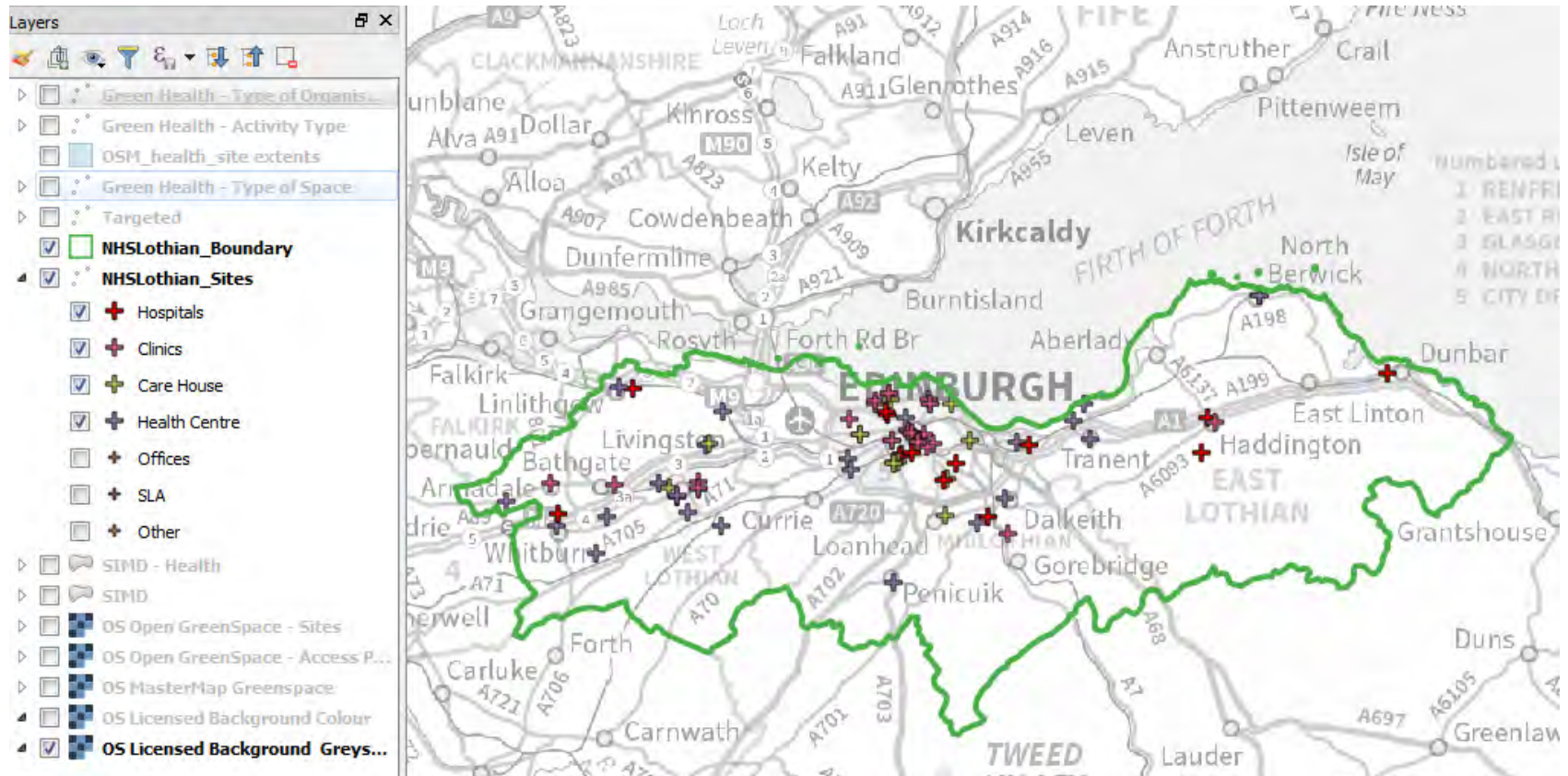
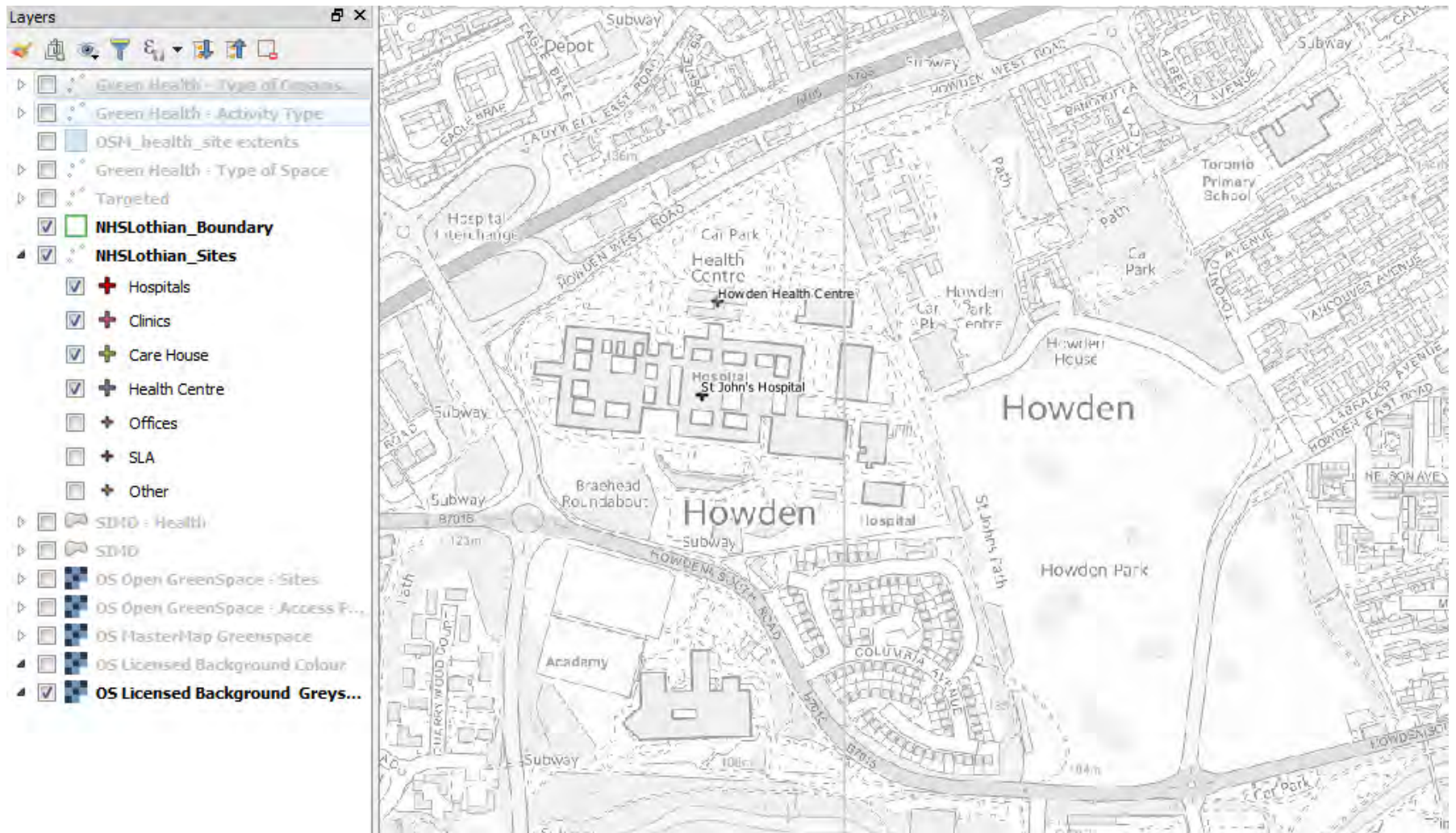


Annex 5: GIS Green Health Map

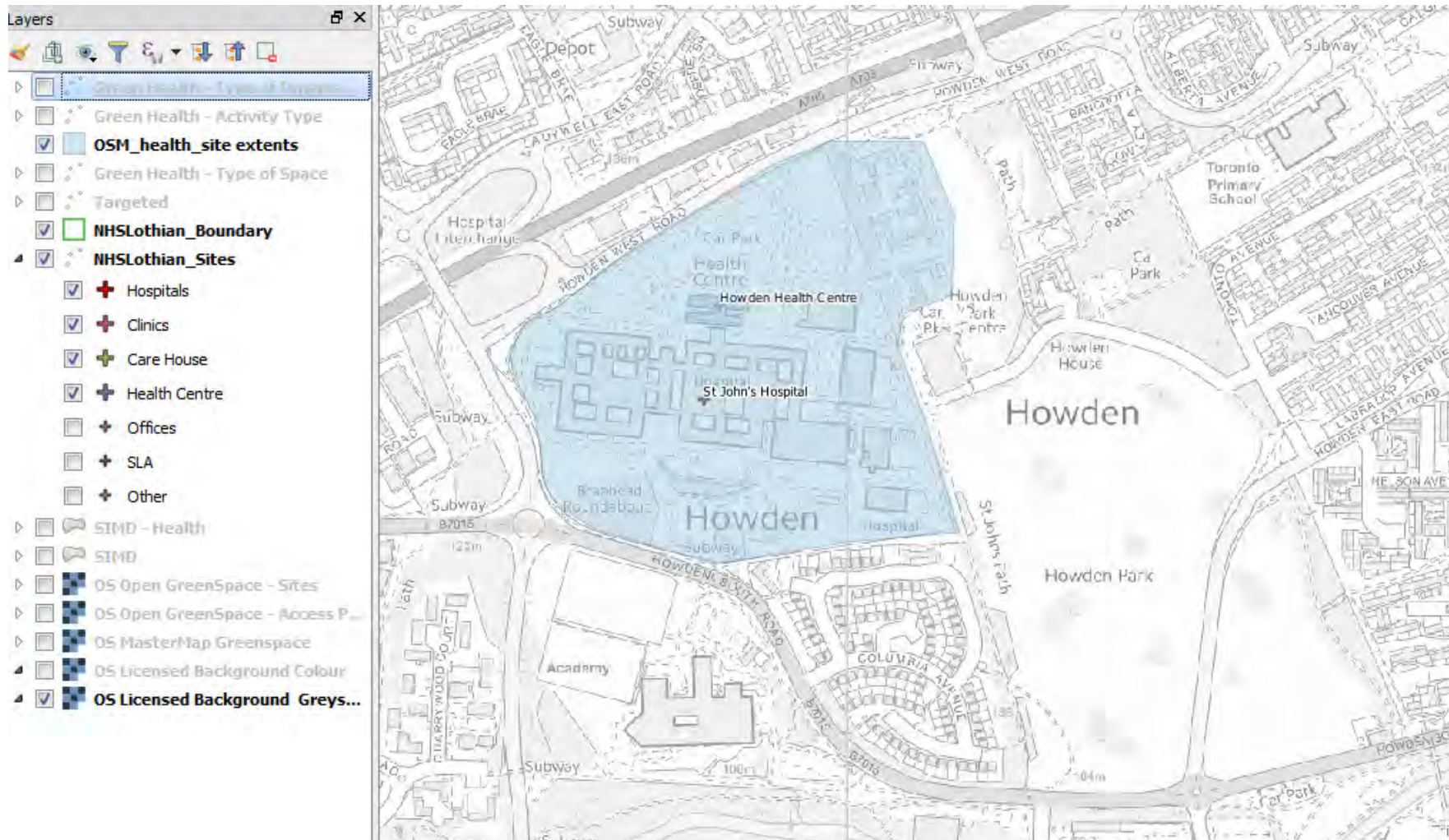


This annex provides an overview of the spatial analysis for the Greenspace and Health Strategic Framework and introduces the GIS Green Health Map. It shows how we combined information from stakeholders with other data, to get a spatial overview of the NHS estate, greenspace and green health activities to inform priorities in the strategy. The Map has been developed in QGIS (a free and open source Geographic Information System) to provide the potential for the Map to be updated, further developed and additional data layers added.

At the start of the project, there was no map or GIS layer of the NHS estate. We started with a list of NHS Lothian site addresses and plotted these locations

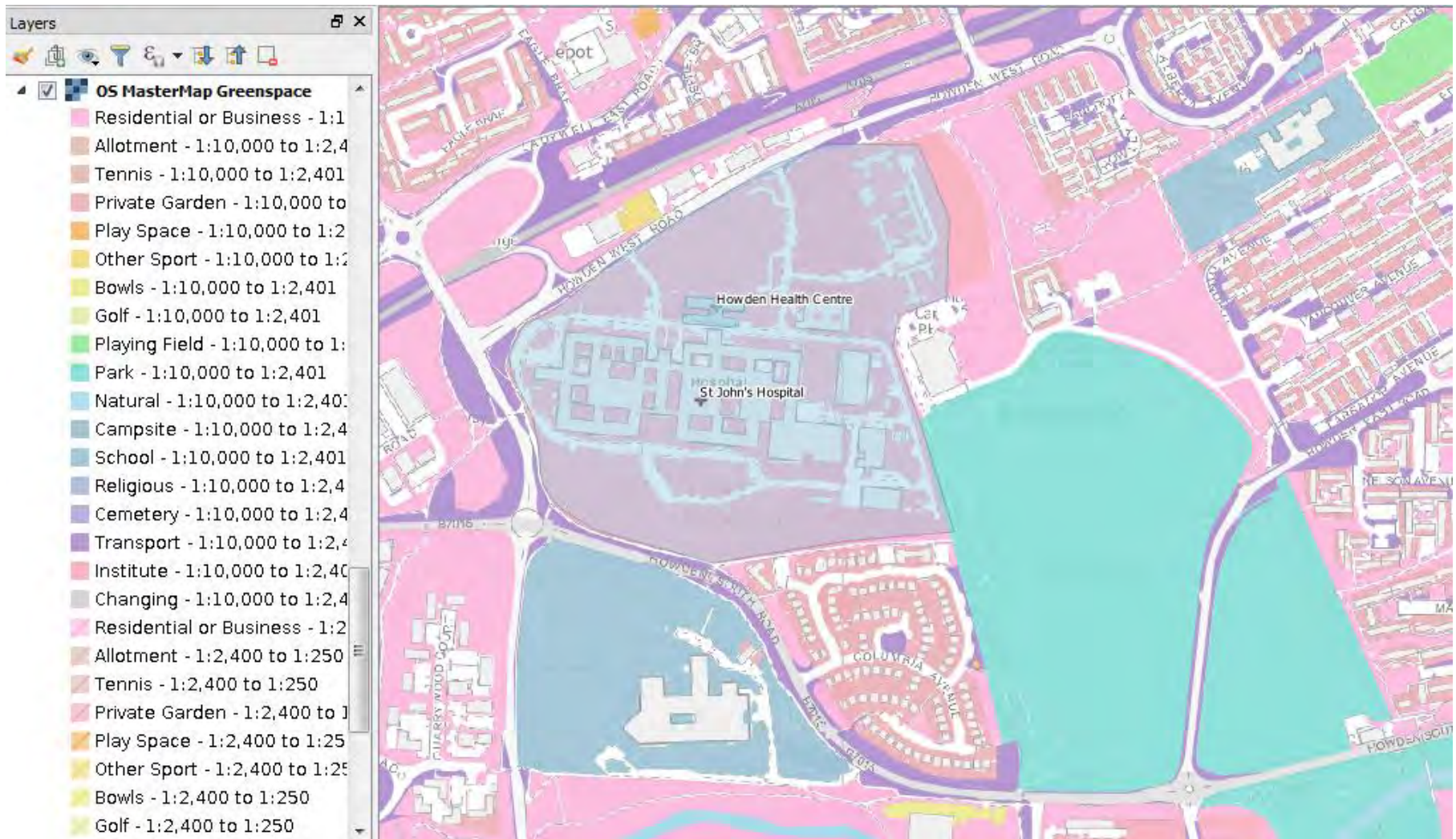


Zooming in to Livingston, you can see markers for St John's Hospital and the Howden Health Centre



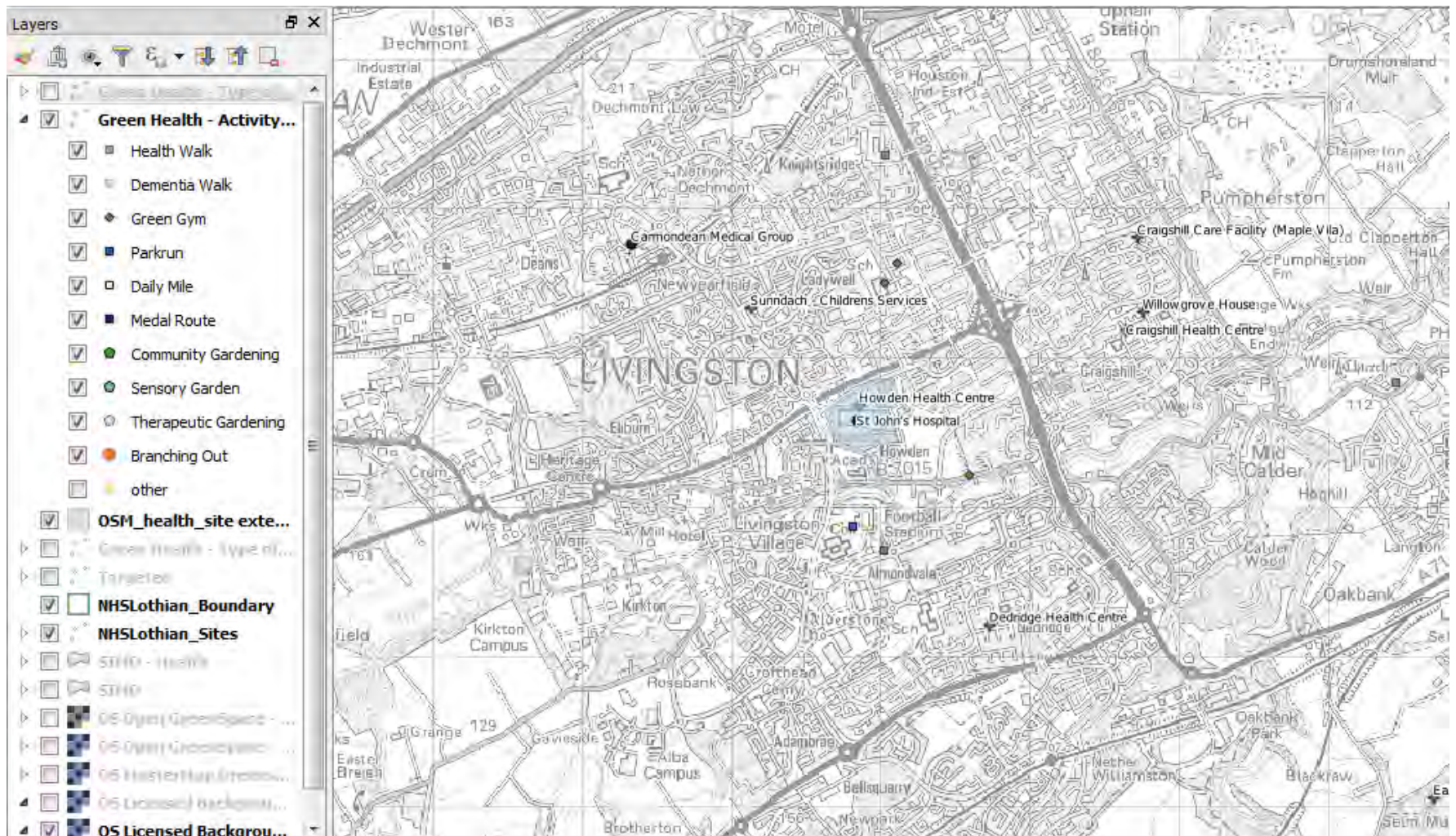
Using other data, we identified the extent of the green estate

At St John's there is limited greenspace around the buildings, carparks and access roads



Adding in data from OS MasterMap Greenspace Layer, we start to see the greenspace nearby. At St John's, the hospital site is adjacent to Howden Park.

So, whilst there may be limited opportunities for green-health activities on the NHS site, the proximity of the park and links to other spaces, community facilities and residential areas offers up opportunities.



If we zoom out a bit, and click on the Green-Health Activity layer, you can start to see how we have plotted the information that stakeholders have provided about a range of Green-Health activities and their locations

The screenshot displays a GIS interface with a map of Livingston, Scotland. On the left, the 'Layers' panel shows several active layers: 'Green Health - Activity...' (with sub-layers for Health Walk, Dementia Walk, Green Gym, Parkrun, Daily Mile, Medal Route, Community Gardening, Sensory Garden, Therapeutic Gardening, Branching Out, and other), 'OSM_health_site exte...', 'Green Health - Type of Targeted', 'NHSLothian_Boundary', 'NHSLothian_Sites', 'S110 - Health', 'S110', 'OS Open GreenSpace', 'OS Open GreenSpace', 'OS Hasbeekap Greens...', 'OS Licensed Backgrou...', and 'OS Licensed Backgrou...'. A red circle on the map highlights a specific location. On the right, the 'Identify Results' panel shows the following data for the selected feature:

Feature	Value
Green Health - Type ...	
int_id	EON
(Derived)	
(Actions)	
Source	aggregated_data_v3
int_id	EON
org_name	TCV
site_name	Howden Walled Gar...
location	EH54 6AD
geocoded	
postcode	EH546AD
X	305592.0000000000
Y	667212.0000000000
activity	green gym
locat_type	park
land_owner	N/A
targeted	YES
org_type	voluntary/third sec...

At the bottom of the Identify Results panel, there are controls for 'Mode' (set to 'Current layer'), 'Auto open form' (unchecked), 'View' (set to 'Tree'), and a 'Help' button.

The icons show the different types of activities (and there are also layers showing the type of organisations providing the activities and the types of spaces where they are taking place)

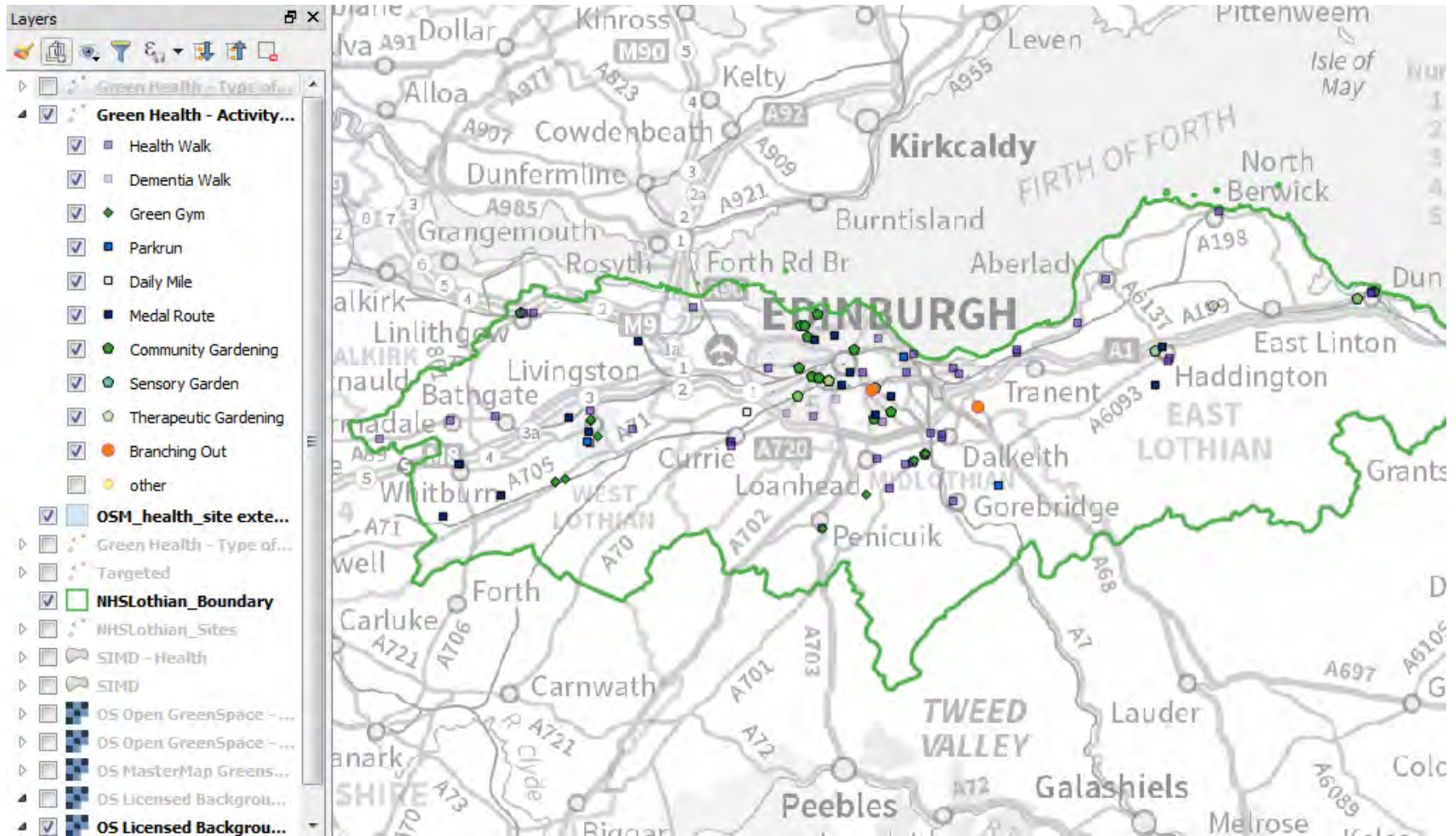
Clicking on the information button provides more information
 For example, this is showing a TCV Green Gym in the Howden Walled Garden

The screenshot displays a GIS application interface. On the left, the 'Layers' panel shows several layers, including 'Green Health - Activity...' with various activity types like 'Health Walk', 'Dementia Walk', 'Green Gym', 'Parkrun', 'Daily Mile', 'Medal Route', 'Community Gardening', 'Sensory Garden', 'Therapeutic Gardening', and 'Branching Out'. Other layers include 'OSM_health_site exte...', 'NHSLothian_Boundary', and 'NHSLothian_Sites'. The main map area shows a street map of Livingston, with a red circle highlighting a specific location near 'Sundach - Care Services'. On the right, the 'Identify Results' panel shows the following data for the selected feature:

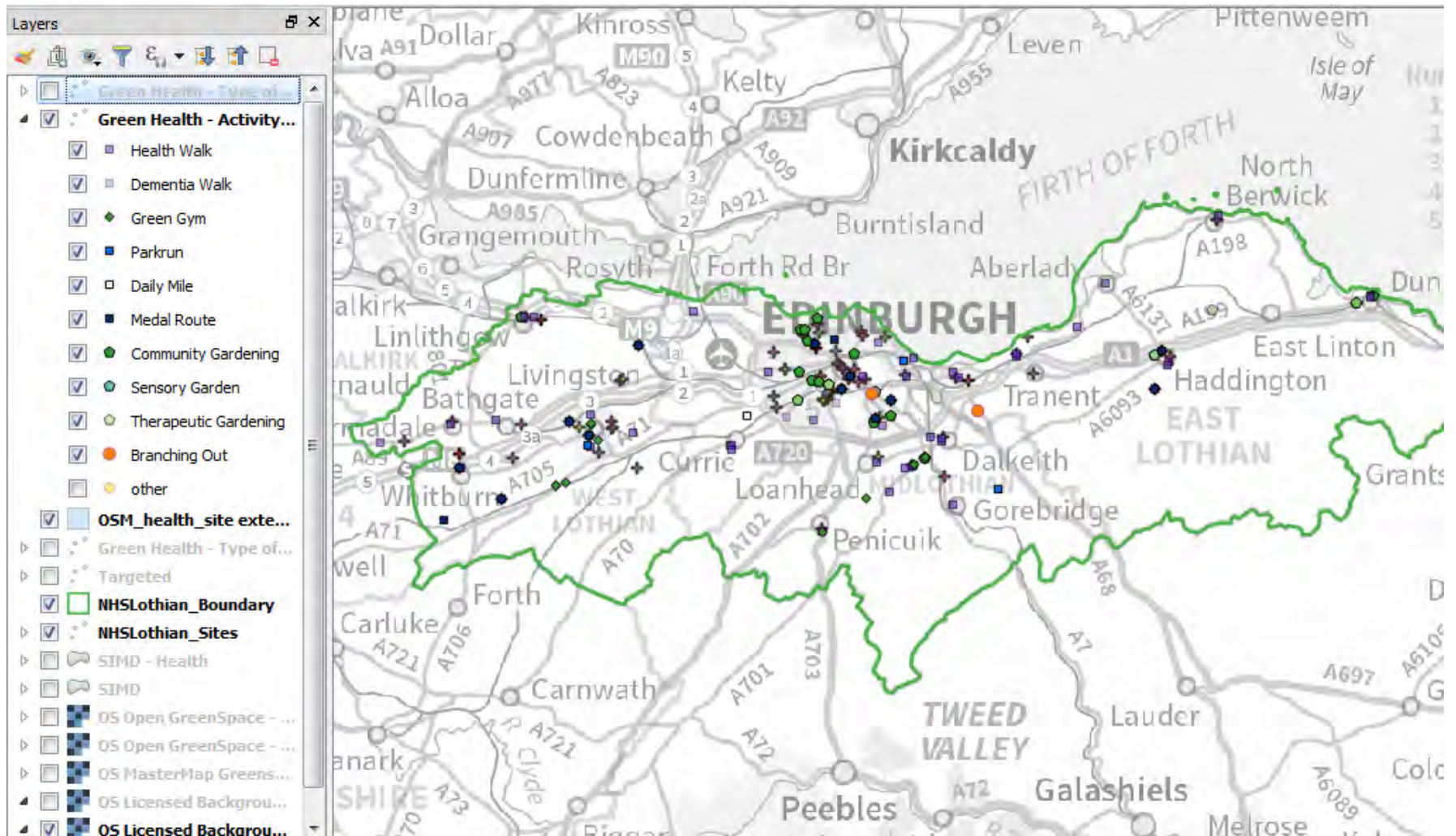
Feature	Value
Green Health - Type ...	
int_id	9(37)
(Derived)	
(Actions)	
Source	aggregated_data
int_id	9(37)
org_name	Paths for All
site_name	City-wide
location	Put Your West Foot...
geocoded	Yes
postcode	EH548HF
X	305030.8730000000
Y	669353.4690000000
activity	health walk, demen...
locat_type	other
land_owner	other
targeted	YES
org_type	voluntary/ third sec...

At the bottom right of the Identify Results panel, there are controls for 'Mode' (set to 'Current layer'), 'Auto open form' (unchecked), 'View' (set to 'Tree'), and a 'Help' button.

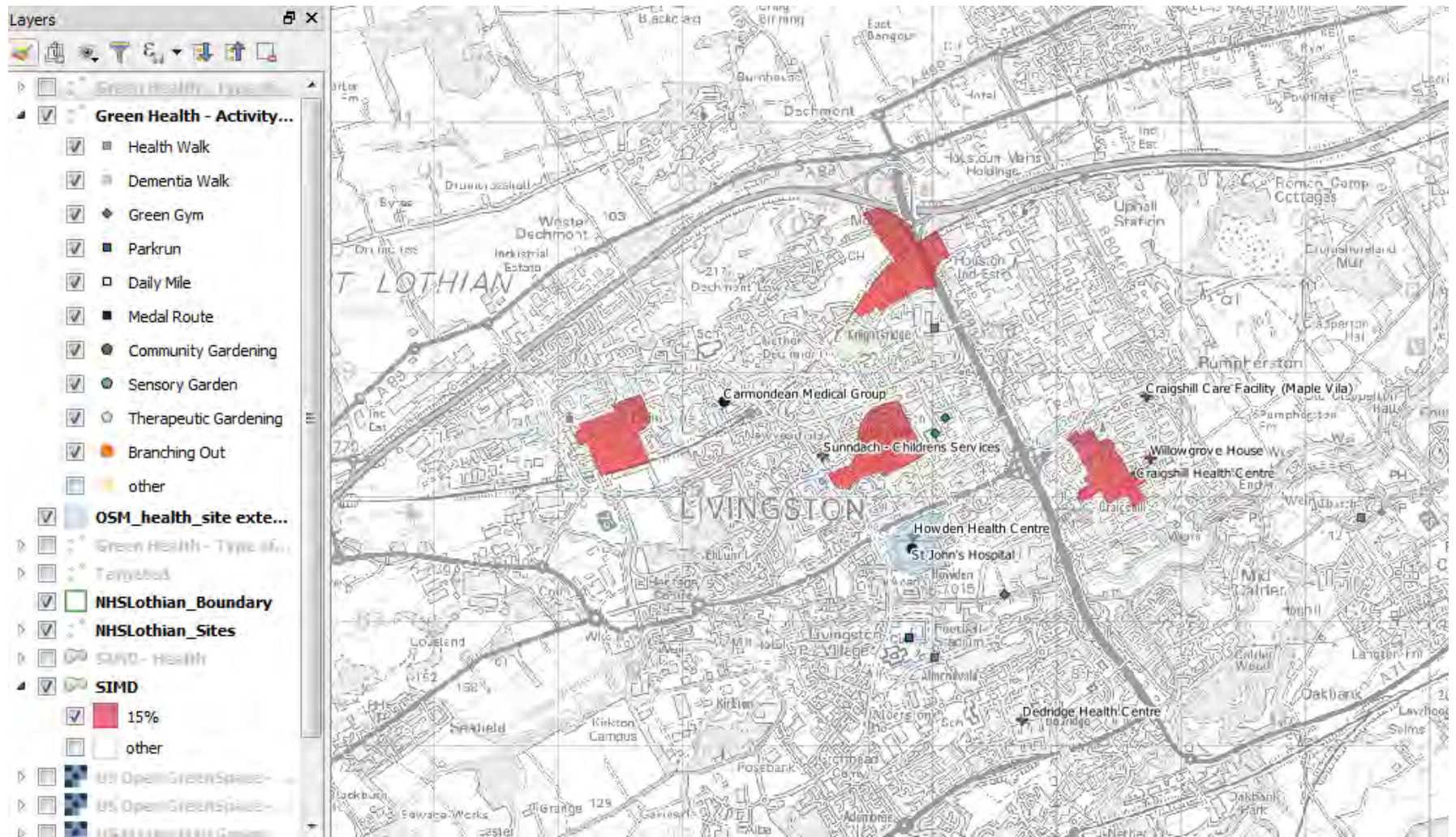
This is a health walk – part of the Put Your West Foot Forward programme



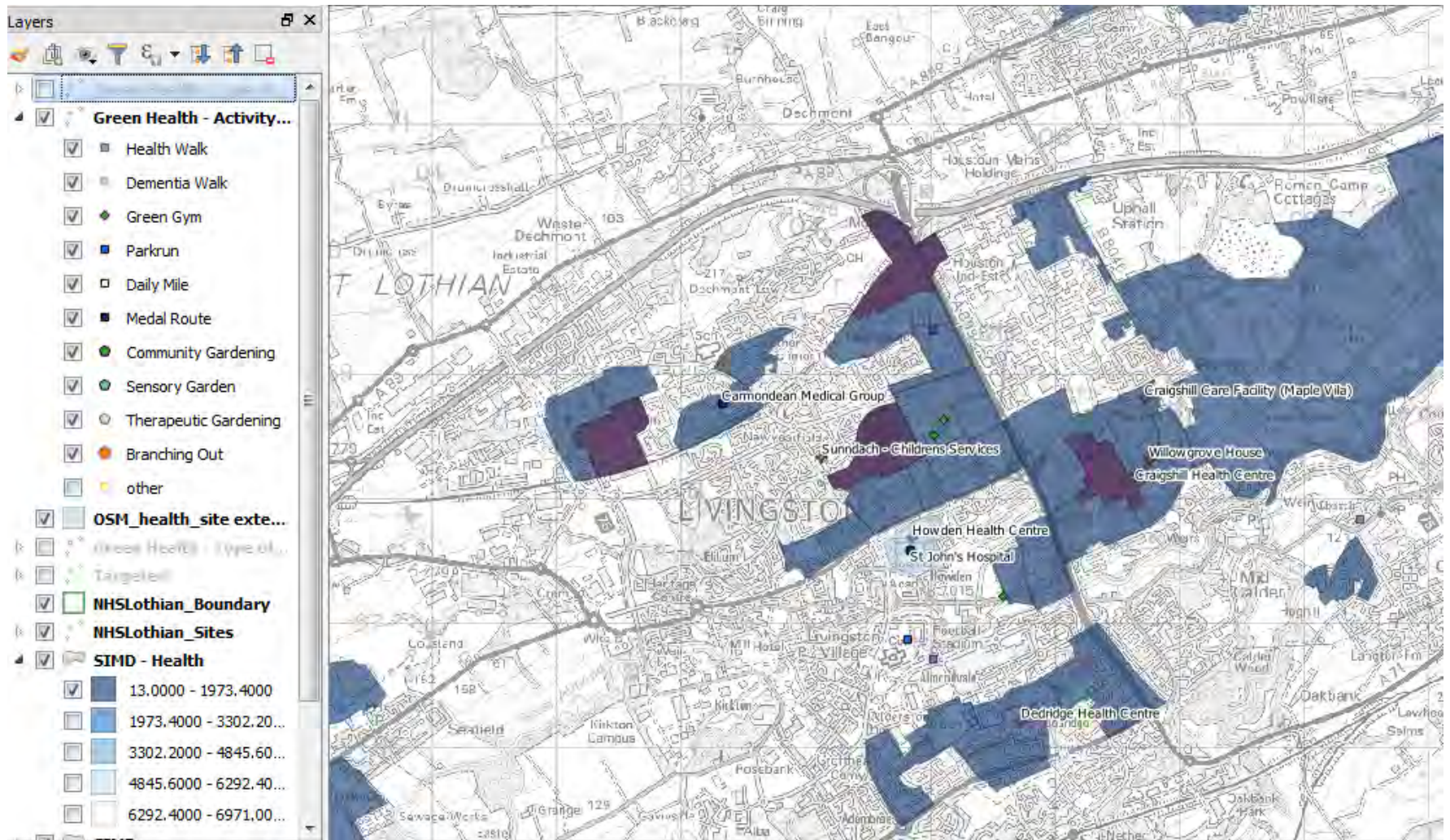
Zooming back out, we can look across Edinburgh and the Lothians, to start to see the distribution and type of green health activities



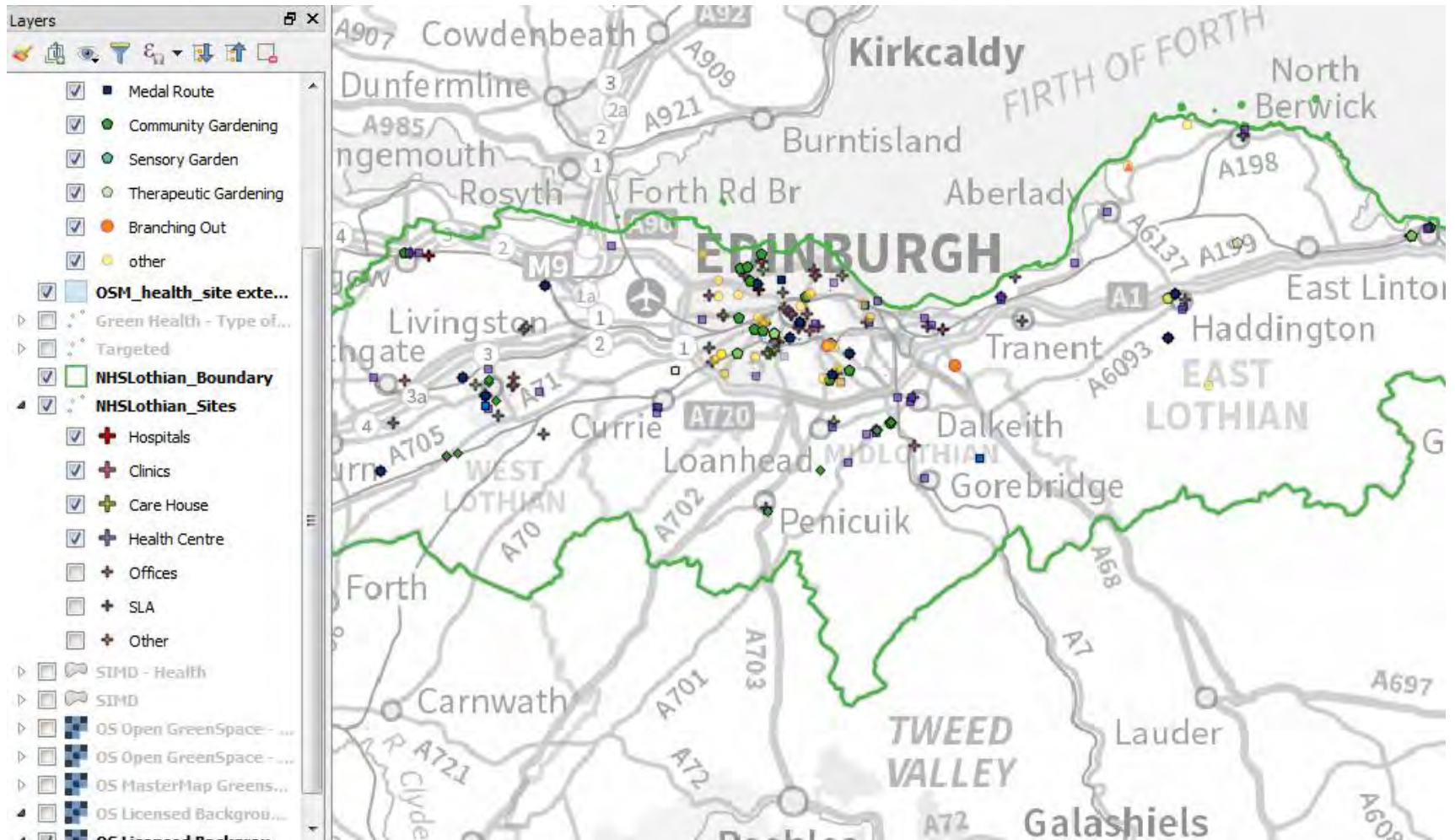
Adding back in the NHS Lothian sites, we can start to see the proximity of green health activities to NHS sites



We can bring in other datasets to begin to see how well current green-health activities match to areas of greatest need from a population health perspective - this slide shows an overlay of the 15% most deprived areas



We can also look at the specific health data within the SIMD - this is adding in the 'worst' quintile from the data



In summary, the GIS Green Health Map includes data for green health activities, the extent of the NHS estate, the location and type of greenspace and Scottish Index of Multiple Deprivation.

The Map has been developed in QGIS and so can be kept updated during the period of the strategic framework. Additional data layers added as required. The Map is designed to provide a tool to support decision-making and to record and share information about green health activities.