VLSM Address Table:

Network Address => 10.13.0.0/16

Subnet Name	Needed Size	Address	Subnet	Range
M (Mordor)	5000	10.13.0.0/19	255.255.224.0	10.13.0.1 – 10.13.31.254
C (Cardolan)	1022	10.13.32.0/22	255.255.252.0	10.13.32.1 - 10.13.35.254
E (Eriador)	1020	10.13.36.0/22	255.255.252.0	10.13.36.1 - 10.13.39.254
A (Arnor)	511	10.13.40.0/22	255.255.252.0	10.13.40.1 - 10.13.43.254
S (Shire)	254	10.13.44.0/24	255.255.255.0	10.13.44.1 - 10.13.44.254
G (Gordor)	127	10.13.45.0/24	255.255.255.0	10.13.45.1 - 10.13.45.254
R (Rohan)	30	10.13.46.0/27	255.255.255.224	10.13.46.1 - 10.13.46.30
W1	2	10.13.46.32/30	255.255.255.252	10.13.46.33 - 10.13.46.34
W2	2	10.13.46.36/30	255.255.255.252	10.13.46.37 - 10.13.46.38
W3	2	10.13.46.40/30	255.255.255.252	10.13.46.41 - 10.13.46.42
W4	2	10.13.46.44/30	255.255.255.252	10.13.46.45 - 10.13.46.46
W5	2	10.13.46.48/30	255.255.255.252	10.13.46.49 - 10.13.46.50
W6	2	10.13.46.52/30	255.255.255.252	10.13.46.53 - 10.13.46.54
W7	2	10.13.46.56/30	255.255.255.252	10.13.46.57 - 10.13.46.58
W8	2	10.13.46.60/30	255.255.255.252	10.13.46.61 - 10.13.46.62