8, and 9 are 16.6 miles of rangeland and 3,889 ft of cropland.

The potential impact on the agricultural use of rangeland will be negligible because the constructed transmission line will not interfere with grazing and Entergy will not fence the ROW or otherwise separate the ROW from adjacent lands. Coordination of the construction phase of the project around the sowing and harvesting of crops will be essential in reducing impacts to the livelihoods of local growers.

To the extent possible, the impact on agricultural rangeland and agricultural cropland will also be minimized with the placing of structures in close proximity to fence and property lines where applicable. There is also no land with mobile irrigation systems. It is anticipated that the only land that will be permanently impacted for the production of crops or animals would be that land physically occupied by the transmission line structures.

When evaluating the potential for the highest impacts from an agricultural perspective, land designated as agricultural rangeland was considered as having the least potential impacts and cropland was considered as having the potential for the highest impacts from an agricultural perspective. Given the lengths of each route across the different types of agricultural land use, Routes 2, 4, 5, and 6 appear to have the least amount of potential impacts to agriculture.

#### 7.3.1.3 Urban and Residential Areas

One of the measures of potential land use impacts is the number of habitable structures located in the vicinity of each route. Burns & McDonnell determined the number and distance and direction of habitable structures located within 300 ft of the centerline of each route through interpretation of aerial photography and verification during reconnaissance surveys, where possible. The aerial photography used to determine the distance of habitable structures within 300 ft of the centerline of each alternative route has a horizontal accuracy of ±20 ft. To account for this and to ensure that all habitable structures within 500 ft were property identified, Burns & McDonnell identified all habitable structures within 520 ft. Burns & McDonnell, to the greatest extent reasonable and in accordance with the policy of prudent avoidance, attempted to avoid habitable structures in the routing of the alternative routes.

Routes 10 and 11 currently have 66 and 63 habitable structures, respectively, within 300 ft of the centerline. However, the Woodforest Development currently has approximately 145 undeveloped lots. These lots are expected to be under development within the next 12 months, however, since no housing plans have been presented at this time, the number of habitable structures that will eventually fall within the 300 ft is unknown. . Routes 5 and 12 have 107 and 138 habitable structures respectively. Routes 1, 2, 4, 6, and 13 have between 153 and 173 habitable structures within 300 ft of the route centerlines, and Routes 3, 7, 8, 9, and 14 are have between 179 and 259 habitable structures within 300 ft. Table 7-1 summarizes the type of habitable structure, direction and distance from the closest route link, as well as the unique identification number to each habitable structure.

**Table 7-1: Habitable Structures within 300 Feet of the Alternative Routes**

| Number | Type | ID | Direction From House to Line | Distance (ft) | Segment |
|---|---|---|---|---|---|
| 1 | House | 1 | SW | 254 | BL |
| 2 | House | 2 | SW | 237 | BL |
| 3 | House | 3 | WSW | 277 | BL |
| 4 | Out Building | 4 | N | 255 | BL |
| 5 | House | 5 | WSW | 282 | BL |
| 6 | Out Building | 6 | N | 111 | BL |
| 7 | House | 7 | E | 120 | BL |
| 8 | House | 8 | S | 257 | BL |
| 9 | House | 9 | E | 286 | BL |
| 10 | House | 10 | WSW | 260 | BL |
| 11 | House | 11 | SSE | 293 | BL |
| 12 | House | 13 | SSE | 203 | BL |
| 13 | House | 14 | N | 156 | I1 |
| 14 | Out Building | 15 | S | 96 | BL |
| 15 | House | 16 | S | 240 | BL |
| 16 | House | 17 | S | 214 | BL |
| 17 | Out Building | 18 | E | 180 | G |
| 18 | House | 19 | S | 224 | BL |
| 19 | House | 20 | S | 245 | BL |
| 20 | House | 21 | S | 149 | I1 |
| 21 | House | 22 | S | 286 | BL |
| 22 | House | 23 | S | 293 | BL |
| 23 | House | 24 | S | 239 | BL |
| 24 | House | 25 | S | 142 | I1 |
| 25 | House | 26 | S | 109 | I2 |
| 26 | House | 27 | S | 289 | I2 |
| 27 | Out Building | 28 | ENE | 221 | H1 |
| 28 | Out Building | 29 | N | 291 | I2 |
| 29 | Out Building | 30 | ENE | 283 | H1 |
| 30 | Out Building | 31 | N | 272 | I2 |
| 31 | Out Building | 32 | ENE | 278 | H1 |
| 32 | House | 33 | ENE | 224 | H1 |
| 33 | House | 34 | S | 229 | I2 |
| 34 | House | 35 | N | 133 | I2 |
| 35 | Out Building | 36 | S | 256 | I2 |
| 36 | House | 37 | N | 300 | I2 |
| 37 | House | 38 | N | 271 | I2 |
| 38 | House | 39 | N | 245 | I2 |
| 39 | House | 40 | N | 277 | I2 |
| 40 | House | 41 | S | 164 | I2 |
| 41 | House | 42 | S | 137 | I2 |
| 42 | House | 43 | S | 202 | I2 |

| Number | Type | ID | Direction From House to Line | Distance (ft) | Segment |
|---|---|---|---|---|---|
| 43 | House | 44 | S | 298 | I2 |
| 44 | House | 45 | E | 287 | H1 |
| 45 | House | 46 | S | 106 | I2 |
| 46 | House | 47 | SSE | 221 | B |
| 47 | House | 48 | E | 182 | H1 |
| 48 | House | 49 | SSE | 161 | B |
| 49 | House | 50 | N | 243 | I2 |
| 50 | House | 51 | SSE | 182 | B |
| 51 | House | 52 | SSE | 177 | B |
| 52 | House | 53 | SSE | 175 | B |
| 53 | House | 54 | SSE | 155 | B |
| 54 | House | 55 | N | 225 | I2 |
| 55 | House | 56 | SSE | 163 | B |
| 56 | House | 57 | SSE | 157 | B |
| 57 | House | 58 | SSE | 159 | B |
| 58 | House | 59 | E | 292 | H1 |
| 59 | House | 60 | SSE | 159 | B |
| 60 | House | 61 | S | 88 | I2 |
| 61 | House | 62 | SSE | 128 | B |
| 62 | House | 63 | SSE | 164 | B |
| 63 | House | 64 | SSE | 140 | B |
| 64 | House | 65 | SSE | 132 | B |
| 65 | House | 66 | N | 253 | I2 |
| 66 | House | 67 | N | 300 | I2 |
| 67 | House | 68 | SSE | 146 | A |
| 68 | House | 69 | SSE | 139 | A |
| 69 | House | 70 | S | 258 | I2 |
| 70 | House | 71 | S | 233 | I2 |
| 71 | House | 72 | N | 283 | I2 |
| 72 | House | 73 | S | 146 | I2 |
| 73 | House | 74 | N | 262 | I2 |
| 74 | House | 75 | N | 286 | I2 |
| 75 | House | 76 | N | 140 | I2 |
| 76 | House | 77 | N | 263 | I2 |
| 77 | House | 78 | N | 290 | H1 |
| 78 | House | 79 | N | 289 | H1 |
| 79 | House | 80 | N | 222 | I2 |
| 80 | House | 81 | N | 274 | H1 |
| 81 | House | 82 | N | 289 | H1 |
| 82 | House | 83 | N | 265 | H1 |
| 83 | House | 84 | N | 222 | H1 |
| 84 | House | 85 | N | 242 | H1 |
| 85 | House | 86 | N | 232 | H1 |

| Number | Type | ID | Direction From House to Line | Distance (ft) | Segment |
|---|---|---|---|---|---|
| 86 | House | 87 | N | 244 | H1 |
| 87 | House | 88 | N | 210 | H1 |
| 88 | House | 89 | N | 152 | H1 |
| 89 | House | 90 | N | 242 | I2 |
| 90 | House | 91 | N | 173 | H1 |
| 91 | House | 92 | N | 131 | H1 |
| 92 | House | 93 | N | 104 | H1 |
| 93 | House | 94 | N | 120 | H1 |
| 94 | House | 95 | S | 159 | I2 |
| 95 | House | 96 | N | 102 | H1 |
| 96 | House | 97 | S | 135 | I2 |
| 97 | House | 98 | E | 187 | H1 |
| 98 | House | 99 | S | 209 | I2 |
| 99 | House | 100 | S | 196 | I2 |
| 100 | Out Building | 101 | S | 168 | I2 |
| 101 | House | 102 | S | 240 | I2 |
| 102 | House | 103 | S | 272 | I2 |
| 103 | House | 104 | N | 203 | M |
| 104 | House | 105 | N | 173 | M |
| 105 | House | 106 | E | 296 | H1 |
| 106 | House | 107 | N | 198 | M |
| 107 | House | 108 | N | 162 | M |
| 108 | House | 109 | N | 143 | M |
| 109 | House | 110 | N | 246 | M |
| 110 | House | 111 | N | 225 | M |
| 111 | House | 112 | N | 135 | M |
| 112 | House | 113 | S | 122 | M |
| 113 | House | 114 | N | 224 | H5 |
| 114 | House | 115 | N | 168 | H5 |
| 115 | House | 116 | S | 141 | M |
| 116 | House | 121 | NNE | 204 | M |
| 117 | House | 123 | NNE | 227 | M |
| 118 | House | 132 | SSW | 180 | M |
| 119 | House | 134 | SSW | 86 | M |
| 120 | Out Building | 139 | N | 97 | BI |
| 121 | House | 141 | SSW | 101 | M |
| 122 | House | 142 | S | 101 | BI |
| 123 | House | 146 | S | 56 | BI |
| 124 | House | 147 | SSW | 105 | M |
| 125 | House | 149 | NNE | 259 | BI |
| 126 | House | 150 | N | 136 | BI |
| 127 | House | 151 | S | 295 | BI |
| 128 | House | 152 | SSW | 151 | M |

| Number | Type | ID | Direction From House to Line | Distance (ft) | Segment |
|---|---|---|---|---|---|
| 129 | House | 153 | W | 288 | L1 |
| 130 | House | 154 | NNE | 201 | M |
| 131 | House | 155 | ENE | 95 | BI |
| 132 | Out Building | 156 | S | 249 | BI |
| 133 | House | 157 | SSW | 172 | M |
| 134 | House | 158 | SSW | 269 | M |
| 135 | Out Building | 159 | S | 259 | BI |
| 136 | House | 160 | ENE | 181 | BI |
| 137 | House | 161 | SSW | 176 | M |
| 138 | House | 167 | NNE | 115 | M |
| 139 | House | 168 | N | 168 | H2 |
| 140 | House | 170 | E | 101 | L1 |
| 141 | House | 171 | NNE | 261 | M |
| 142 | House | 175 | WSW | 246 | BI |
| 143 | House | 178 | W | 300 | H3 |
| 144 | House | 179 | NNE | 176 | R1 |
| 145 | Out Building | 180 | NNE | 182 | R1 |
| 146 | House | 181 | N | 184 | BI |
| 147 | House | 182 | N | 167 | BI |
| 148 | House | 183 | N | 165 | BI |
| 149 | House | 184 | WSW | 254 | BI |
| 150 | House | 185 | N | 184 | BI |
| 151 | House | 186 | NNE | 124 | R1 |
| 152 | House | 187 | N | 256 | BI |
| 153 | House | 188 | N | 296 | BI |
| 154 | House | 189 | WSW | 238 | BI |
| 155 | House | 190 | NNE | 125 | R1 |
| 156 | House | 191 | N | 257 | BI |
| 157 | House | 192 | WSW | 223 | BI |
| 158 | Out Building | 193 | E | 195 | O |
| 159 | House | 194 | N | 185 | BI |
| 160 | House | 195 | WSW | 293 | BI |
| 161 | House | 196 | SSW | 133 | R1 |
| 162 | House | 197 | N | 136 | BI |
| 163 | House | 198 | SSW | 60 | R1 |
| 164 | Out Building | 199 | E | 174 | O |
| 165 | Out Building | 200 | E | 226 | O |
| 166 | House | 201 | NNE | 120 | R1 |
| 167 | House | 202 | N | 137 | BI |
| 168 | House | 203 | SSW | 35 | R1 |
| 169 | House | 204 | N | 77 | BI |
| 170 | House | 205 | N | 66 | BI |
| 171 | House | 206 | N | 258 | BK |

| Number | Type | ID | Direction From House to Line | Distance (ft) | Segment |
|---|---|---|---|---|---|
| 172 | House | 208 | NNE | 268 | R1 |
| 173 | House | 209 | NNE | 161 | R1 |
| 174 | House | 210 | SSW | 83 | R1 |
| 175 | House | 211 | N | 119 | BI |
| 176 | House | 212 | N | 183 | BI |
| 177 | House | 213 | N | 207 | BI |
| 178 | House | 214 | SSW | 146 | R1 |
| 179 | House | 215 | E | 179 | O |
| 180 | House | 216 | SSW | 196 | R1 |
| 181 | Out Building | 217 | N | 25 | BI |
| 182 | House | 218 | SSW | 68 | R1 |
| 183 | Church | 219 | S | 29 | BI |
| 184 | House | 220 | S | 36 | BI |
| 185 | House | 221 | S | 63 | BI |
| 186 | House | 222 | N | 291 | BK |
| 187 | House | 223 | S | 39 | BI |
| 188 | House | 224 | S | 54 | BI |
| 189 | House | 225 | N | 89 | BI |
| 190 | Out Building | 226 | N | 220 | BK |
| 191 | House | 227 | S | 64 | BI |
| 192 | House | 228 | S | 78 | BI |
| 193 | Out Building | 229 | SSW | 297 | R1 |
| 194 | Out Building | 230 | N | 205 | BK |
| 195 | House | 231 | N | 252 | BK |
| 196 | House | 232 | S | 189 | BI |
| 197 | Out Building | 233 | S | 167 | BI |
| 198 | House | 234 | N | 252 | BK |
| 199 | House | 235 | SSW | 155 | R1 |
| 200 | House | 236 | N | 242 | BK |
| 201 | House | 237 | S | 237 | BI |
| 202 | House | 238 | S | 75 | BI |
| 203 | House | 239 | N | 227 | BK |
| 204 | Out Building | 240 | N | 128 | BK |
| 205 | House | 241 | N | 248 | BK |
| 206 | House | 242 | N | 298 | BK |
| 207 | House | 243 | N | 157 | BK |
| 208 | House | 244 | S | 300 | BI |
| 209 | House | 245 | SSW | 202 | R1 |
| 210 | House | 246 | N | 154 | BK |
| 211 | House | 247 | N | 169 | BK |
| 212 | House | 248 | S | 300 | BI |
| 213 | House | 249 | SSW | 220 | R1 |
| 214 | House | 250 | S | 227 | BI |

| Number | Type | ID | Direction From House to Line | Distance (ft) | Segment |
|---|---|---|---|---|---|
| 215 | House | 251 | S | 256 | BI |
| 216 | House | 252 | N | 115 | BK |
| 217 | House | 253 | S | 235 | BI |
| 218 | House | 254 | N | 125 | BK |
| 219 | House | 255 | S | 300 | BI |
| 220 | House | 256 | S | 293 | BI |
| 221 | House | 257 | N | 116 | BK |
| 222 | House | 258 | S | 247 | BI |
| 223 | House | 259 | S | 249 | BI |
| 224 | House | 260 | N | 126 | BK |
| 225 | House | 261 | S | 270 | BI |
| 226 | House | 262 | E | 171 | O |
| 227 | House | 263 | S | 226 | BI |
| 228 | House | 264 | SSW | 232 | R1 |
| 229 | House | 265 | N | 258 | BK |
| 230 | Out Building | 266 | SSW | 70 | R1 |
| 231 | Out Building | 267 | SSW | 118 | R1 |
| 232 | House | 268 | S | 257 | BI |
| 233 | House | 269 | SSW | 241 | R1 |
| 234 | Out Building | 270 | NNE | 148 | R1 |
| 235 | House | 271 | NNE | 272 | R1 |
| 236 | Out Building | 272 | NNE | 154 | R1 |
| 237 | Out Building | 273 | E | 95 | O |
| 238 | House | 274 | N | 123 | BK |
| 239 | Out Building | 275 | NNE | 156 | R1 |
| 240 | House | 276 | SSW | 290 | R1 |
| 241 | House | 277 | NNE | 235 | R1 |
| 242 | House | 278 | NNE | 177 | R1 |
| 243 | Out Building | 279 | SSW | 19 | R1 |
| 244 | Out Building | 280 | SSW | 89 | R1 |
| 245 | House | 281 | NNE | 211 | R1 |
| 246 | House | 282 | N | 300 | BK |
| 247 | Out Building | 283 | SSW | 72 | R1 |
| 248 | House | 284 | N | 300 | BK |
| 249 | Out Building | 285 | SSW | 59 | R1 |
| 250 | House | 286 | NNE | 207 | R1 |
| 251 | House | 287 | SSW | 68 | R1 |
| 252 | House | 288 | N | 134 | BK |
| 253 | House | 289 | NNE | 152 | R1 |
| 254 | House | 290 | N | 129 | BK |
| 255 | House | 291 | E | 167 | O |
| 256 | House | 292 | N | 202 | BK |
| 257 | House | 293 | N | 222 | BK |