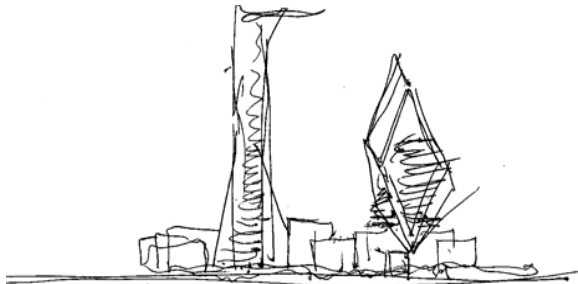


knowledge capital project

Smart Structure in Crystal Pyramid

29. Aug. 2005

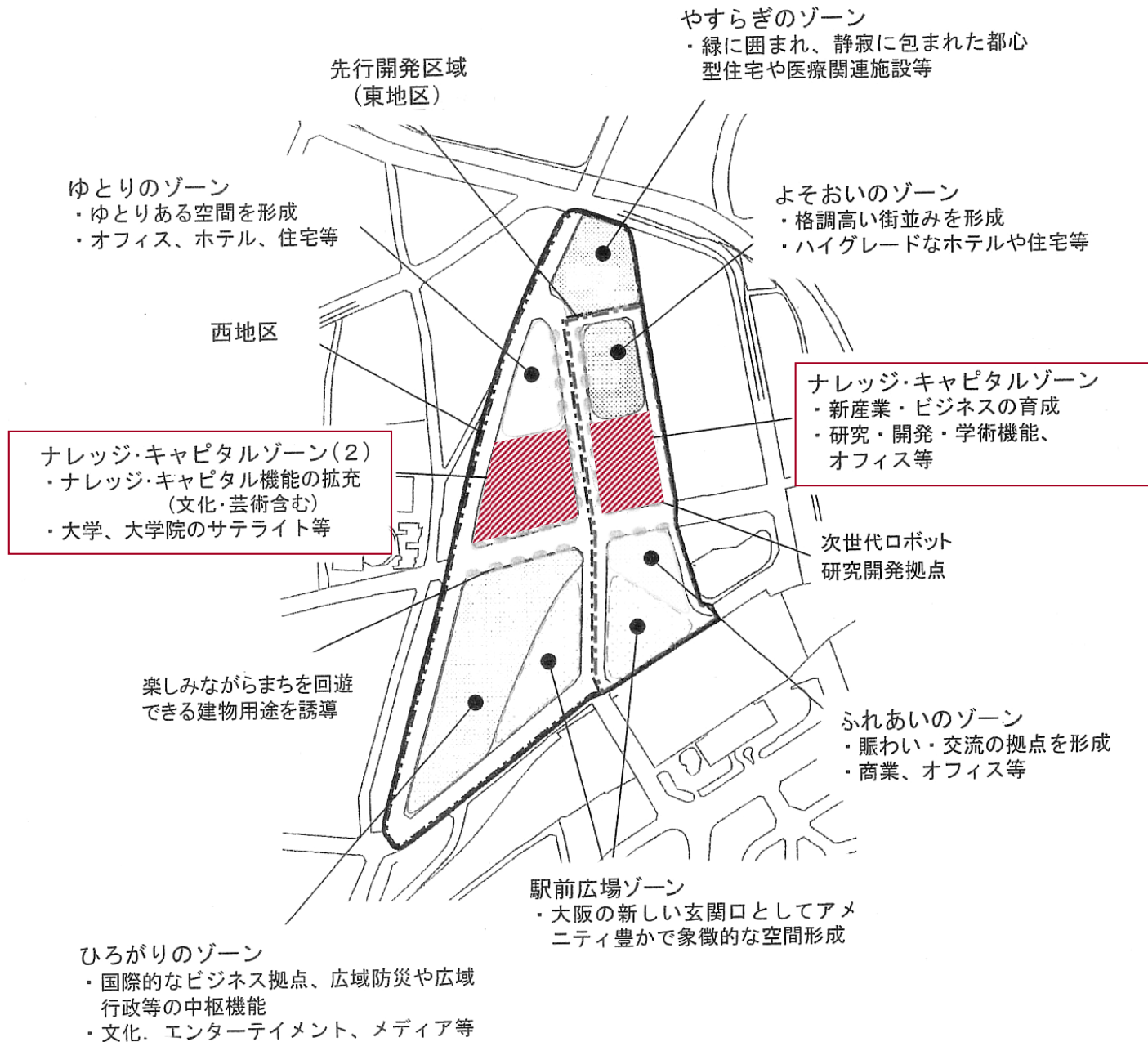


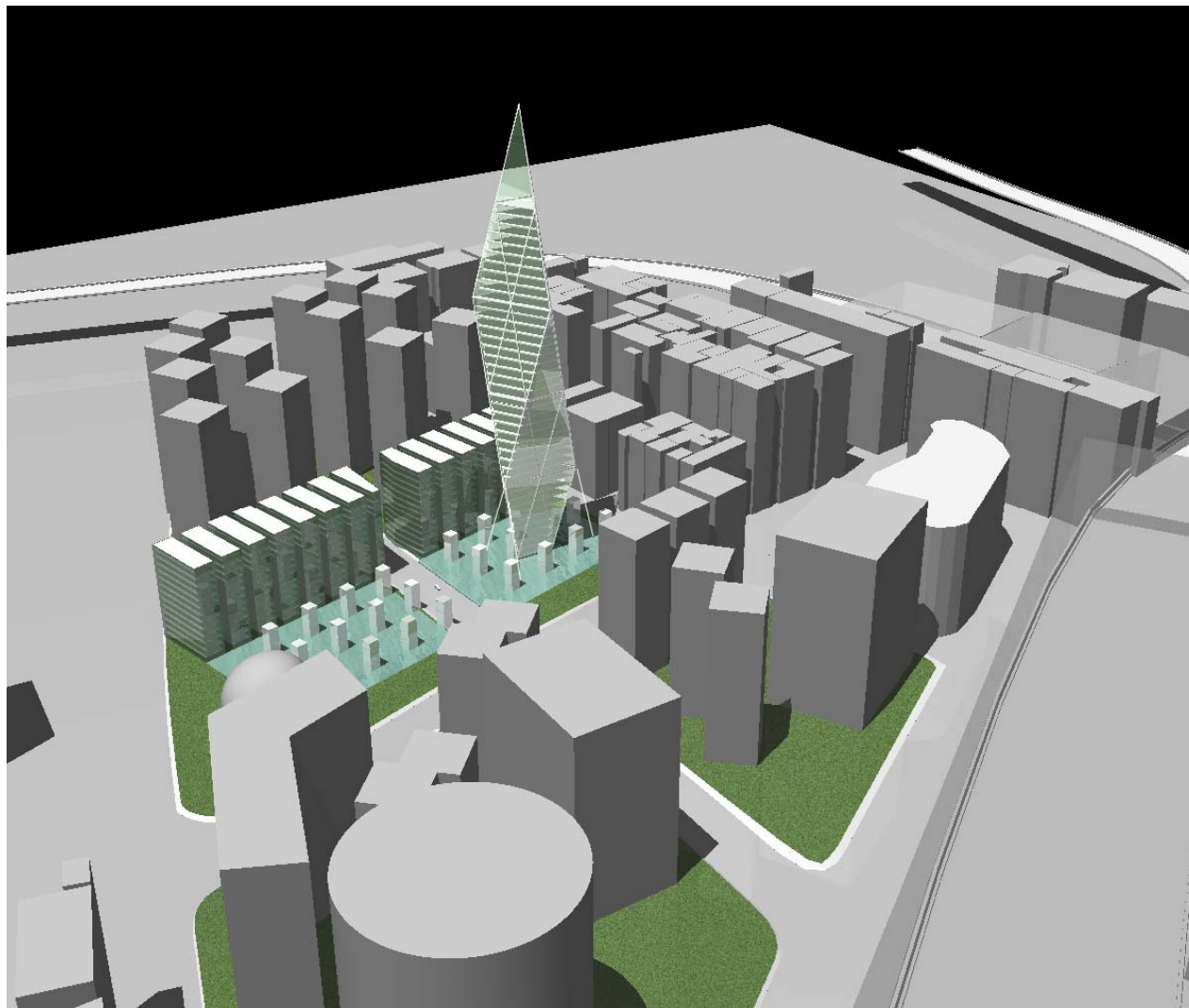
Cyber media Center & Architectural Eng. Division of Osaka University.

Hirokazu Abe Eizaburou Tachibana



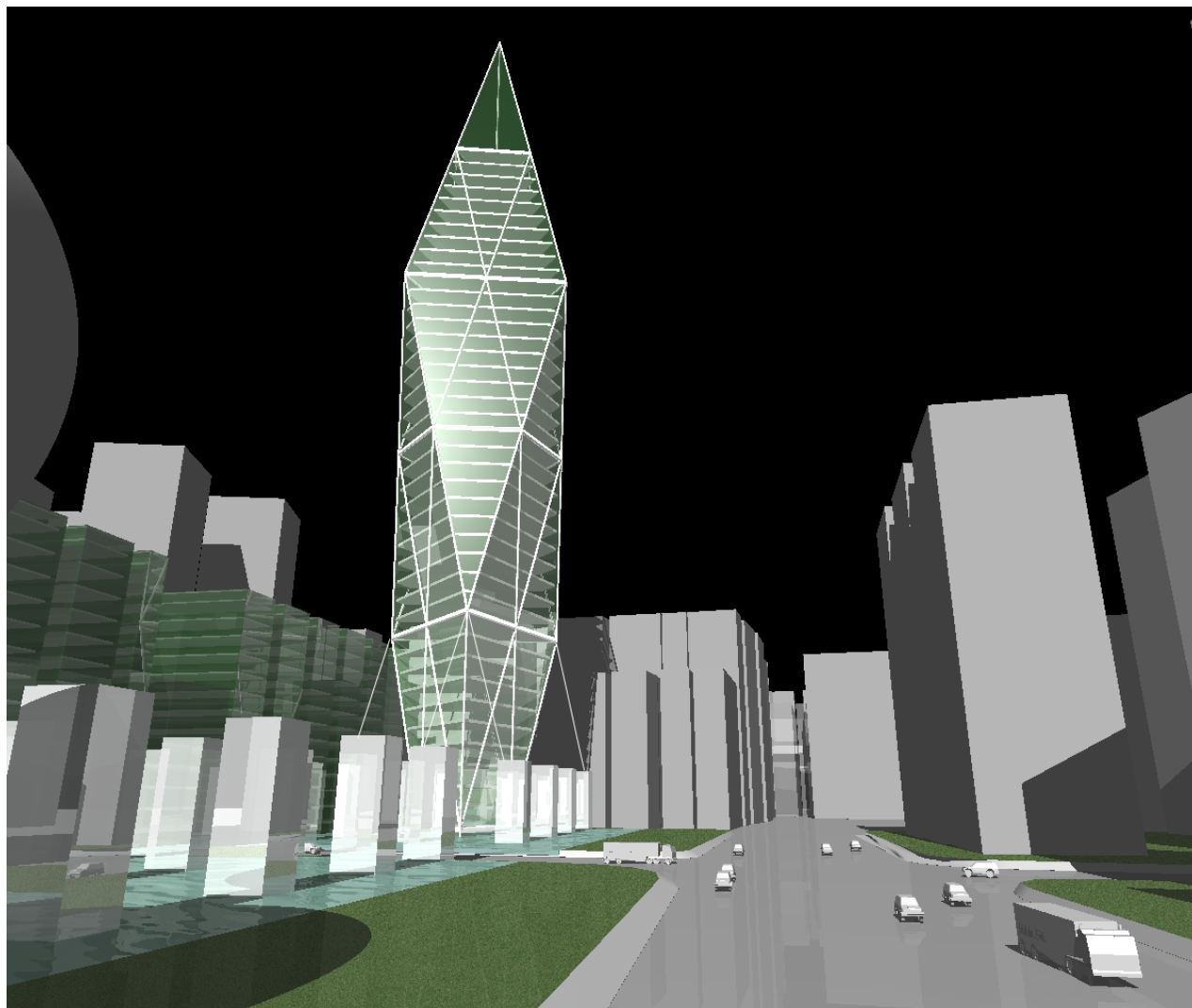
Development Plan





Townscape of Knowledge Capital Area

北ヤード全体の景観



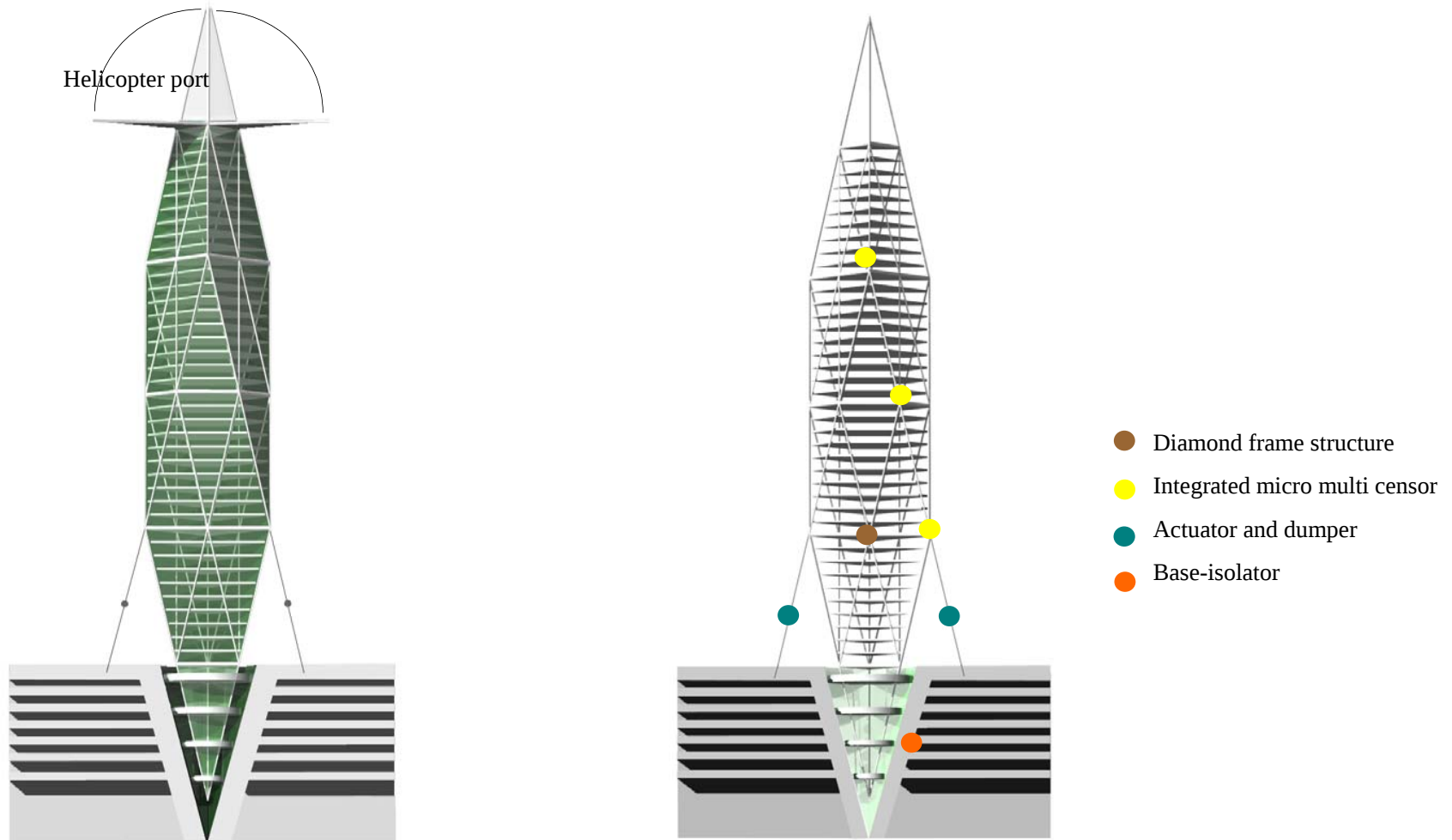
Townscape of Knowledge Capital Area

ナレッジキャピタルゾーンの景観

Smart Structure and Earthquake Engineering

Smart Structure : new type of structure is being born named “smart structure”. They required various devices and systems .

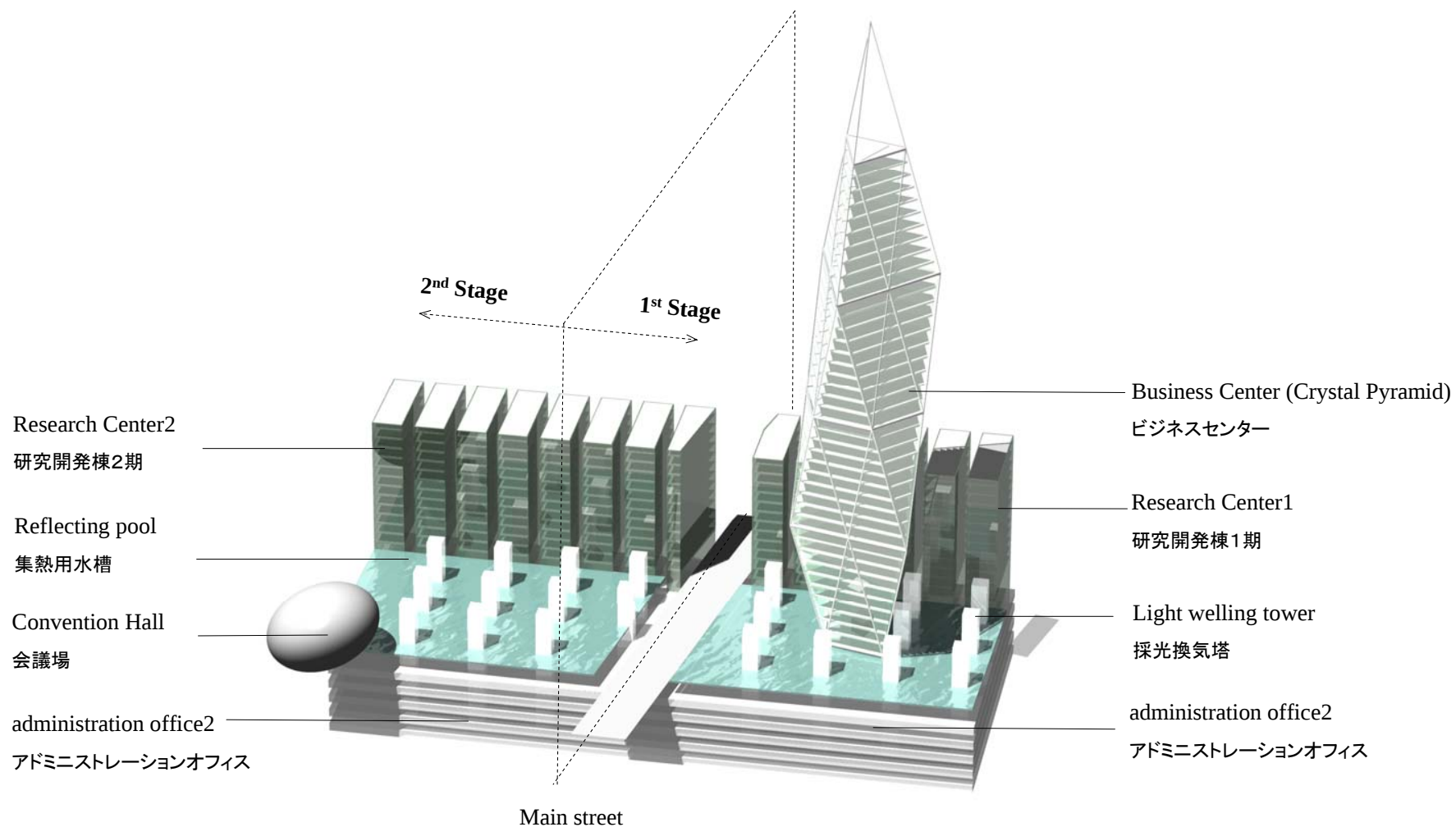
- 1) Implanted sensors for continuous health monitoring and for control of vibration,
- 2) Special cushions named base-isolators to avoid resonance,
- 3) Actuators, dumpers like as muscles and ice bag.



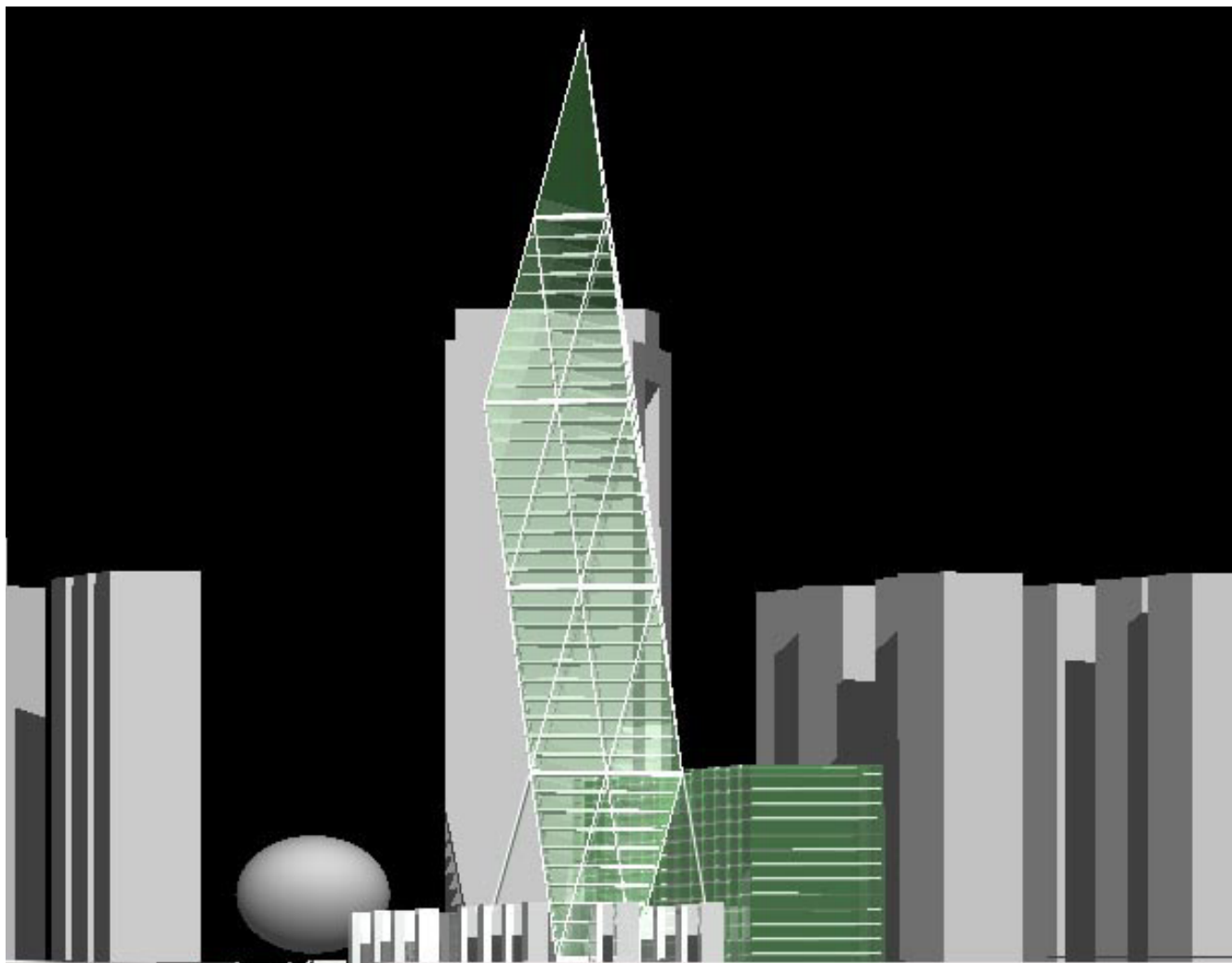
スマートストラクチャーは様々なデバイスとシステムを組み込んだ新しいタイプの構造体です。

- 1) インパクトセンサー（建物の継続的モニタリングと振動制御） 2) ベースアイソレーター（振動を回避する特殊な緩衝材） 3) アクチュエーター、ダンパー（建物の筋肉として機能）

Composition of Knowledge Capital Central Zoon

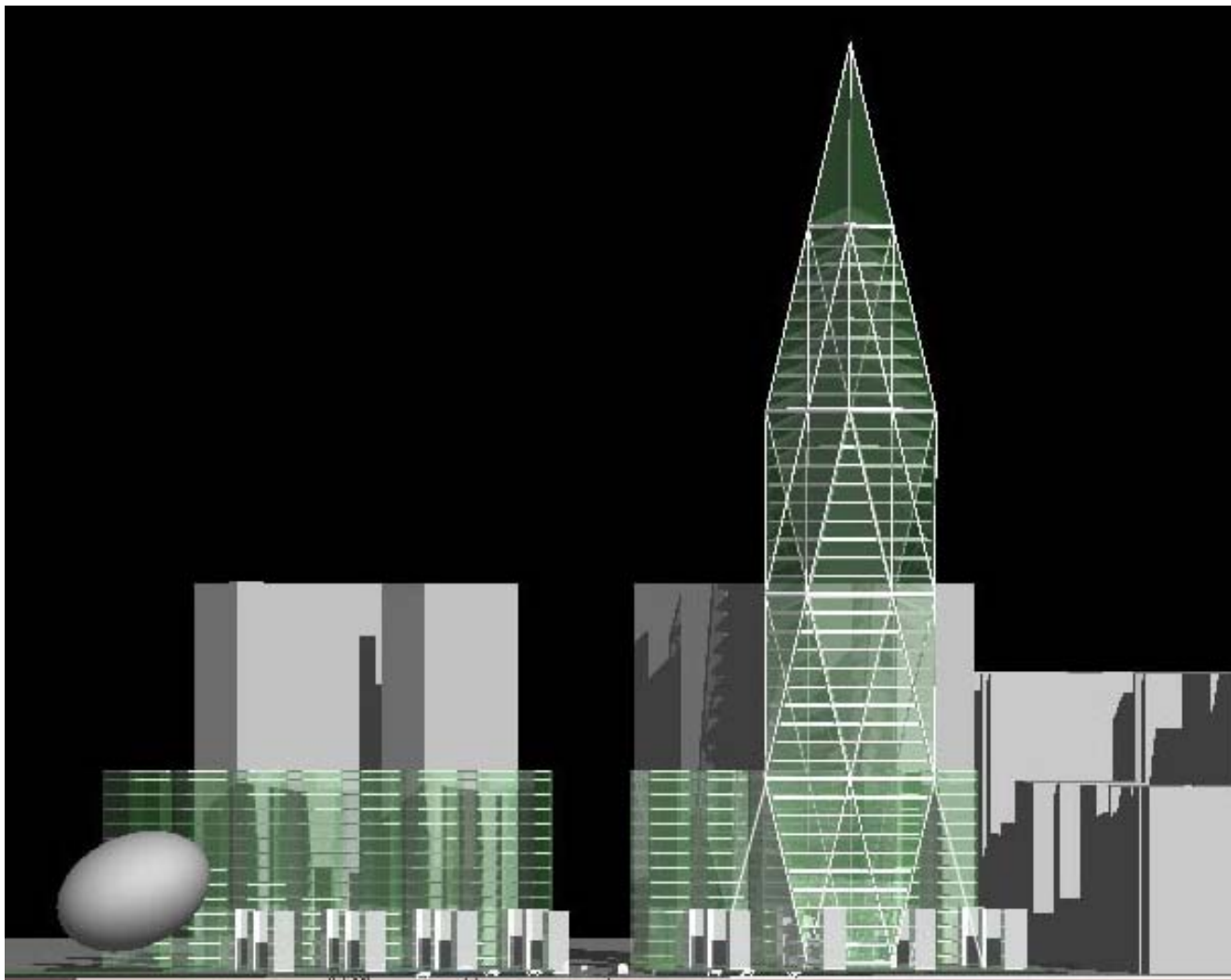


ナレッジキャピタルゾーンの街区構成



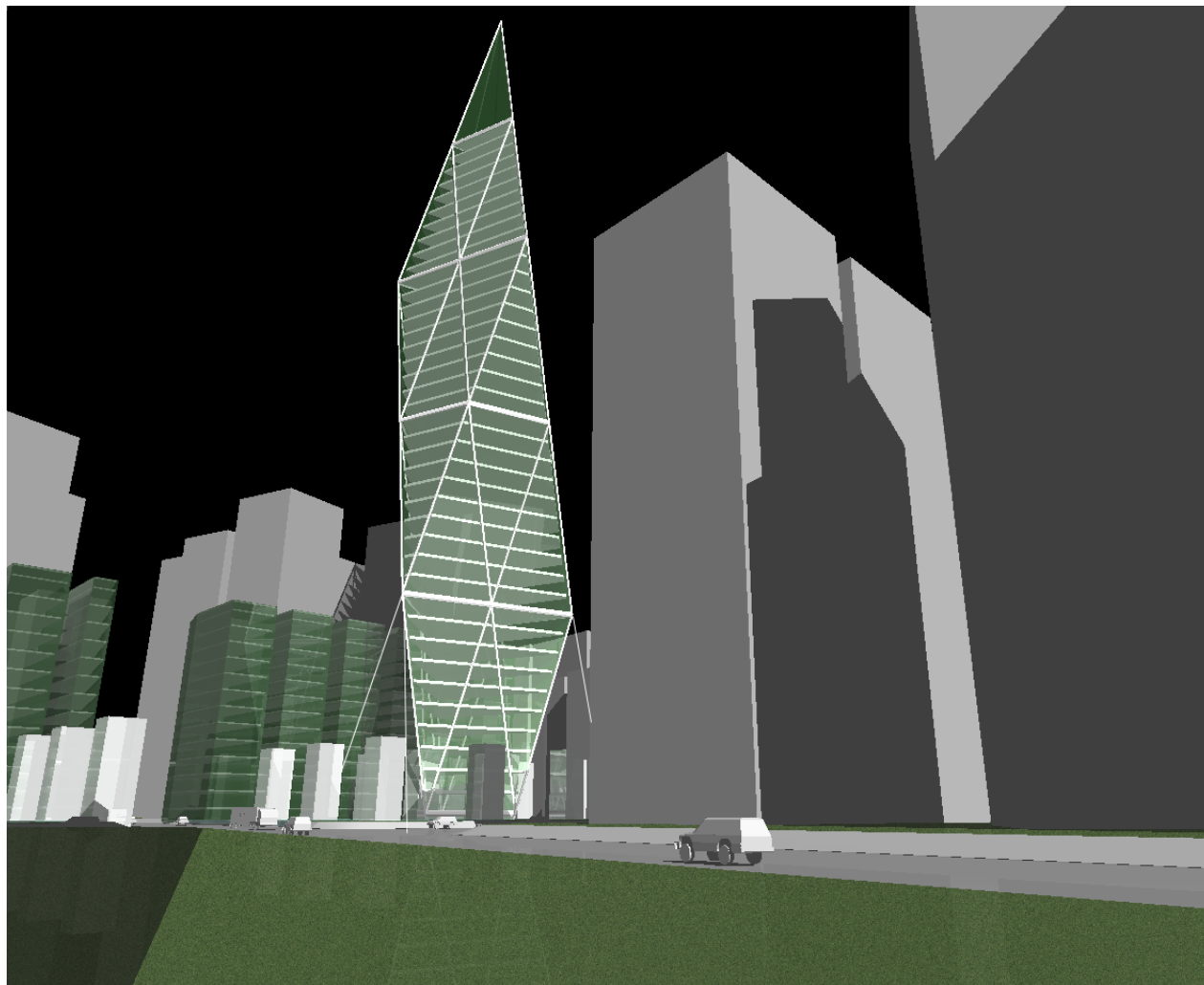
East Elevation Plan

東立面図



South Elevation Plan

南立面图



Townscape of Knowledge Capital Area

ナレッジキャピタルゾーンの景観