UK Dynamo User Group

South

Perkins+Will

26/07/2017

Managing data in early stage residential schemes

Maccreanor Lavington

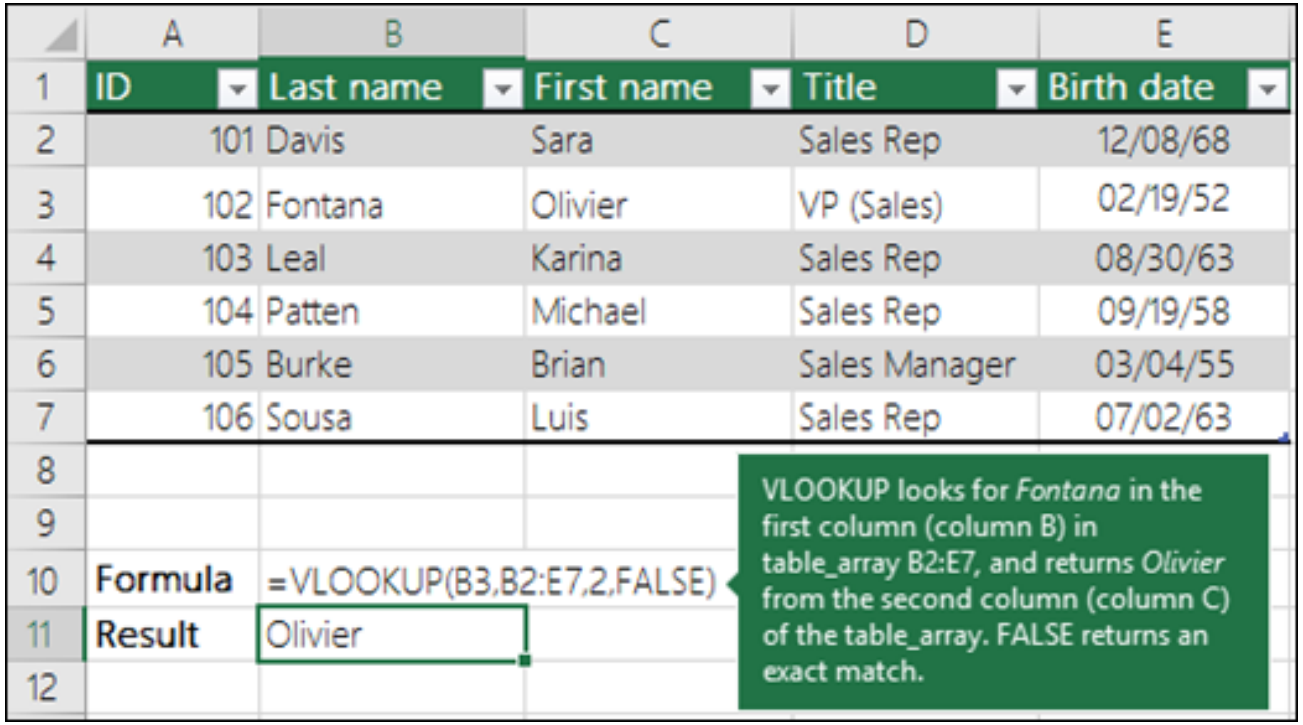
Saxon Court

Maccreanor Lavington

South Gardens

1 - Brief lookup

Microsoft Excel vlookup



	A	B	C	D	E
1	ID	Last name	First name	Title	Birth date
2	101	Davis	Sara	Sales Rep	12/08/68
3	102	Fontana	Olivier	VP (Sales)	02/19/52
4	103	Leal	Karina	Sales Rep	08/30/63
5	104	Patten	Michael	Sales Rep	09/19/58
6	105	Burke	Brian	Sales Manager	03/04/55
7	106	Sousa	Luis	Sales Rep	07/02/63
8					
9					
10	Formula	=VLOOKUP(B3,B2:E7,2,FALSE)			
11	Result	Olivier			
12					

VLOOKUP looks for *Fontana* in the first column (column B) in table_array B2:E7, and returns *Olivier* from the second column (column C) of the table_array. FALSE returns an exact match.

1 - Brief lookup

Visicalc (1979)

Wikipedia: Lookup tables were one of the earliest functionalities implemented in computer spreadsheets, with the initial version of VisiCalc (1979) including a LOOKUP function among its original 20 functions.

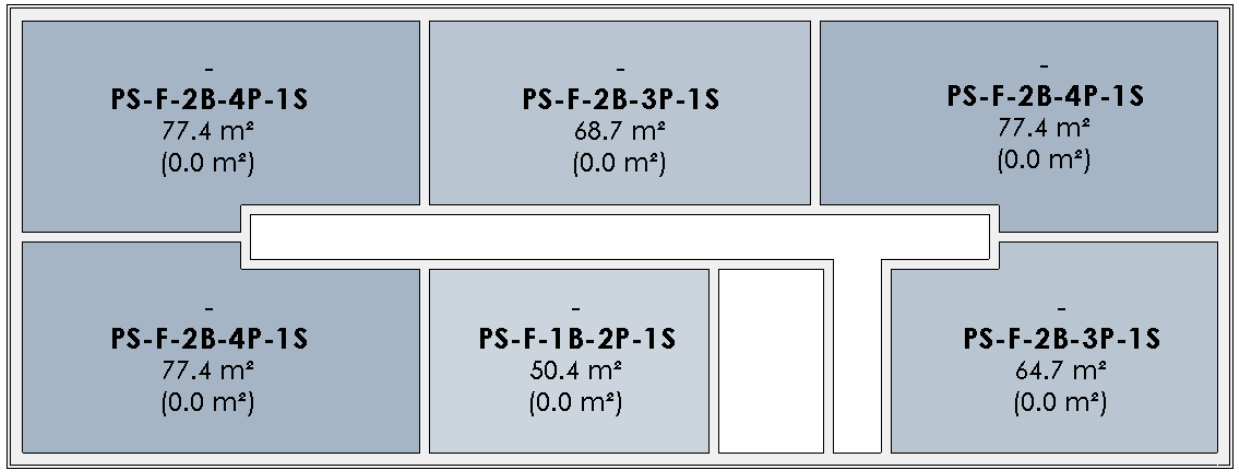
1 - Brief lookup

Project specific brief information stored in a JSON file.


```
"Brief Data": {
  "PS-F-0B-1P-1S": {
    "Target": 37,
    "Tenure": "PS",
    "Storeys": 1,
    "HR": 1,
    "WH": false,
    "WHT" : "",
    "UTGA" : "0B1P",
    "ToD" : "Flat"
  },
  "PS-F-1B-2P-1S": {
    "Target": 50,
    "Tenure": "PS",
    "Storeys": 1,
    "HR": 2,
    "WH": false,
    "WHT" : "",
    "UTGA" : "1B2P",
    "ToD" : "Flat"
  },
  "PS-F-1B-2P-1S-WAC": {
    "Target": 50,
    "Tenure": "PS",
    "Storeys": 1,
    "HR": 2,
    "WH": true,
    "WHT" : "WAC",
    "UTGA" : "1B2P",
    "ToD" : "Flat"
```

1 - Brief lookup

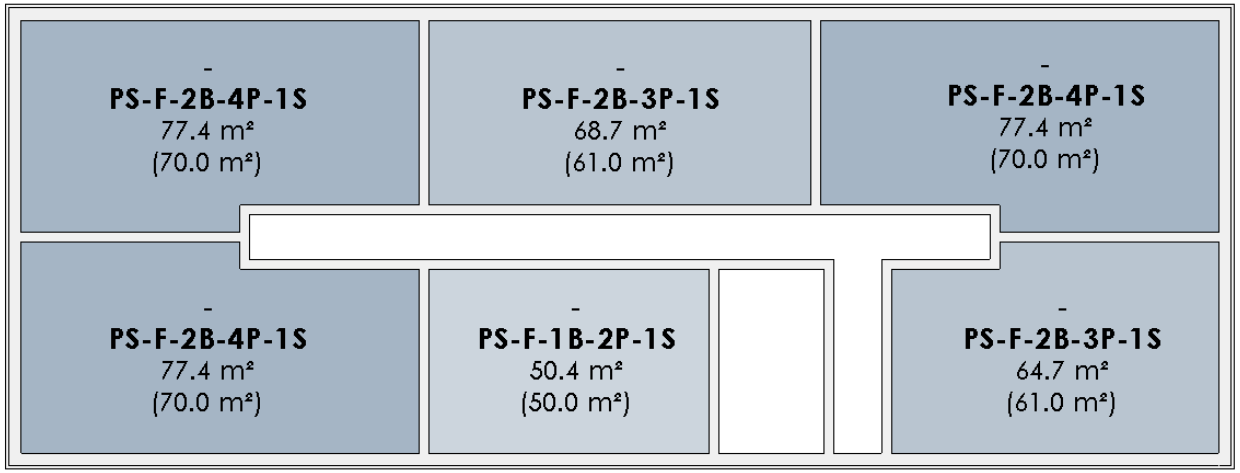
Diagrammatic tenure plan identifying each unit type.



1 - Brief lookup

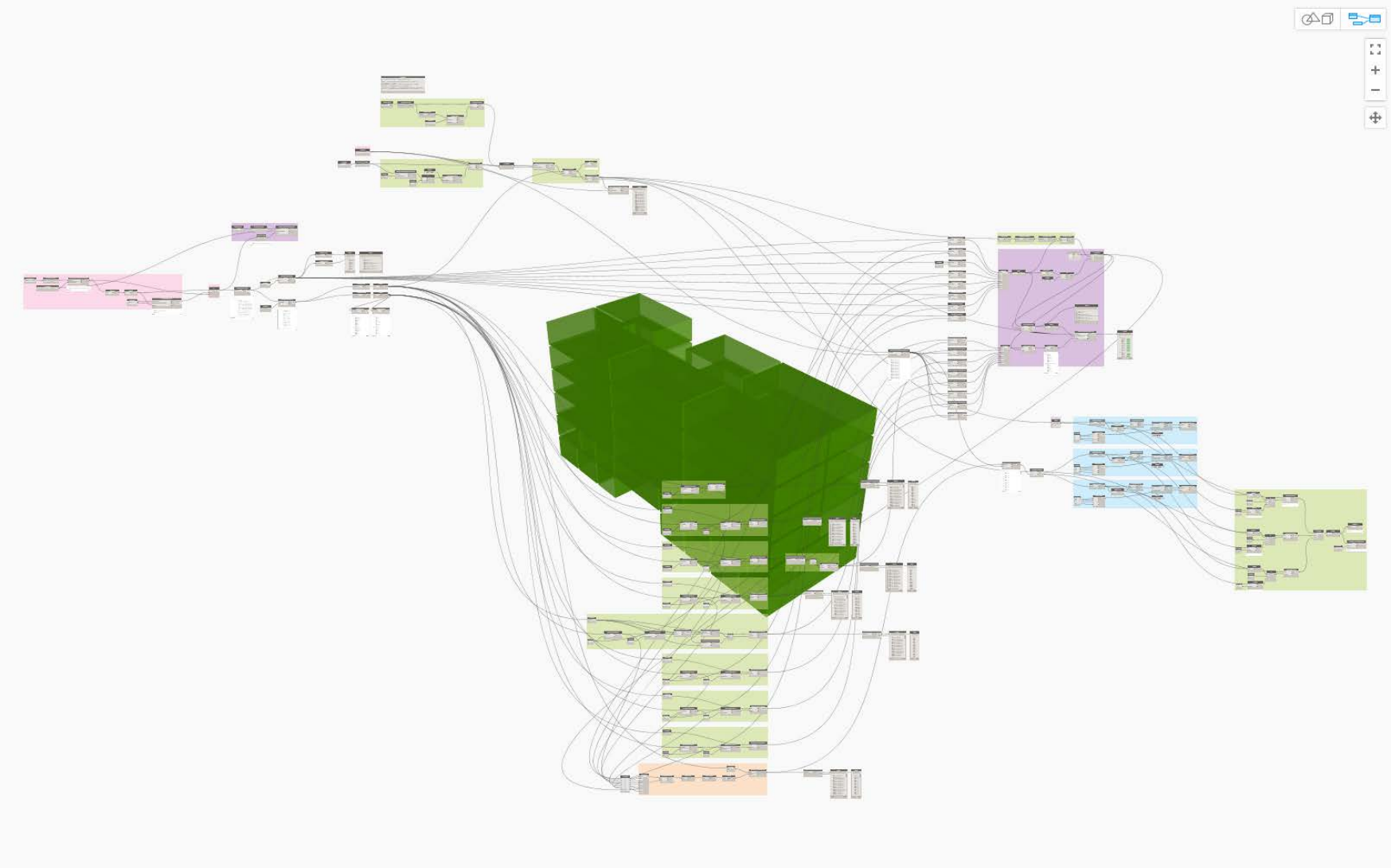
Diagrammatic tenure plan identifying each unit type.

Unit data set from brief including target area in brackets.



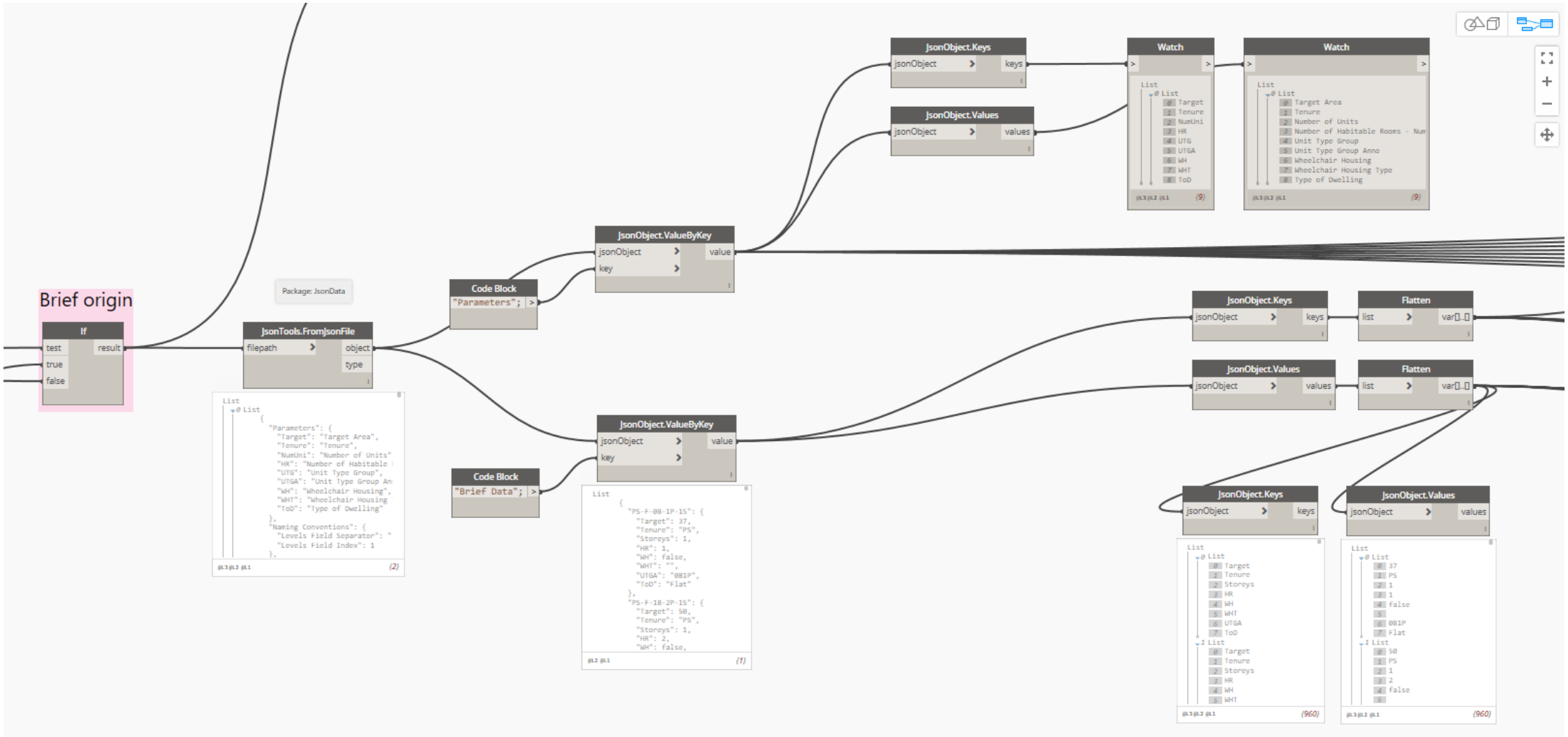
1 - Brief lookup

Overview



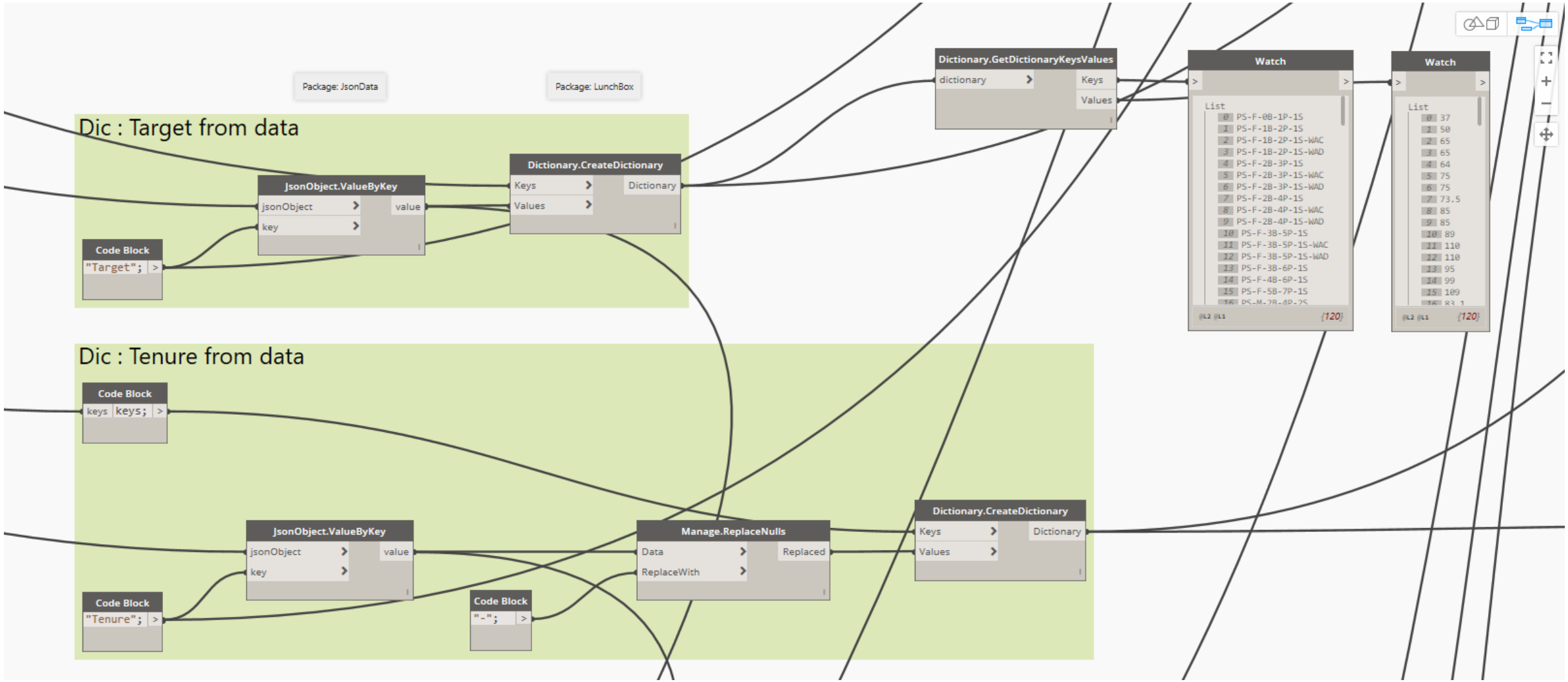
1 - Brief lookup

Retrieving JSON objects from data



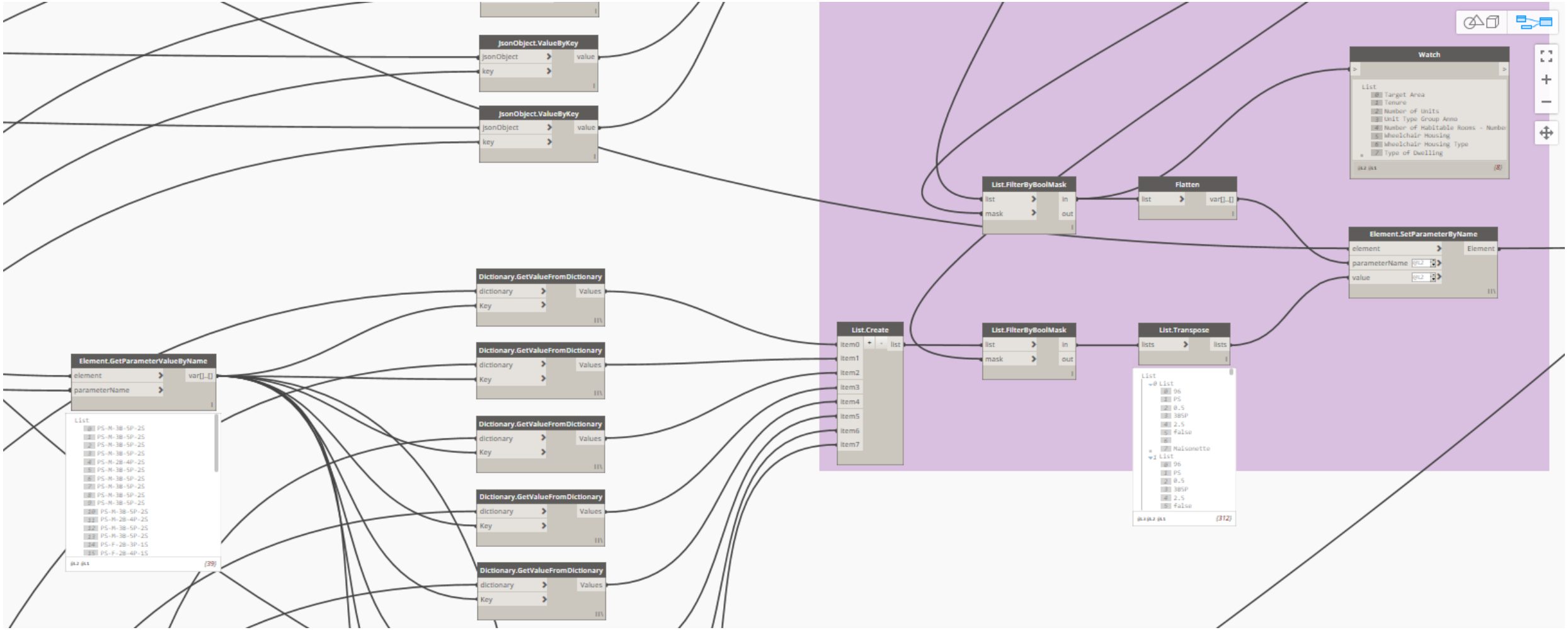
1 - Brief lookup

Creating dictionaries for each parameter



1 - Brief lookup

Dictionary calls + setting parameters



2 - Unit numbering

Credits for concept:

paulwintour

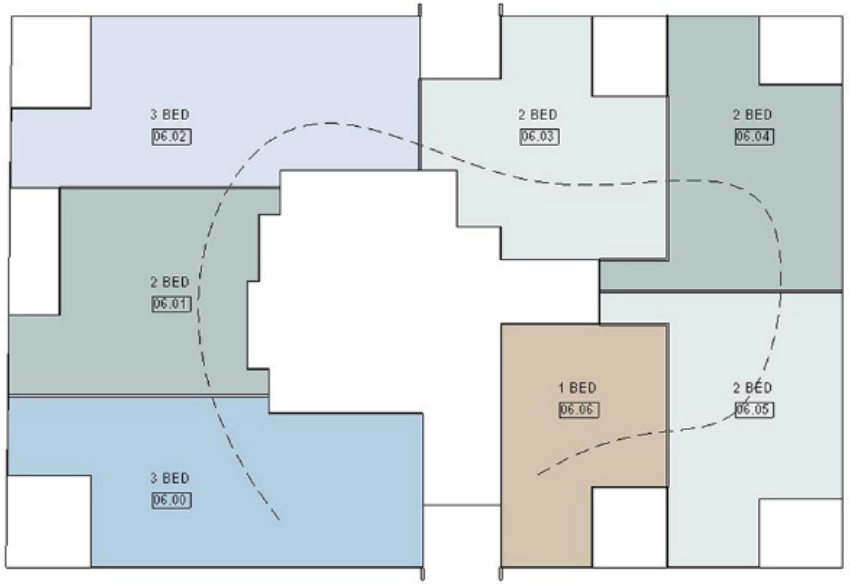
WEBSITE:

https://parametricmonkey.wordpress.com

PROFILE:

Parametric Monkey

HOME | BLOG | TUTORIALS | TEACHING | RESEARCH | ABOUT US



Leave a Comment

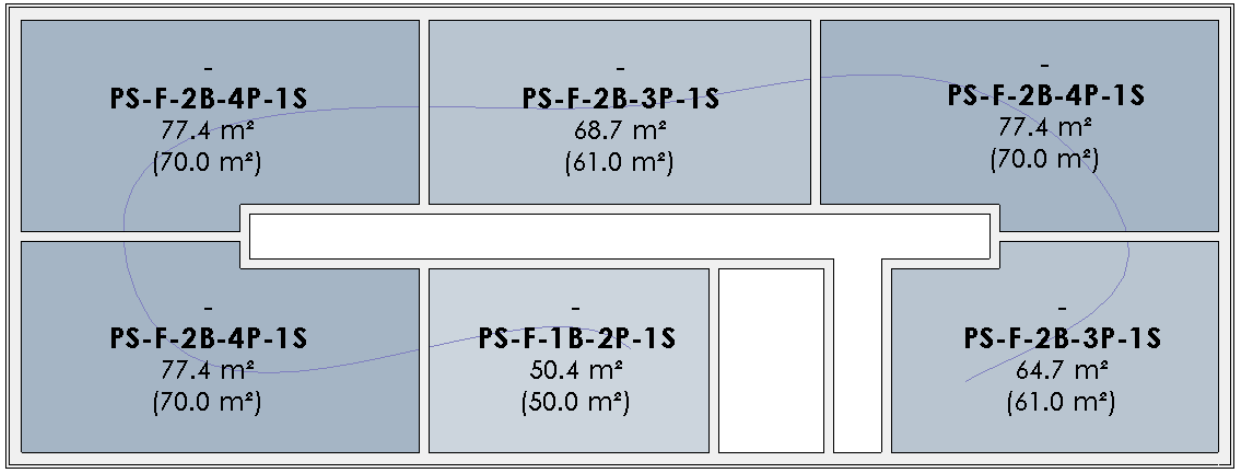
Posted on May 2, 2015 by paulwintour

Renumbering rooms

Search ... Go

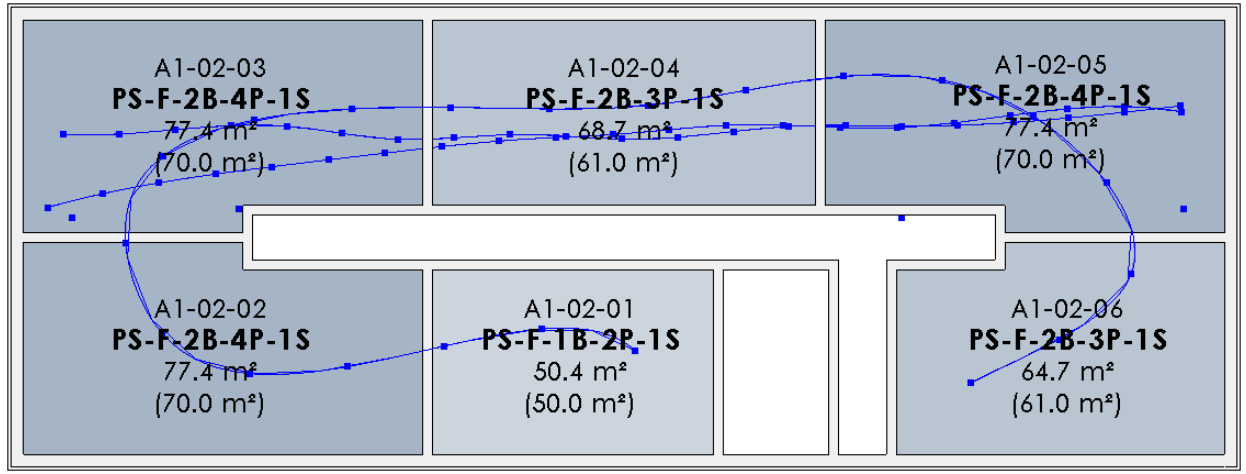
2 - Unit numbering

Model curve sets the numbering sequence in each core / level.



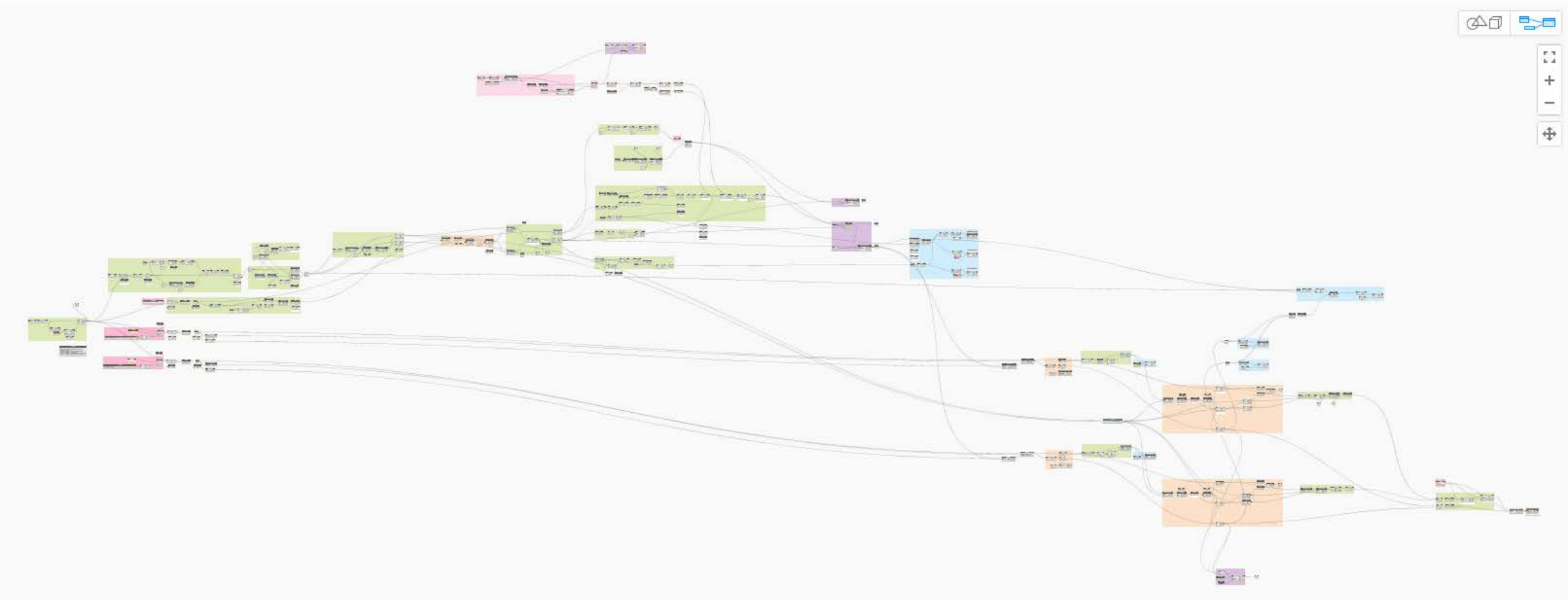
2 - Unit numbering

Model curve sets the numbering sequence in each core / level.



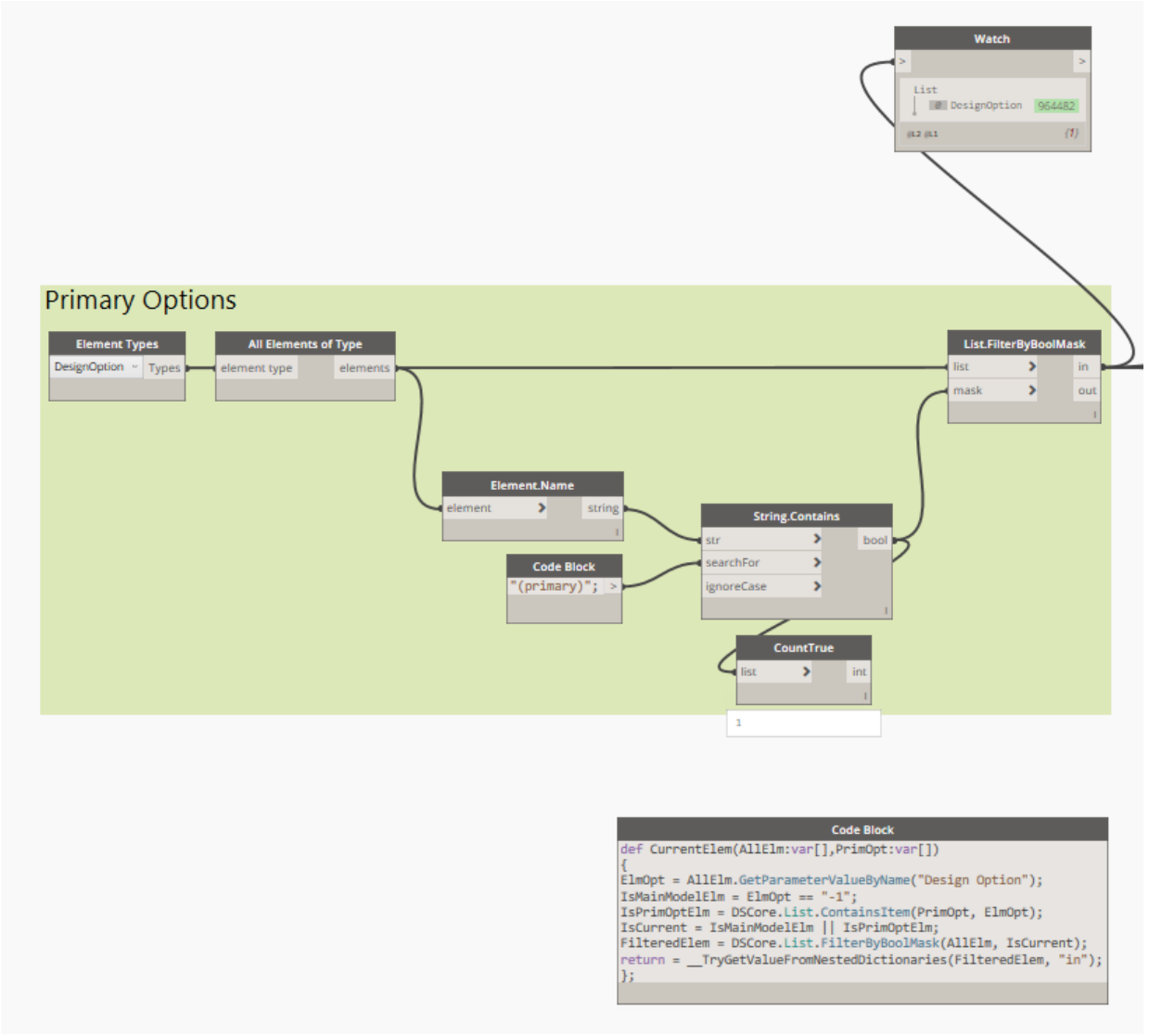
2 - Unit numbering

Overview



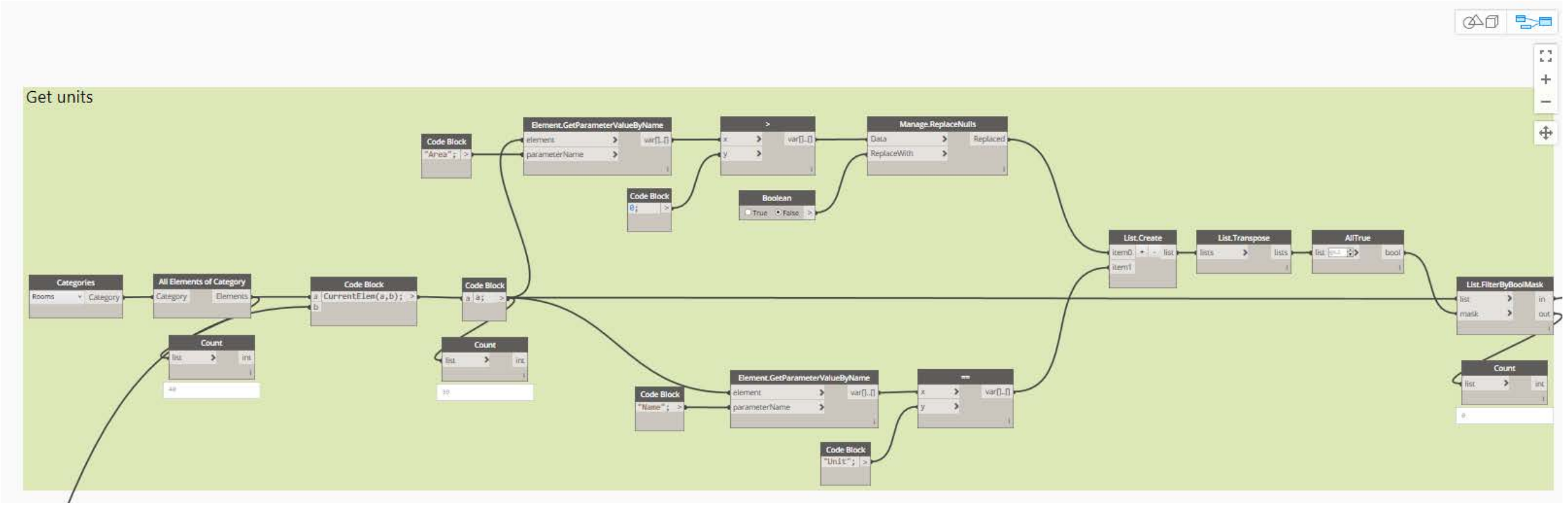
2 - Unit numbering

Find primary options + CurrentElem function



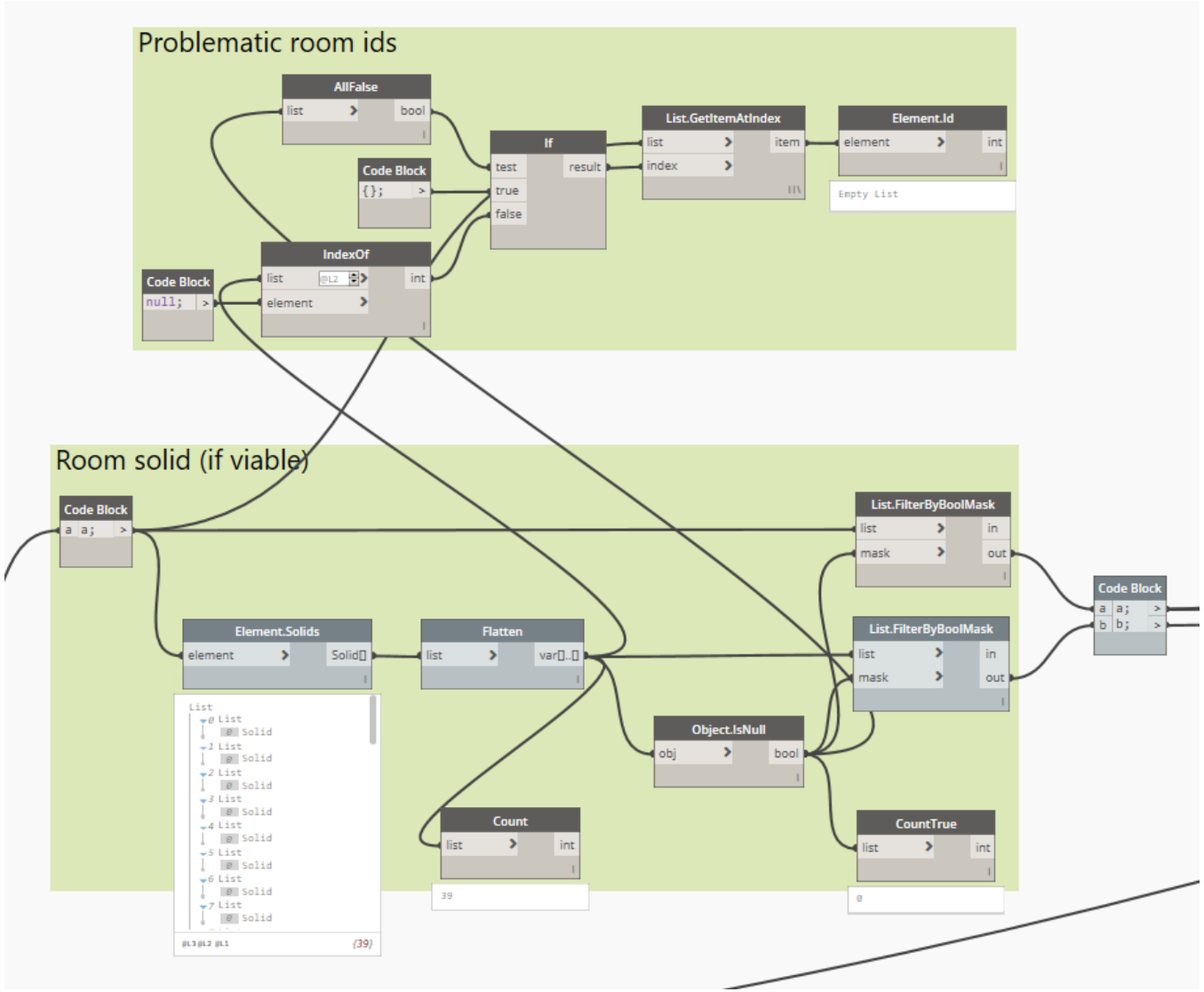
2 - Unit numbering

Filter rooms in primary options



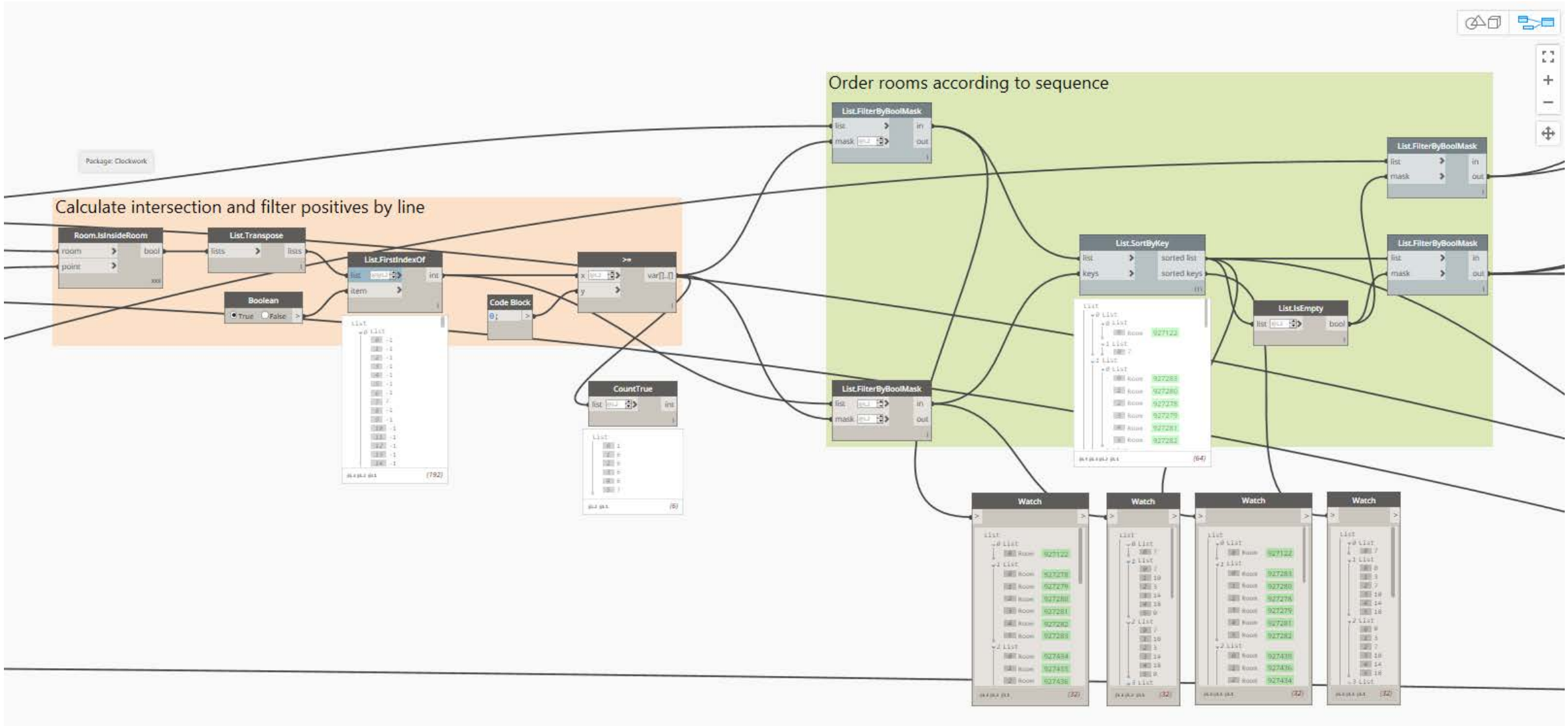
2 - Unit numbering

Filter rooms nulls



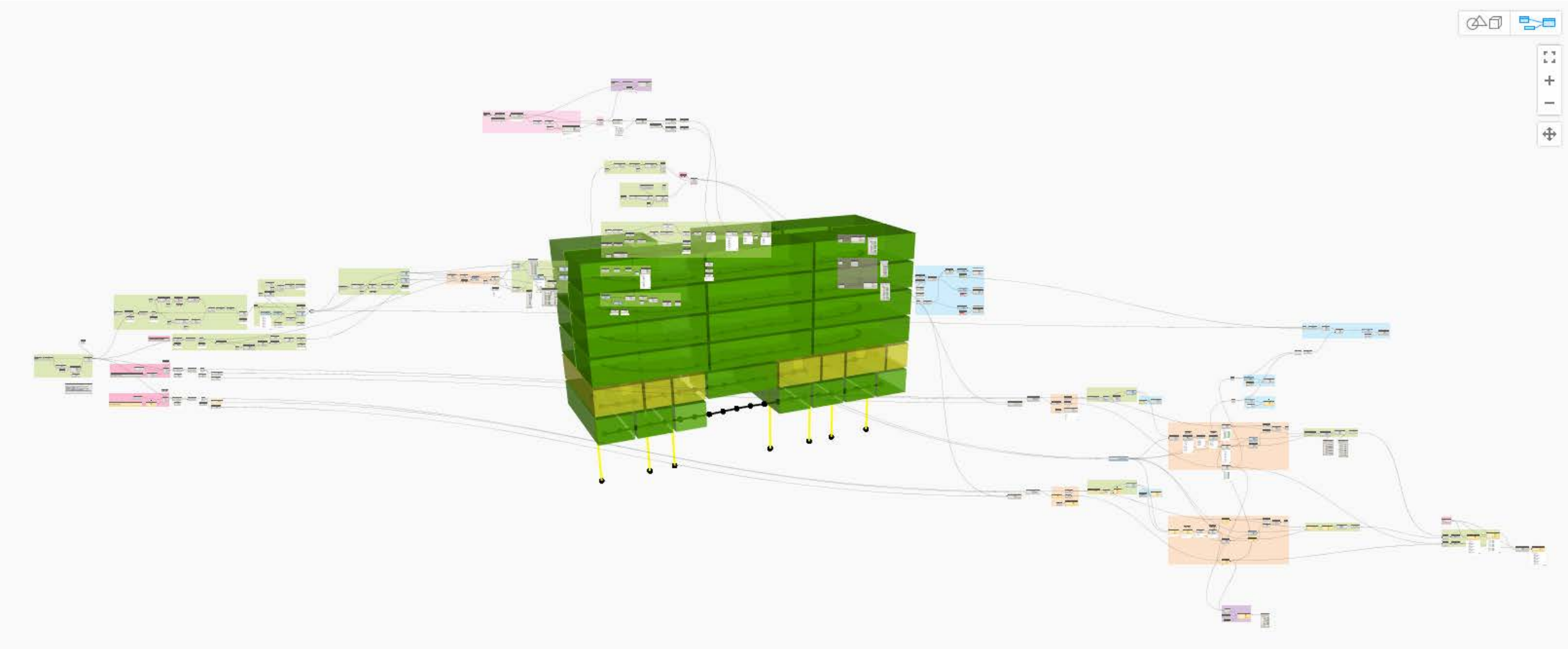
2 - Unit numbering

Find if elements are inside rooms



2 - Unit numbering

Overview



3 - Brief QA

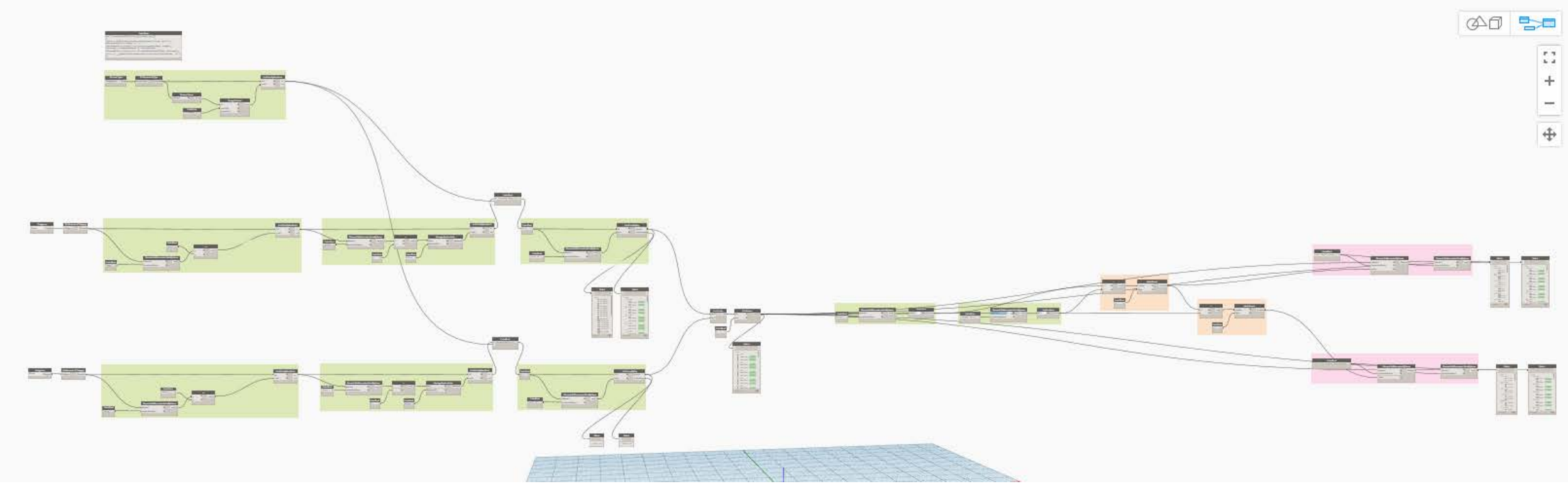
With Unit IDs and target areas in the model it is possible to calculate deviation from brief.

<101 - Acc Sch - Detailed>

A	B	C	D	E	F	G
Unit ID	Unit Type Group	Area	Target Area	Unit Area Excess	Unit Area Excess P	Number of Units
A1-00-01	PS-M-3B-5P-2S	106.3 m²	96.0 m²	10.3 m²	0.107	1
A1-00-02	PS-M-3B-5P-2S	106.3 m²	96.0 m²	10.3 m²	0.107	1
A1-00-03	PS-M-2B-4P-2S	95.4 m²	83.0 m²	12.4 m²	0.149	1
A1-00-04	PS-M-3B-5P-2S	106.3 m²	96.0 m²	10.3 m²	0.107	1
A1-00-05	PS-M-3B-5P-2S	106.3 m²	96.0 m²	10.3 m²	0.107	1
A1-00-06	PS-M-3B-5P-2S	106.3 m²	96.0 m²	10.3 m²	0.107	1
A1-00-07	PS-M-3B-5P-2S	106.3 m²	96.0 m²	10.3 m²	0.107	1
A1-01-01	PS-F-2B-3P-1S	68.3 m²	61.0 m²	7.3 m²	0.12	1
A1-02-01	PS-F-1B-2P-1S	50.4 m²	50.0 m²	0.4 m²	0.008	1
A1-02-02	PS-F-2B-4P-1S	77.4 m²	70.0 m²	7.4 m²	0.106	1
A1-02-03	PS-F-2B-4P-1S	77.4 m²	70.0 m²	7.4 m²	0.106	1
A1-02-04	PS-F-2B-3P-1S	68.7 m²	61.0 m²	7.7 m²	0.126	1
A1-02-05	PS-F-2B-4P-1S	77.4 m²	70.0 m²	7.4 m²	0.106	1
A1-02-06	PS-F-2B-3P-1S	64.7 m²	61.0 m²	3.7 m²	0.061	1
A1-03-01	PS-F-1B-2P-1S	50.4 m²	50.0 m²	0.4 m²	0.008	1
A1-03-02	PS-F-2B-4P-1S	77.4 m²	70.0 m²	7.4 m²	0.106	1
A1-03-03	PS-F-2B-4P-1S	77.4 m²	70.0 m²	7.4 m²	0.106	1
A1-03-04	PS-F-2B-3P-1S	68.7 m²	61.0 m²	7.7 m²	0.126	1
A1-03-05	PS-F-2B-4P-1S	77.4 m²	70.0 m²	7.4 m²	0.106	1
A1-03-06	PS-F-2B-3P-1S	64.7 m²	61.0 m²	3.7 m²	0.061	1
A1-04-01	PS-F-1B-2P-1S	50.4 m²	50.0 m²	0.4 m²	0.008	1
A1-04-02	PS-F-2B-4P-1S	77.4 m²	70.0 m²	7.4 m²	0.106	1
A1-04-03	PS-F-2B-4P-1S	77.4 m²	70.0 m²	7.4 m²	0.106	1
A1-04-04	PS-F-2B-3P-1S	68.7 m²	61.0 m²	7.7 m²	0.126	1
A1-04-05	PS-F-2B-4P-1S	77.4 m²	70.0 m²	7.4 m²	0.106	1
A1-04-06	PS-F-2B-3P-1S	64.7 m²	61.0 m²	3.7 m²	0.061	1
A1-05-01	PS-F-1B-2P-1S	50.4 m²	50.0 m²	0.4 m²	0.008	1
A1-05-02	PS-F-2B-4P-1S	77.4 m²	70.0 m²	7.4 m²	0.106	1
A1-05-03	PS-F-2B-4P-1S	77.4 m²	70.0 m²	7.4 m²	0.106	1
A1-05-04	PS-F-2B-3P-1S	68.7 m²	61.0 m²	7.7 m²	0.126	1
A1-05-05	PS-F-2B-4P-1S	77.4 m²	70.0 m²	7.4 m²	0.106	1
A1-05-06	PS-F-2B-3P-1S	64.7 m²	61.0 m²	3.7 m²	0.061	1
		2465.6 m²				32

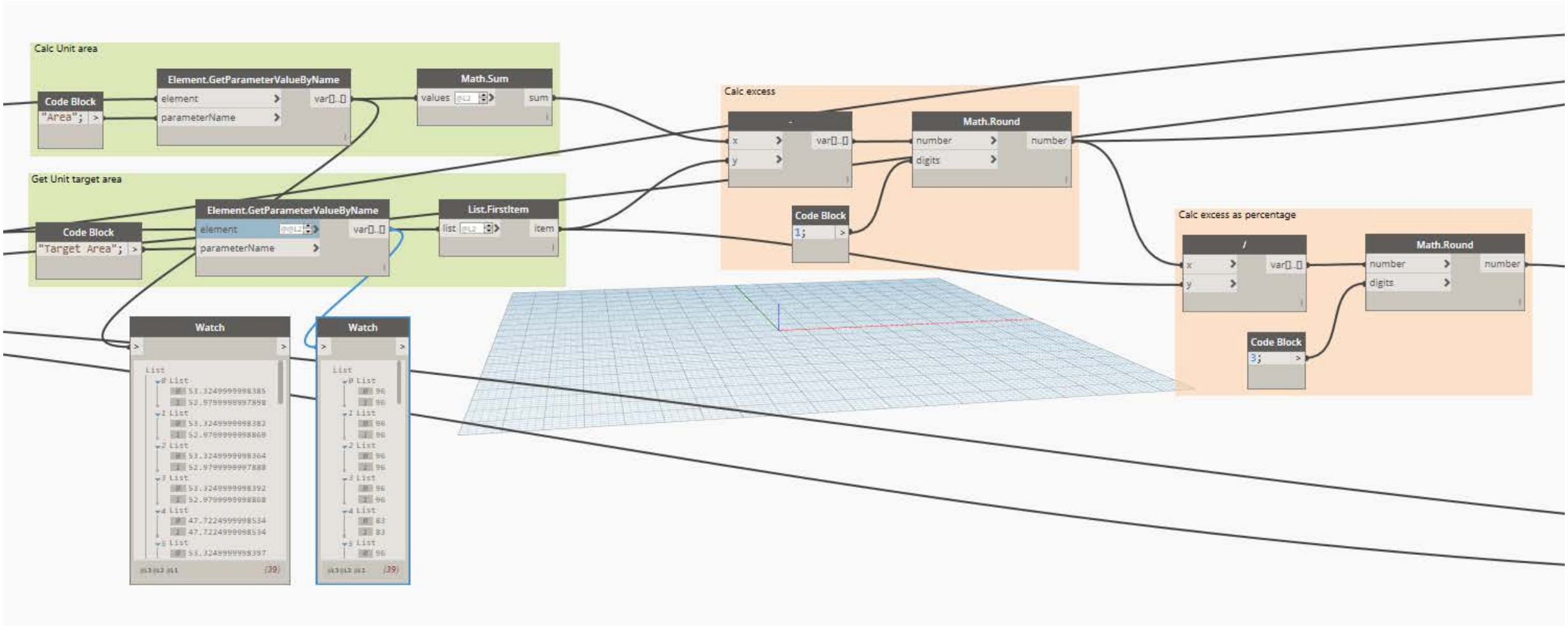
3 - Brief QA

Overview



3 - Brief QA

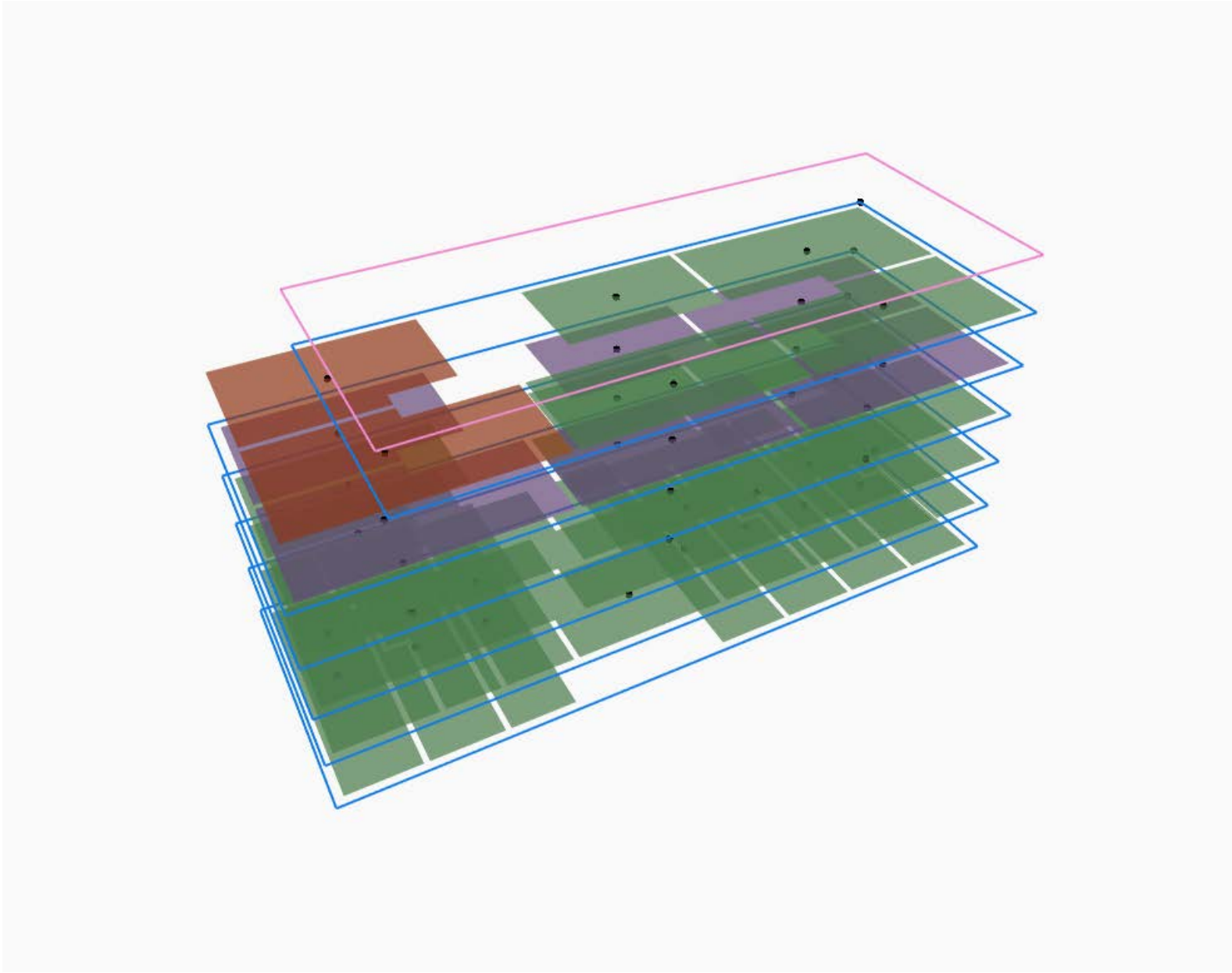
Calculate excess



4 - NSA vs GEA QA

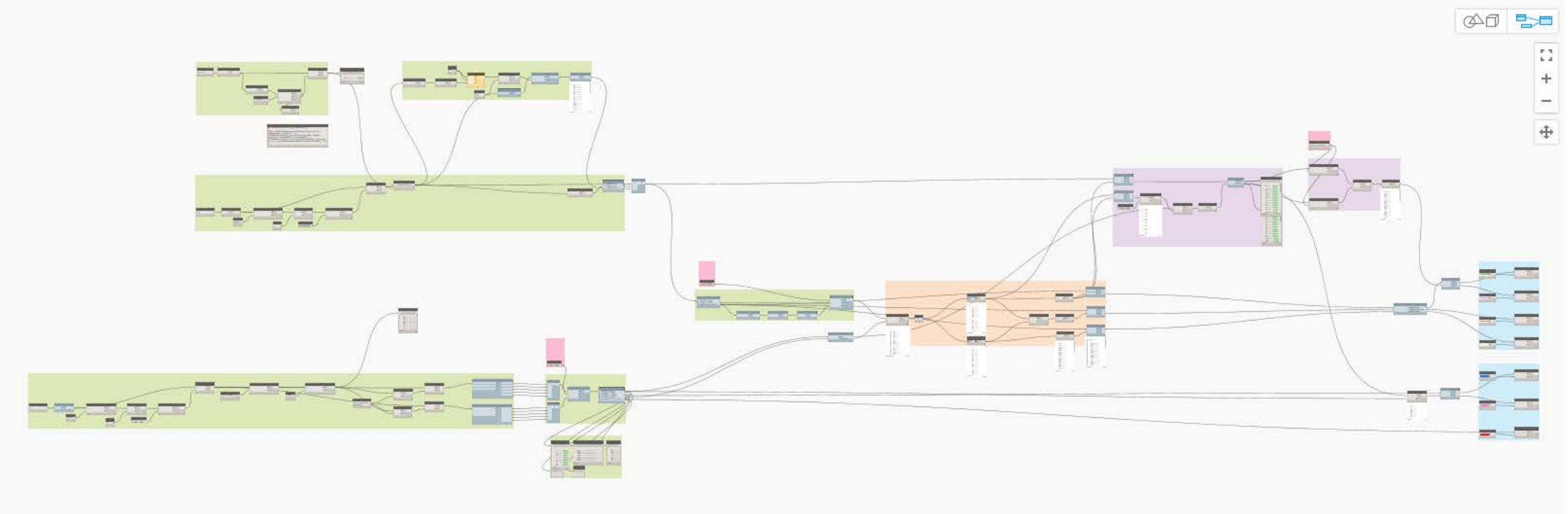
QA check for rooms being properly contained by an area.

Rooms that clearly belong to an area can then be checked for consistency of data with the area they belong to.



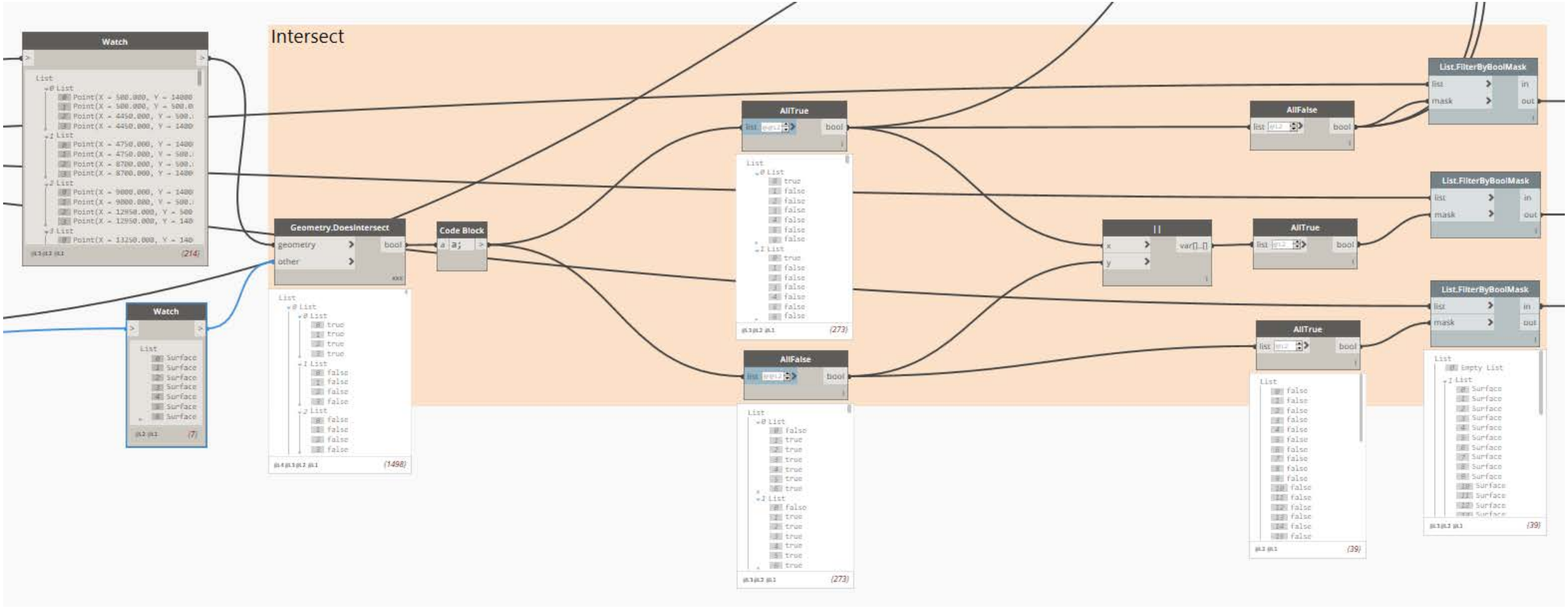
4 - NSA vs GEA QA

Overview



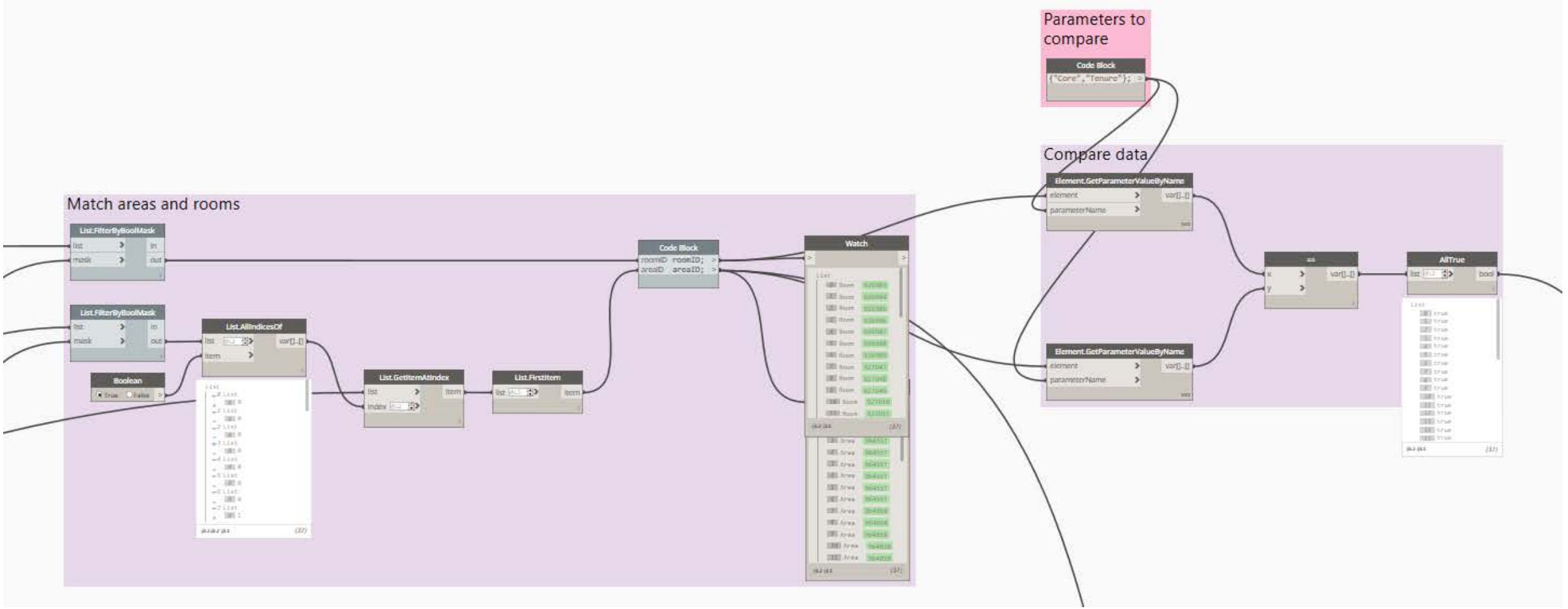
4 - NSA vs GEA QA

Containment test



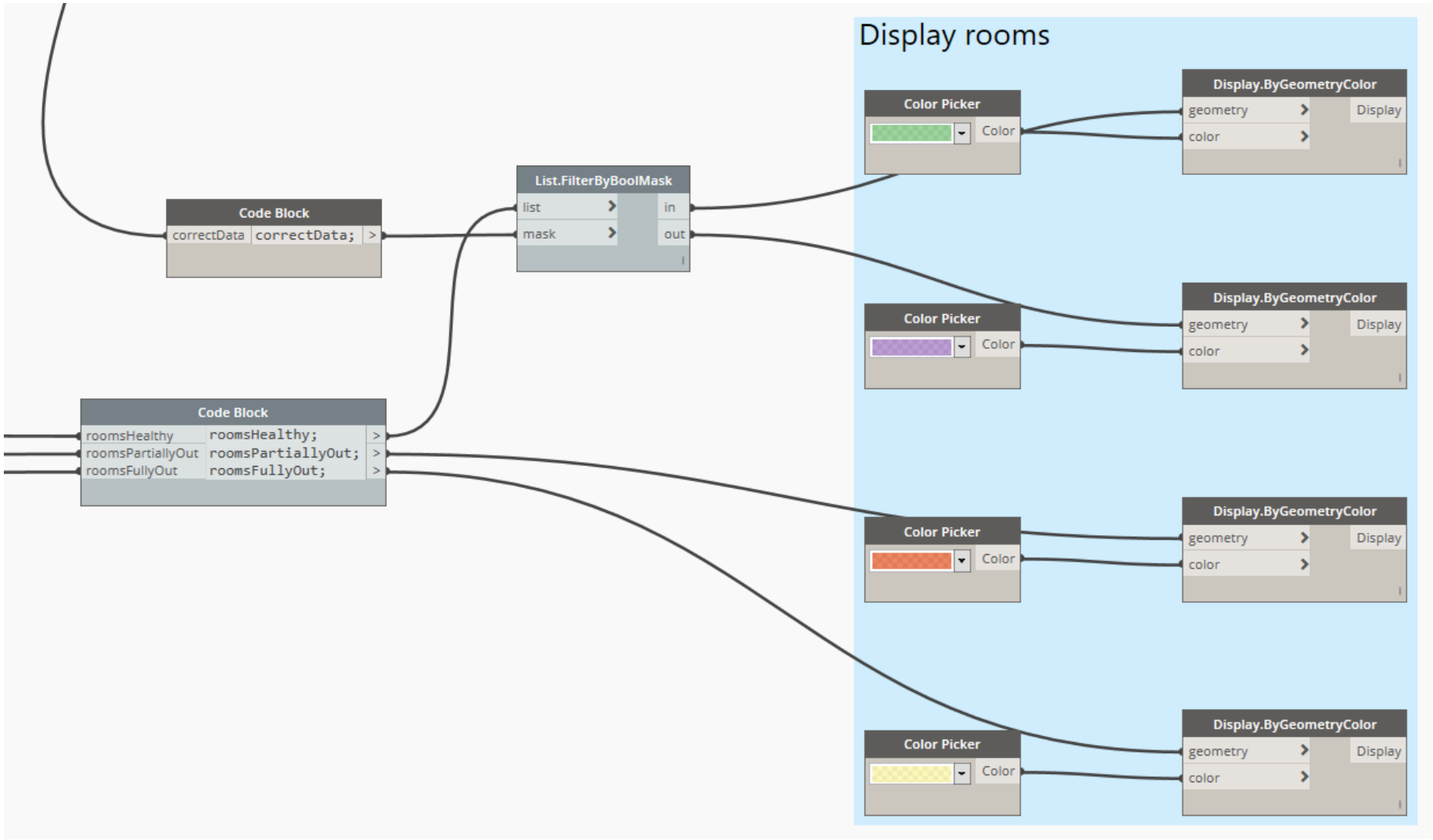
4 - NSA vs GEA QA

Compare data between rooms and areas



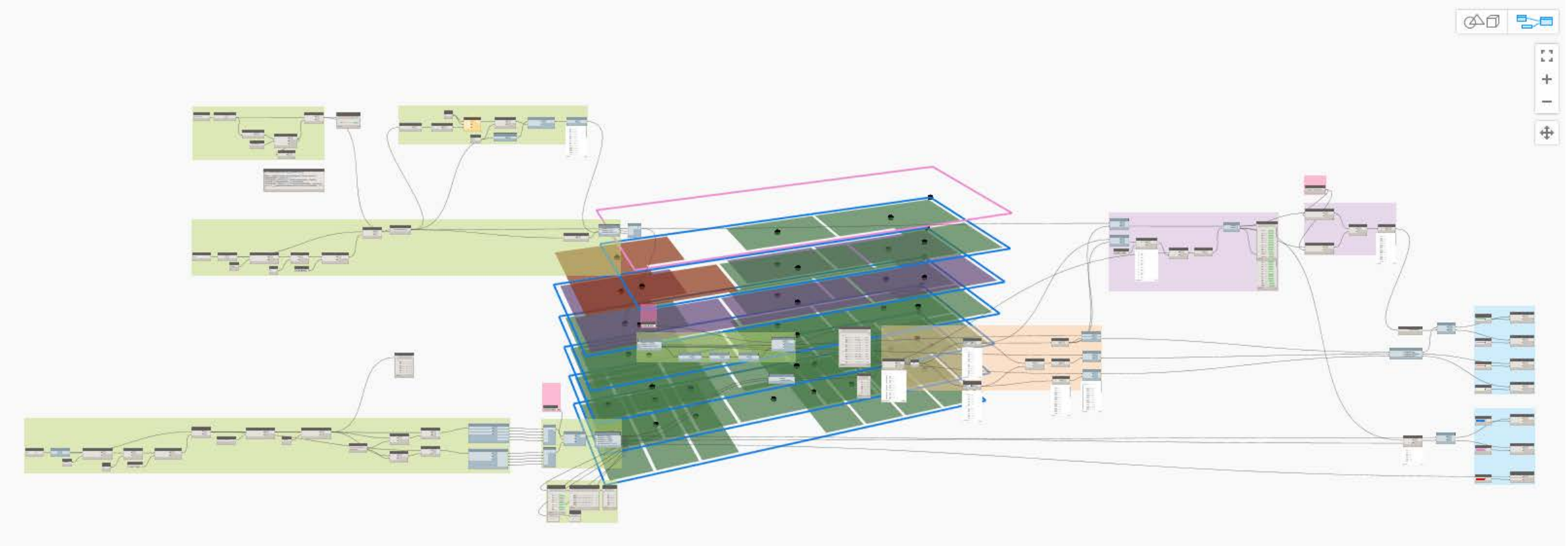
4 - NSA vs GEA QA

Display



4 - NSA vs GEA QA

Overview



Thank you