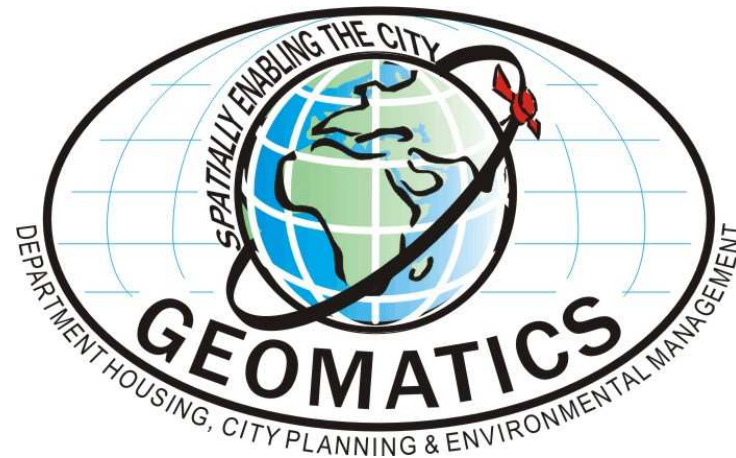


GEOCODING ADDRESSES FOR CITY OF TSHWANE (COT)



[Background (Complexities)]

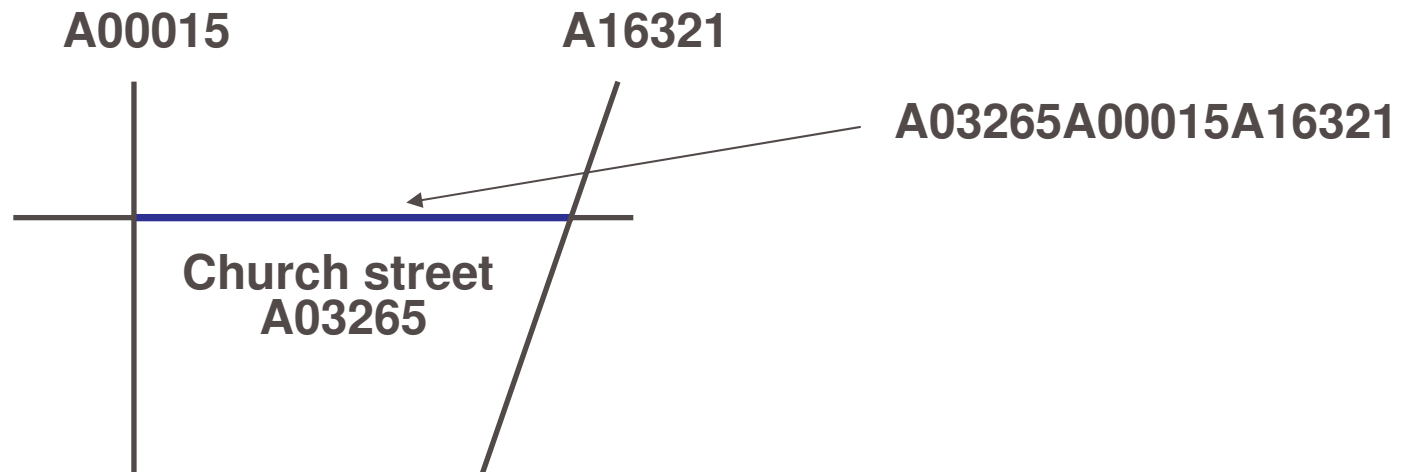
- Problems regarding street address allocation
- Simple single addresses
- Complex multiple addresses eg. flats , sectional schemes and buildings

[Conceptual Solution Model]

- Centralized address model
- Simplified to allow value-added data by any potential application or end user of address information
- Address information presented spatially

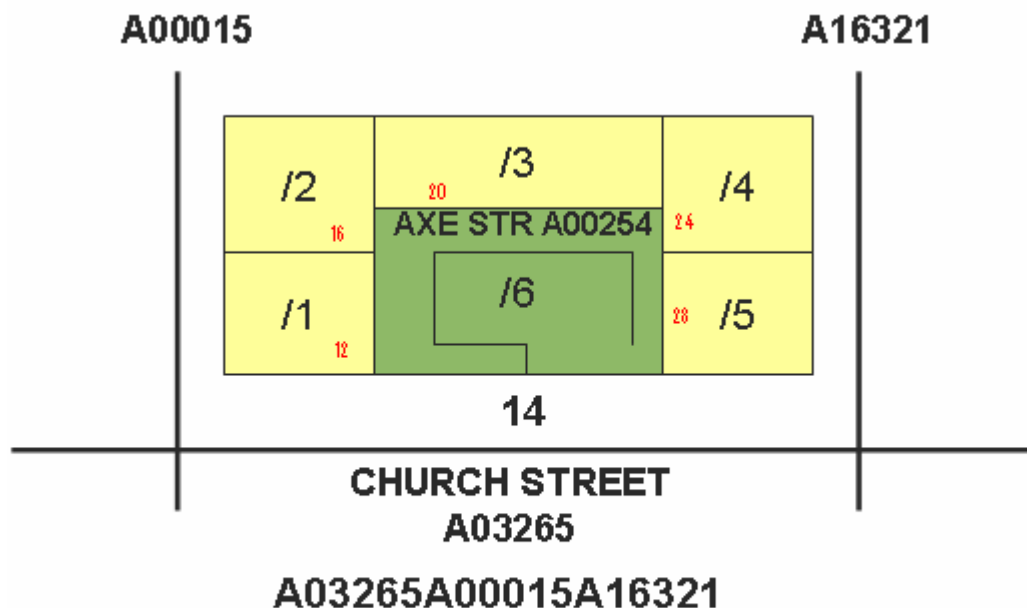
[Street Section Code]

- Street Code matched to a Street Name
- Street Section Code to reference the road segment between intersecting roads



[Multiple Addresses]

- Addresses to sectional schemes and cluster housing.

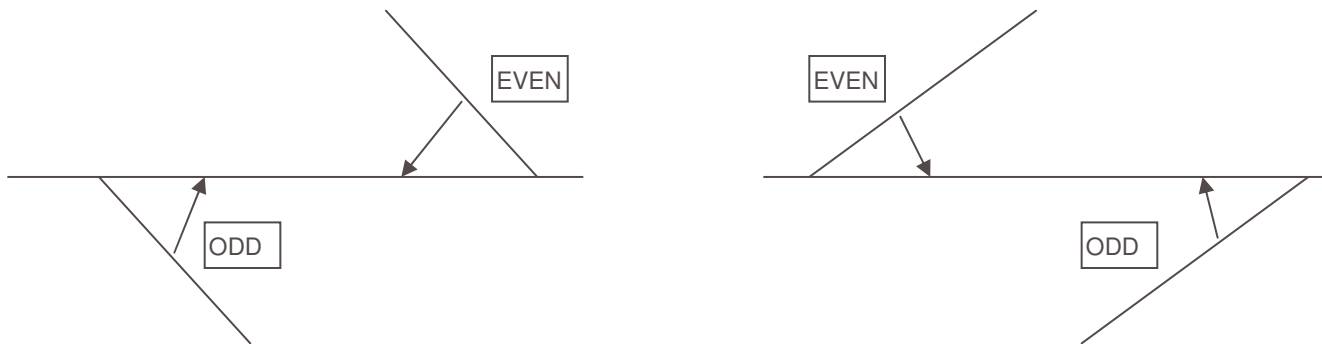


Street Address

Physical Address No: 20
Physical Street Name: AXE Street
Physical Property Name: SS TULIP
Locality Address No: 14
Locality Street Name: CHURCH STR
Street Section Code: A00254A03265

[Model - 1st Principle]

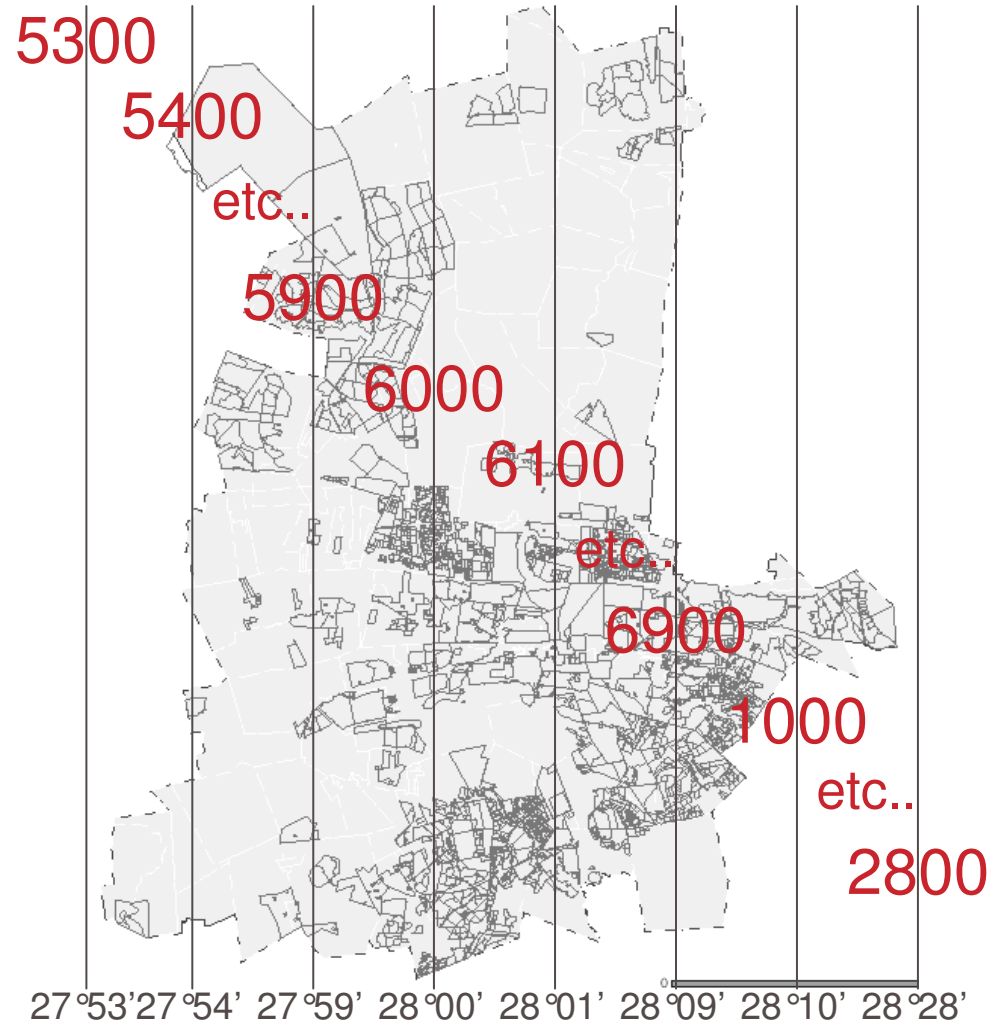
- All streets will be collapsed to the horizontal to determine even/odd values
- Even always on the Northern side
- Even to Eastern side if due North/South



[Model - 2nd Principle]

- Longitudinal grid is overlaid over COT
- 1' (one minute) of arc
- Range 27°53' to 28°28'
- Only used to indicate start addresses
- Makes provision for extension and continuation of streets

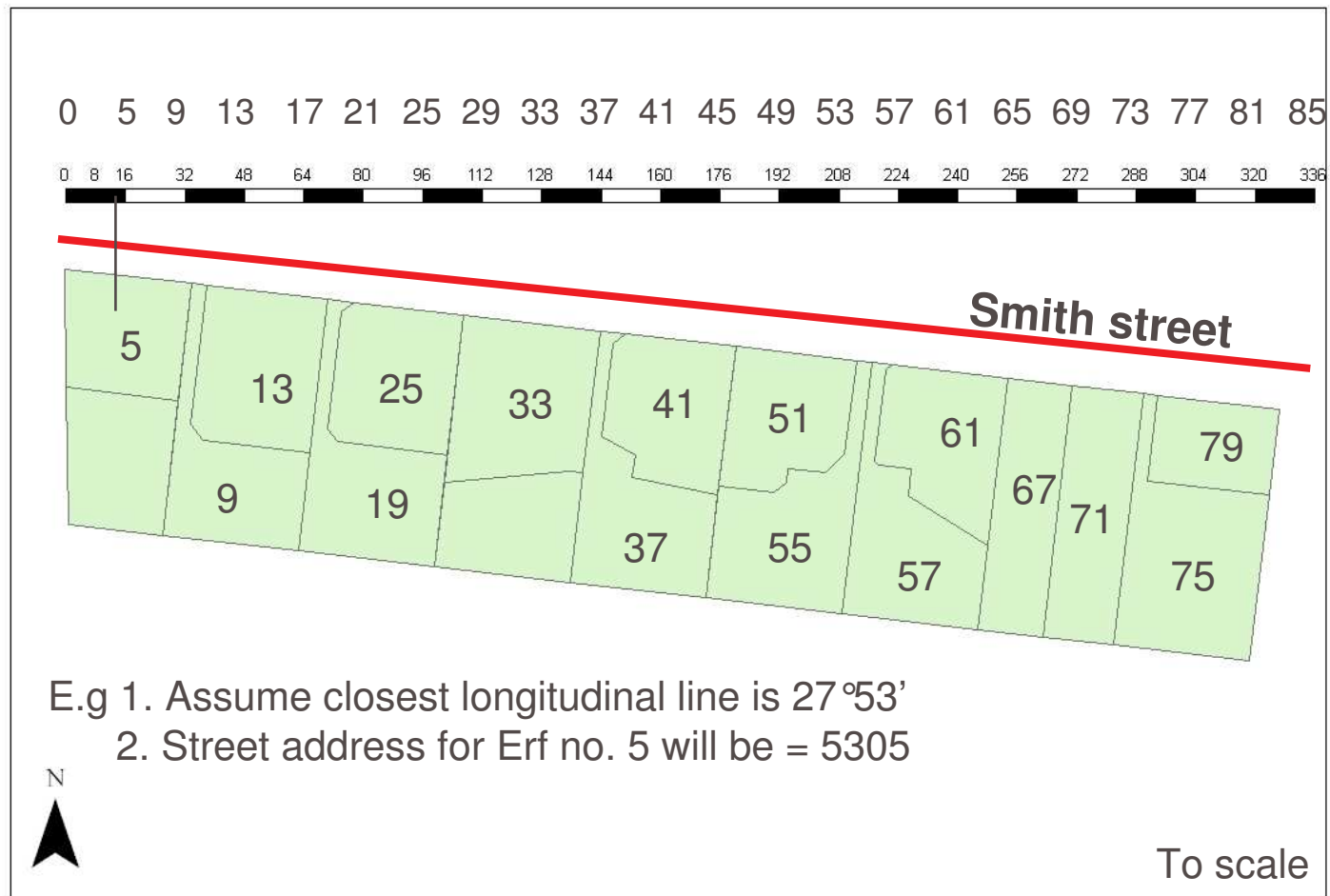
[Longitudinal Grid]



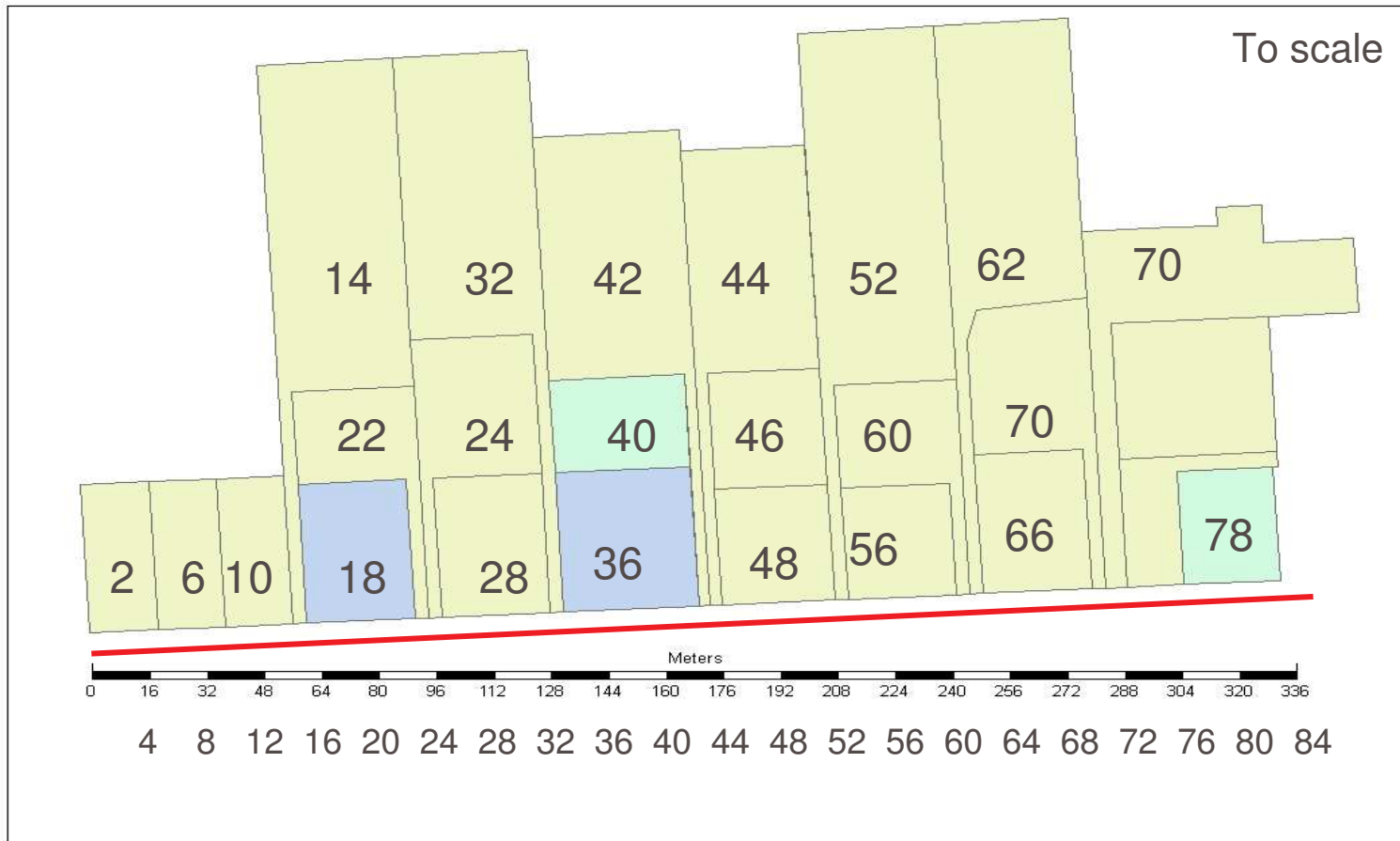
[Street Address Allocation]

- Street sections will be divided into equal intervals depending on the street frontage length
- $>16\text{m}$, street section divided into 16m divisions
- $<16\text{m}$, street section divided into 10m divisions
- Street address numbers will increment by four per division
- Number closest to street frontage of property will be assigned accordingly

Street Address Allocation



Street Address Allocation



E.g 1. Assume closest longitudinal line is 28°00'

2. Street address for Erf no. 36 will be = 6036

[Conclusion]

- Methodology will cover future subdivisions of larger street frontage properties
- Allows for street continuations
- Allows for street extensions
- Removes guesswork involved in allocation of addresses
- Conforms to SANS1883

[Contact Details]

- Kurt Schulze (012) 358 7850
- Charlene Vos (012) 358 7579
- Geomatics@tshwane.gov.za
Subject: Address Schema Inquiry