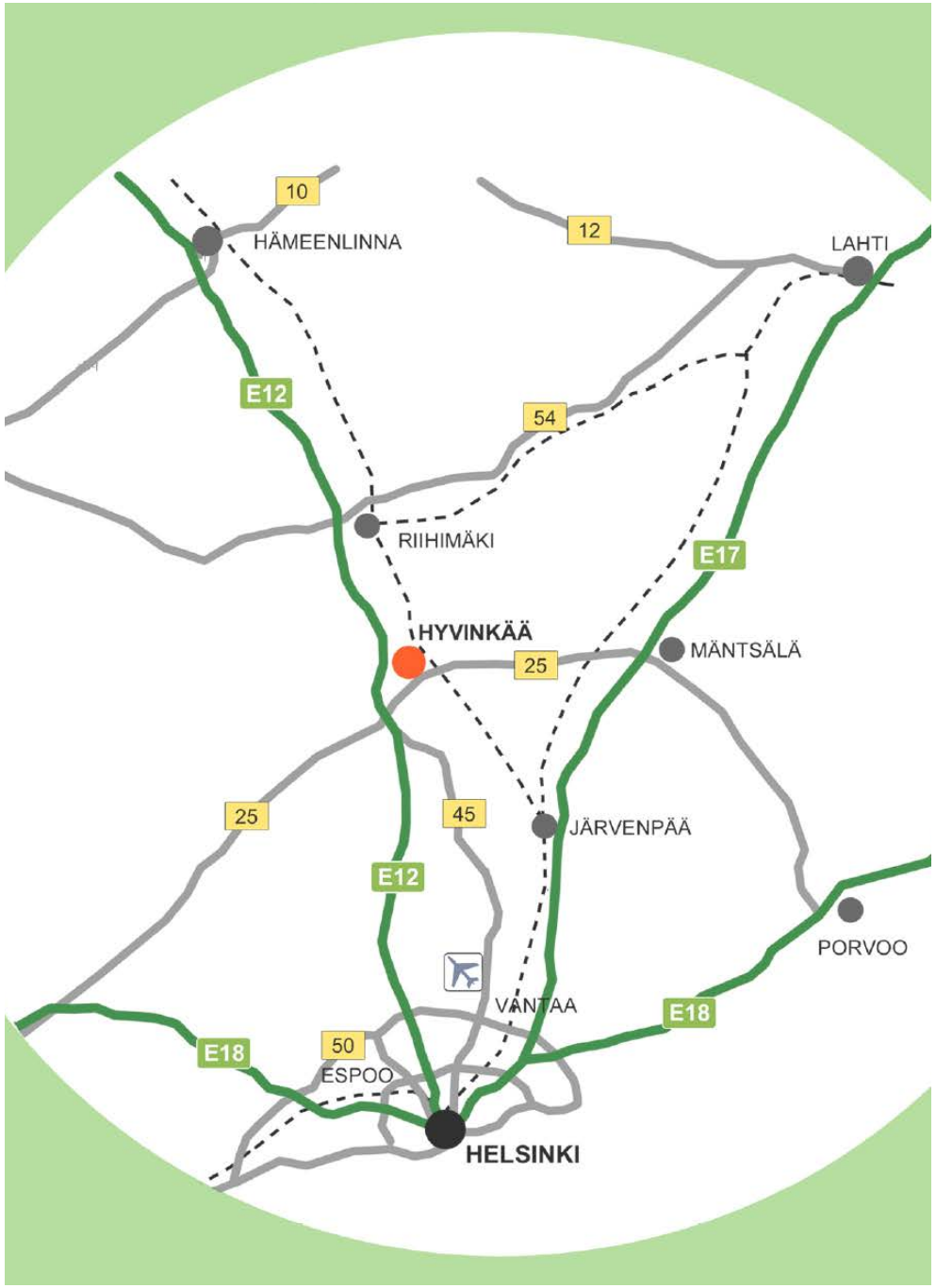
HYVINKÄÄLLÄ
ON HYVÄ HUOMEN.

DIGITAL WORKING ENVIRONMENT FOR URBAN PLANNING AND IMPLEMENTATION – CASE HANGONSILTA, HYVINKÄÄ

10.5.2016 Anne Jarva

SMART CITIES IN SMART REGIONS 2016 CONFERENCE, LAHTI



HYVINKÄÄ

The northern centre of the Helsinki Region

46 500 inhabitants

19 300 working places

International industries, logistics, trade and retail

KONE, Konecranes, Saint-Gobain, Onninen, Ahlsell etc.

HANGONSILTA

From an old railway yard to a modern housing area

- Unused old railway yard nearby the city center
- Planning activities since the end of the1990´s
- Delays caused by land aquisition and expensive groundworks
- The city bought most of the area owned by the state during 2000-2016, only few private property owners
- City´s most important development area of the 2020´s, 25 hectares
- Homes for 2000 people (90 000 squaremeters)
- Workingplaces, public & private services

COMPREHENSIVE PLANNING WITH NEW TOOLS

Architectural ideas competition
Overall concept and block structure
Detailed planning principles
2012-2014

Surveys concerning ground water hydrology, soil contamination and ground work actions
2013-2015

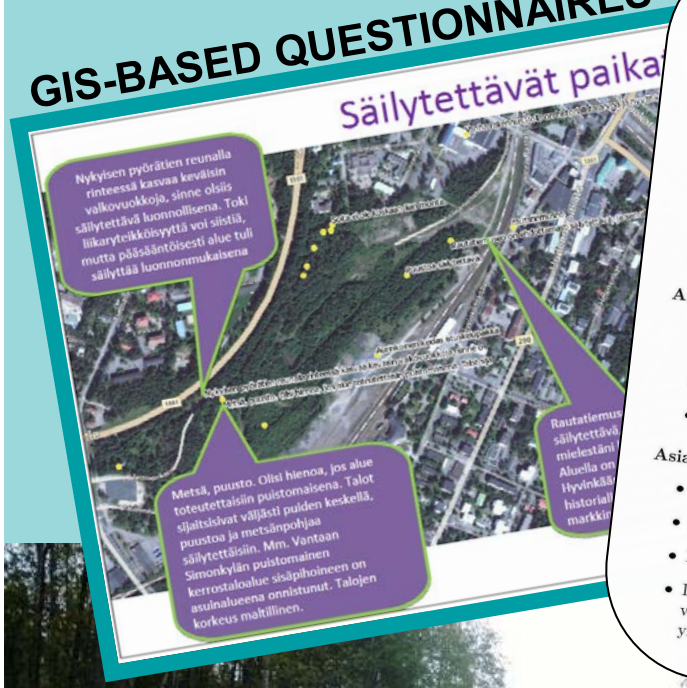
Competition for private partners, preliminary site agreements
Planning and design partnership
2015 ->

3-D City model for spatial planning, infrastructure and building design, virtual working environment
2015 ->

- Central location close to existing housing areas & historical railway milieu -> diversified public hearing methods
- Difficult soil & ground conditions: turf, earth fillings, ground water, dirty soil -> pre-building actions
- Relatively fast implementation with several partners -> simultaneous land use planning and architectural design
- Coordination of public and private planning and design processes -> efficient project management

DIVERSIFIED PUBLIC INTERACTION

GIS-BASED QUESTIONNAIRES



WEBPAGES AND GALLERIES

28 – Suutarin lasten markka

Kokoavana ytimenä alueen halki kulkeva vehreä Keskusraitti; kevyenliikenteen yhteys ja puutarhakortteleita yhdistävä julkinen tila

Estetiikka	44
Käytännöllisyys	42
Tunnelma	40

Asiat, joista pidän ehdotuksessa

- Koulu, urheilukentät, silta ja lähikorttelit muodostavat hie… aisuuden.
- Tasapainoiset, miellyttävät asuinkorttelit. Suojaavat radalta j…
- Suojaisa alue, jolle muodostuu yhteisön tuntua.

Asiat, joista en pidä ehdotuksessa

- Ei julkisia puistoja. Ei viheraluehierarkiaa tai tilallista jaksott…
- Saapumiset alueelle rujoja. Kalevankadun rakennukset tavanom…
- Renton alue olisi voinut olla urbaanimpi.
- Liian täyteen ahdettu taloja. Mahdottoman pitkä pysäköintikenttä radan varressa toimii mutta karmean ankea. Kerrostalot tunkeutuvat Läntisen yhdystien melualuelle.

EXHIBITIONS

Hangonsillan kilpailutyöt nähtävillä

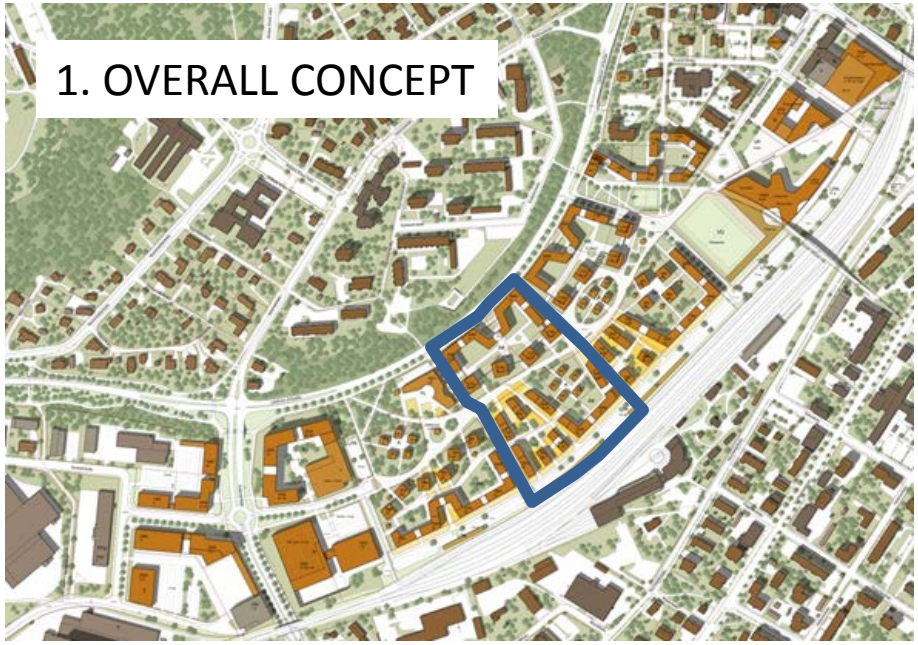
Yleisö voi kommentoida töitä marraskuun ajan

Hangonsillan suunnittelukilpailun 39 työtä ovat nähtävillä marraskuun aikana. Kaavoitusarkkitehtija Charlotta Tanner valmistelli näyttelyä.

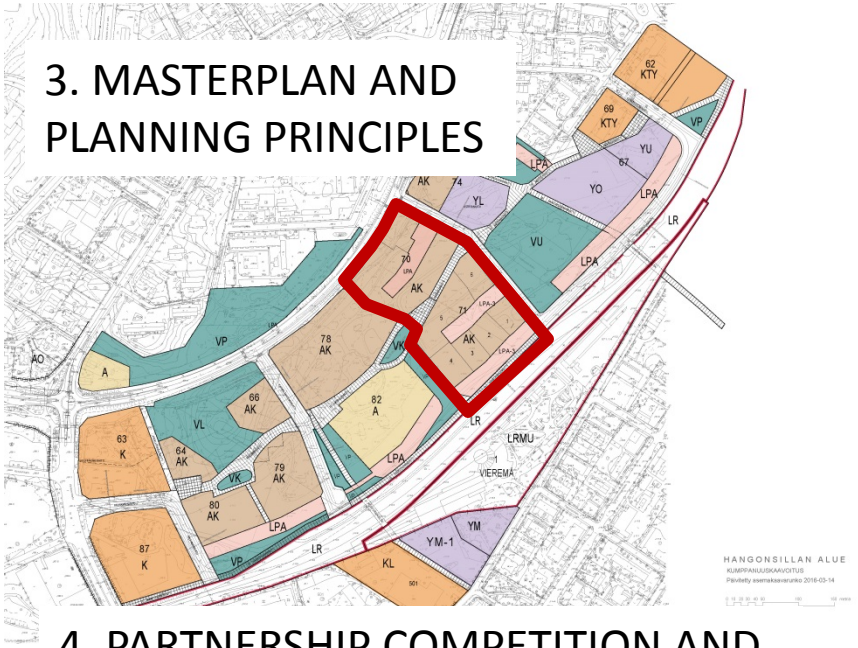
FORMAL HEARINGS
SOCIAL MEDIA

PUBLIC MEETINGS AND ”PLANNING WALKS”

PLANNING STEPS



1. OVERALL CONCEPT



2. BLOCK CONCEPT

4. PARTNERSHIP COMPETITION AND
PLANNING AGREEMENTS

4. COMBINED BLOCK DESIGN

5. DETAILED PLAN PROPOSAL

SMART HYVINKÄÄ

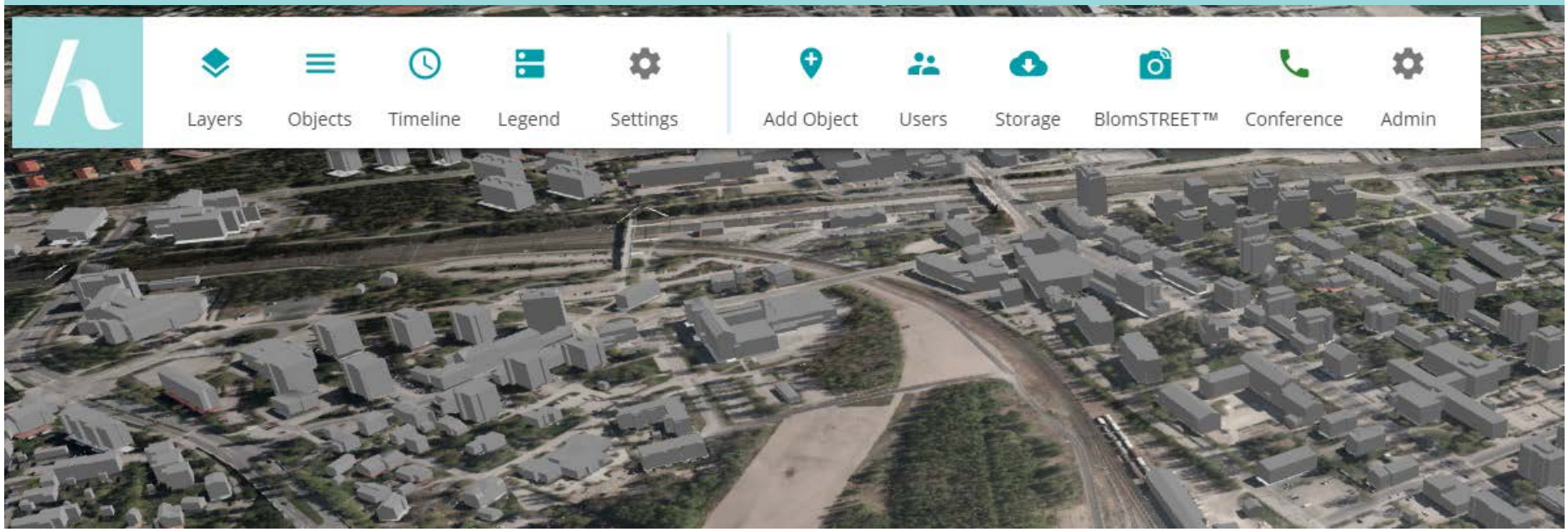
from Hangonsilta project management tool to digital innovation platform for urban development

SMART HYVINKÄÄ – INNOVATION PLATFORM

- A 3D data management environment and a multipurpose smart city platform, with which
- The Information of a city development project can be stored, shared and published by using only an internet browser.
- Based on open source code MAPGETS application platform owned by FCG City Portal Ltd
- Additional urban development applications can easily be added to the same digital environment when needed

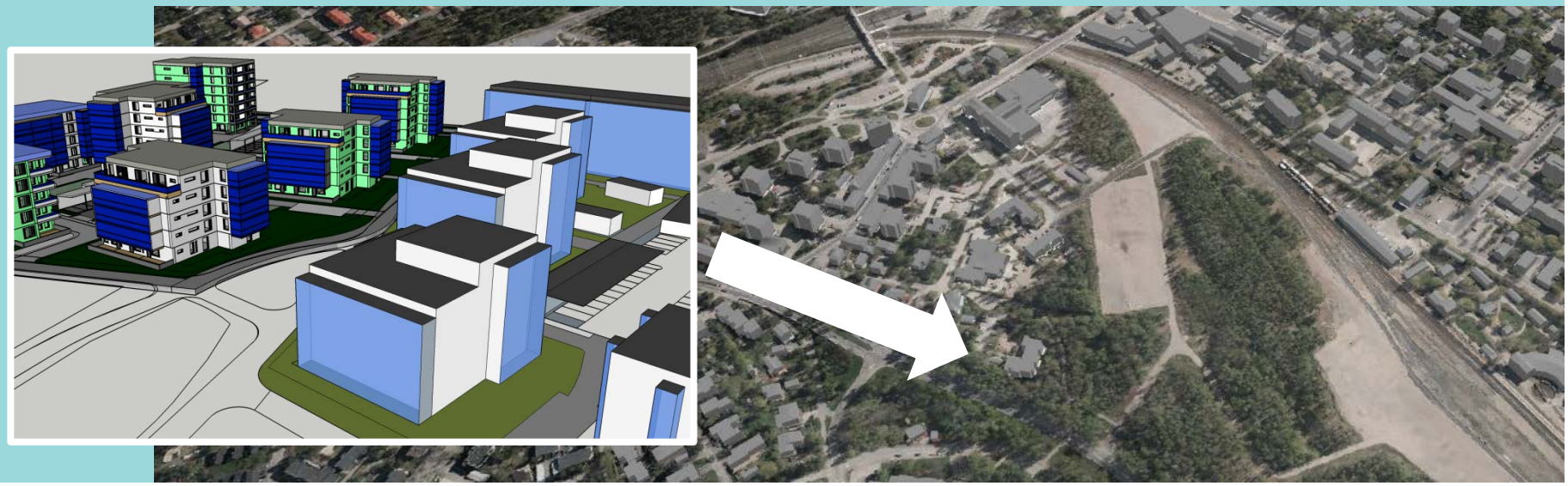
USER MANAGEMENT

- The administrator can manage data accessibility according to the organisation and user profiles
- Selected material may also be shared with users outside the city organisation, for example with Hangonsilta project partners
- The administrator can also manage publication of information



CONTENT MANAGEMENT

- The administrator can import information models, such as infra models and building information models (BIM) to the 3D GIS environment
- Also documents, videos, photographs and internet links can be added to 3 D map features
- Information can also be selected and viewed through external WMS/WFS interface services
- Both outdoor spaces and indoor spaces can be visualised



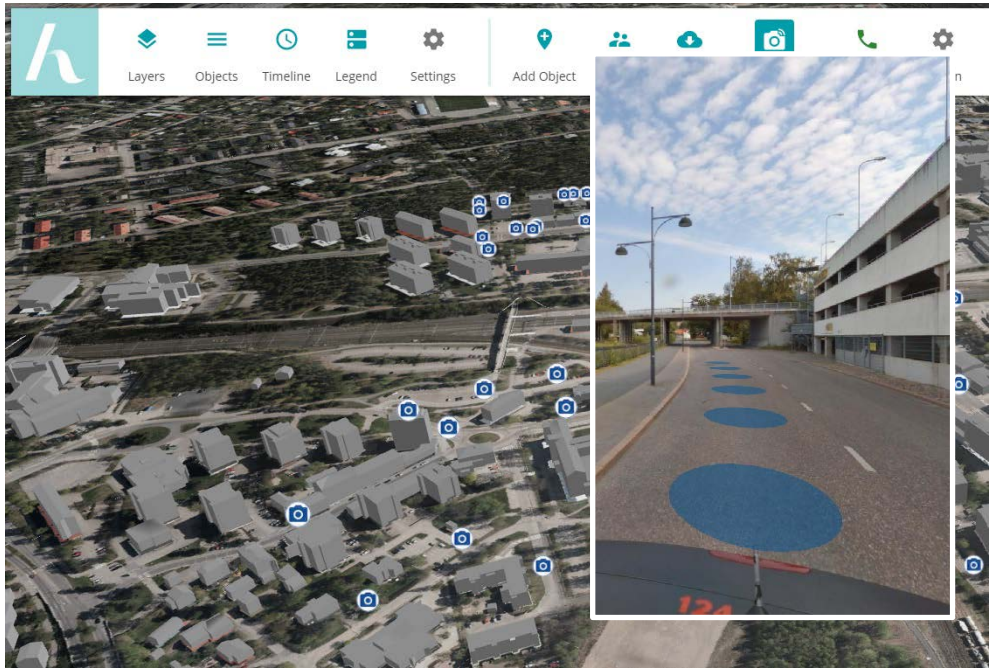
TIMELINE

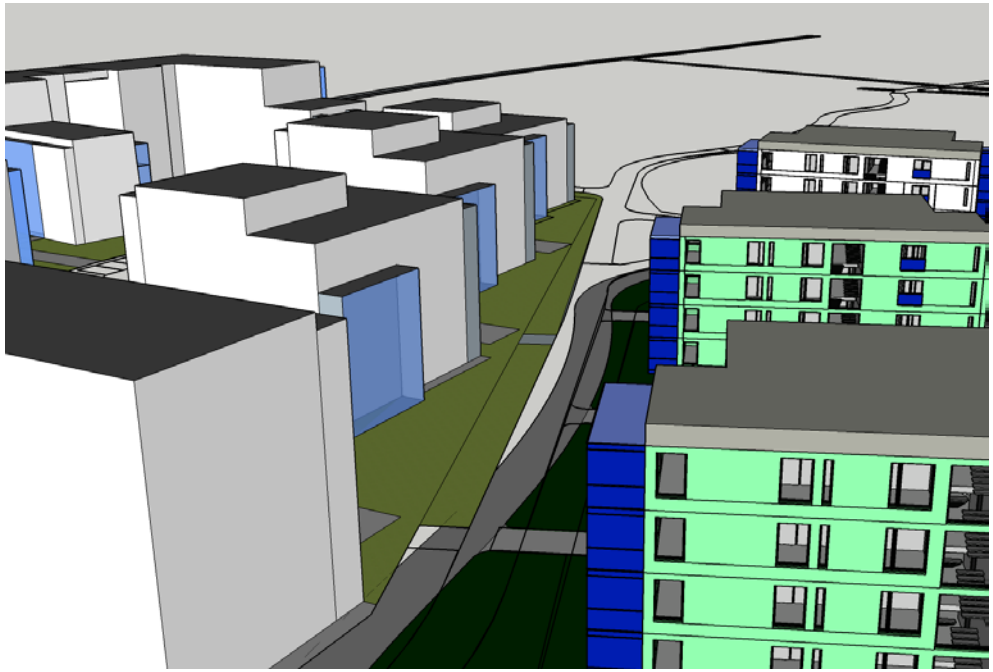
With the timeline function it is possible to create views of the city model in a certain time in the past or in the future as well as follow the city development project over time

3 D VIRTUAL CONFERENCE ROOM

- 3 D Virtual room can serve as a conference room and as a portal for actual project information
- At the moment 3D virtual room serves as a big room of Hangonsilta project
- Hyvinkää is also going to utilise virtual conference room at schools for educational and communication purposes

3D virtual conference room developed by Finpeda Ltd.





ADDITIONAL INTEGRATIONS

”Blom Street” view image service produced by Blom: street views of designated positions can be viewed in 3D environment

Virva 3D application, developed by Sova3D Ltd., is integrated to Smart Hyvinkää in order to manage and store building information models (BIM)

SMART HYVINKÄÄ ENABLES

- comprehensive location based city development
- efficient project management and data sharing
- easy communication between several city departements and external project partners
- connections between different data models (city models, inframodels and BIMs)
- visualisation of the outdoor spaces and indoorspaces in the same environment
- an oppoturnity to widen public participation to 3-dimensional format (for example by visualising the developing area in planning phase)
- a possibility to utilise the same platform in different projects and purposes
- an open source code platform for future developments
  - a digital environment where technical, ecogical, economic and social aspects can be combined during the lifespan of an area

THANK YOU!

www.hyvinkaa.fi

http://smarthyvinkaa.mapgets.com
http://smarthyvinkaa.meshmoon.com
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