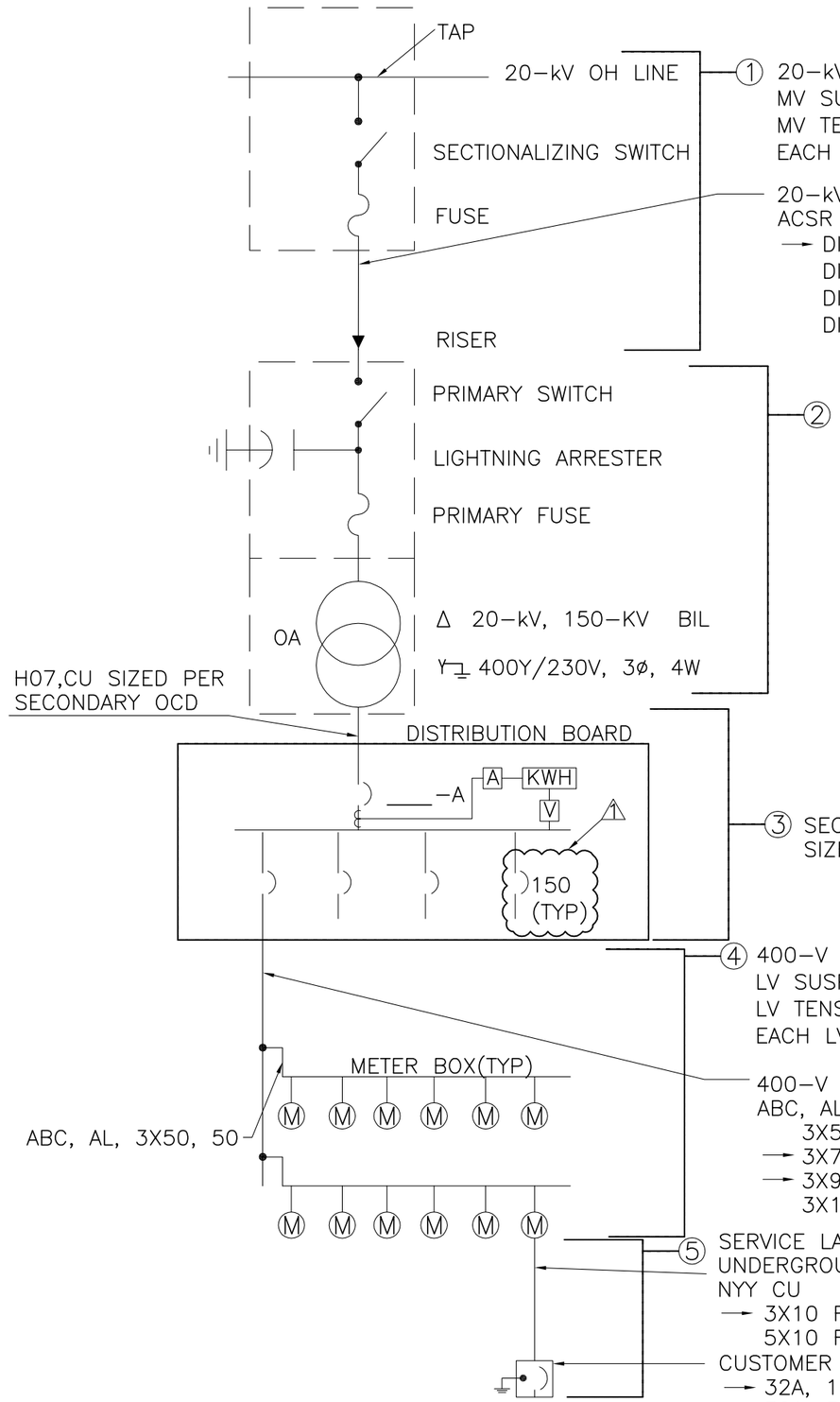

① 20-kV OHL
MV SUSPENSION (TANGENT) POLES, SINGLE 2,000-MM CROSS ARM, DABS AS-01, 2XAS-05, AS-07, MV-301C
MV TENSION (ANGLE) POLES, DOUBLE 2,000-MM CROSS ARMS, DABS AS-03, 1XAS-05, 6XAS-09, MV-308C
EACH MV TENSION (ANGLE) POLE IS GUYED. MV GUY, DABS AN-S1, GU-S1, GU-102C

20-kV OH LINE
ACSR
→ DIN 70/12
DIN 95/15
DIN 120/20
DIN 185/30

② 2

SECONDARY TRANSFORMER SUBSTATION & DISTRIBUTION BOARD

TRANSFORMER kVA	MCB (A)	TAP C/ø, 3P+N (mm^2)	BCB (A)
25	50	1 X 50	NONE
40	80	1 X 50	NONE
63	120	1 X 50	NONE
100	200	1 X 120	2 X 150
160	300	1 X 240	3 X 150
250	500	2 X 150	5 X 150
400	800	3 X 185	7 X 150
630	1200	5 X 185	12 X 150
1000	2000	8 X 240	10 X 250

③ SECONDARY 400-V DISTRIBUTION
SIZE TRANSFORMER SECONDARY OCD PER TRANSFORMER SIZE

④ 400-V OH TO METER BOXES
LV SUSPENSION (TANGENT) POLES, DABS AS-11, LV-101
LV TENSION (ANGLE) POLES, DABS AS-12, AS-13, LV-102
EACH LV TENSION (ANGLE) POLE IS GUYED. LV GUY, DABS AN-S1, GU-S1, GU-101C

400-V OH LINE
ABC, AL
3X50, 50
→ 3X70, 50
→ 3X95, 70
3X120, 70

⑤ SERVICE LATERALS AND SE DISCONNECTS
UNDERGROUND SERVICE LATERAL
NYY CU
→ 3X10 RE
5X10 RE
CUSTOMER SERVICE DISCONNECT
→ 32A, 1P
32A, 3P

NOTE:
MATERIALS SHALL CONFORM TO DABS DISTRIBUTION STANDARDS, CHAPTER U DABS STANDARD TECHNICAL DATA SHEETS, CHAPTER Y, DABS TECHNICAL SPECIFICATIONS, CHAPTERS A THROUGH S, AND DABS CHAPTER Z-3 INFORMATION ON SPECIFIC ITEMS OF SUPPLY, CHAPTERS D,H,I,N,O,S.

NOT FOR CONSTRUCTION

UNLESS OTHERWISE NOTED, LINEAR DIMENSIONS SHOWN ARE IN MILLIMETERS.

CONCEPT DESIGN

	DESCRIPTION	DATE	APR
2	ADDED SECONDARY TABLE	12/20/2010	
1	CHANGED SIZE OF OCD	12/18/2010	
	SYMB		

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DESIGNED BY: MAL
DWN BY: AS
CHK BY: MAL
DATE: 12/31/2010
SUBMITTED BY: TETRA TECH
FILE NO.: LT0025-E-100

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42 VILLAGES ELECTRIFICATION
ELECTRICAL
ONE-LINE DIAGRAM

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SHEET REFERENCE NUMBER:
LT0025
E-100

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DESIGNED BY: AS	DATE: 01/04/2011		
DWN BY: AS	SUBMITTED BY: TETRA TECH		
CHK BY: MAL	FILE NO.: LT0025-E-131W		

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AERIAL IMAGE

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LT0025
E-131W

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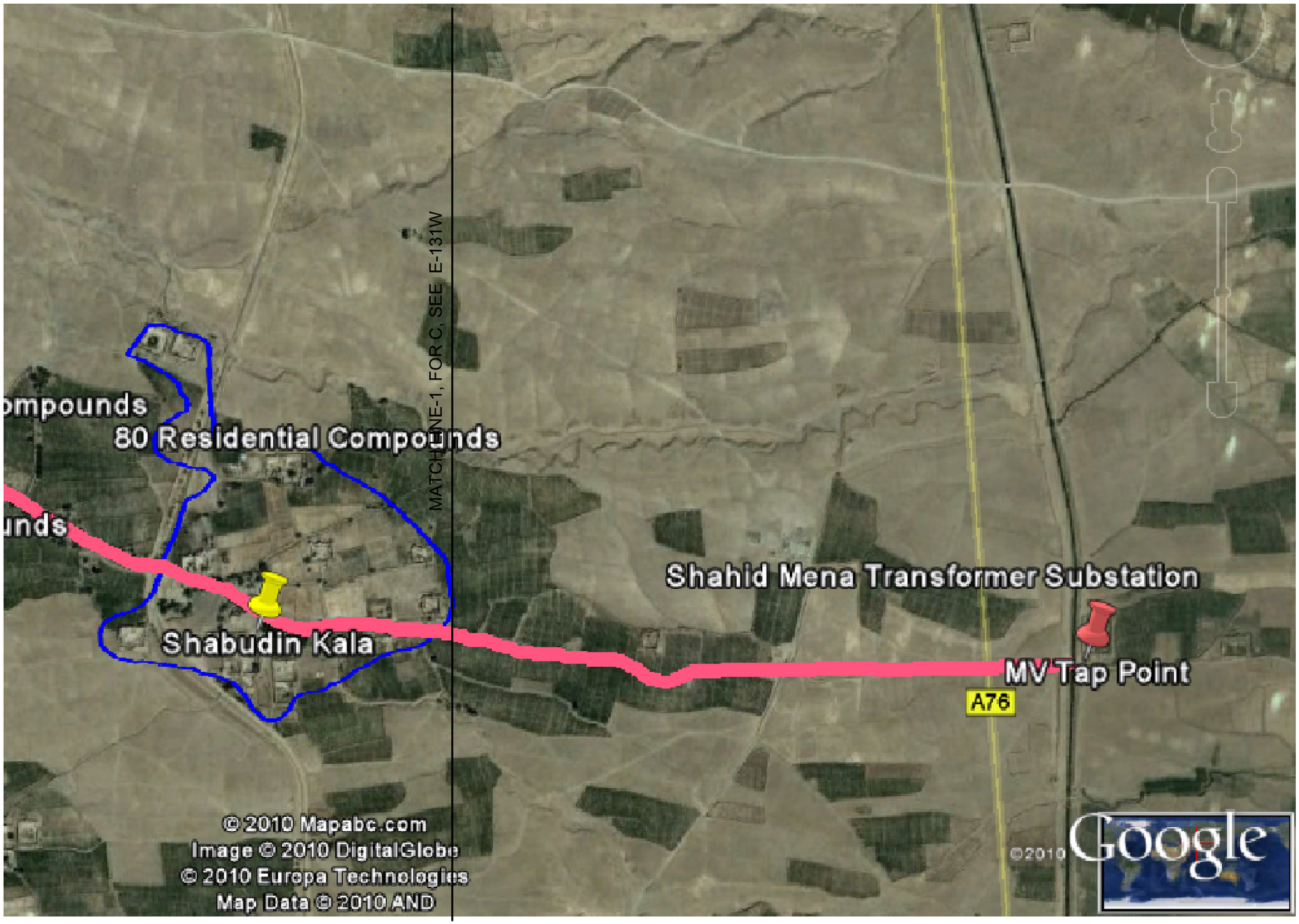

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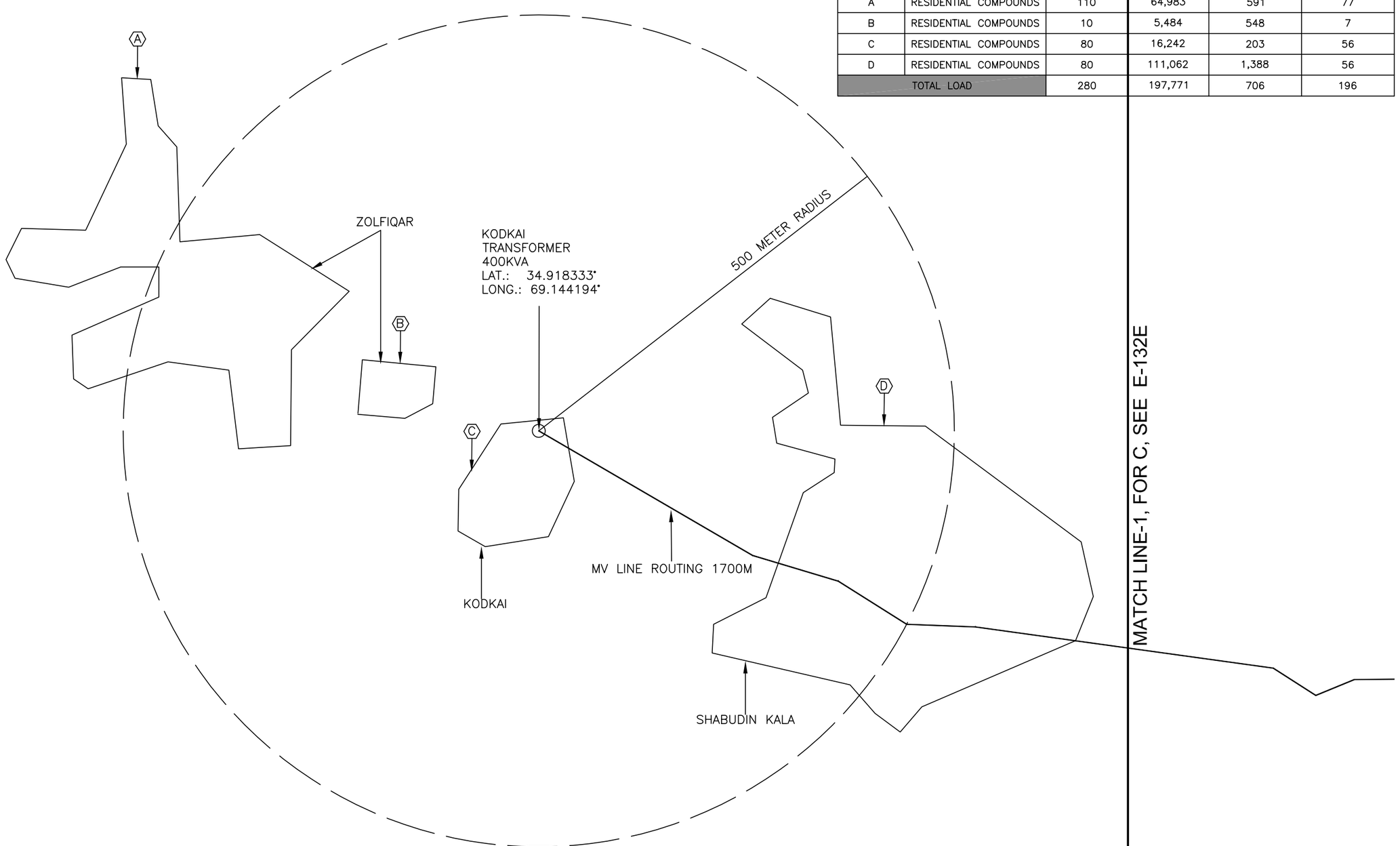
SUMMARY TABLE					
FIGURE	TYPE OF CUSTOMER	NUMBER OF CUSTOMER	AREA M²	DENSITY M²/CUSTOMER	ESTIMATED PEAK COINCIDENTAL KW
A	RESIDENTIAL COMPOUNDS	110	64,983	591	77
B	RESIDENTIAL COMPOUNDS	10	5,484	548	7
C	RESIDENTIAL COMPOUNDS	80	16,242	203	56
D	RESIDENTIAL COMPOUNDS	80	111,062	1,388	56
TOTAL LOAD		280	197,771	706	196



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SYMB	DESCRIPTION	DATE	APP

DESIGNED BY:	DATE:
AS	01/04/2011
DWN BY:	SUBMITTED BY:
AS	TETRA TECH
CHK BY:	FILE NO.:
MAL	LT0025-E-132E

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