



11445 COMPAQ CENTER W DR,
HOUSTON, TX, 77070

TECHNOLOGY/ALTERNATIVE ENERGY



Gensler



NARRATIVE

Viva Center is leveraging the significant MEPT infrastructure built out in their campus to support new R&D ventures focused on moving the tech industry toward a more sustainable future.

The campus has been recently improved to support research & development of liquid cooled IT equipment for super computing by a leading technology hardware company. The amount of immediately available power, data & water will support rapid deployments and jump start ventures in a way that few other site's can.

CAMPUS AMENITIES

\$64 Million-dollar (MEP) rebuild done in 2019/2020.

IMMERSION COOLING & TECHNOLOGY

NEXT GEN - FORMER HPE-HPC SUPERCOMPUTING TESTING

- 14 Thousand tons of chiller tonnage
- 10 million gallons of underground chilled water loop
- Flow & Temperate controlled water delivery

DATA CO-LABS

214 CO-DATA LABS THROUGHOUT THE CAMPUS

- 4 Raised Floor Data Centers
- 6 Fiber Rings throughout the campus (multiple carriers)
- Updated Cat-6 and Fiber Cross Connects Throughout the Campus

POWER & CAPACITY

ONSITE SWITCH YARD WITH REDUNDANT CONNECTIONS TO CENTERPOINT SUBSTATION

- 48 MW of power currently available (200MW expansion)
- 9 back up generators (7 diesel, 2 natural gas)
- 22 onsite distribution transformers

CENTRAL PLANT

BAS CONTROL CENTER

- JC MetaSys Control System
- 24x7 Monitoring
- Fire, Water, Lights, Power, AC/Heating
- IWP Water Treatment



CAMPUS

TECHNOLOGY/ALTERNATIVE ENERGY

RENEWABLE ENERGY METHODS

BIOMASS ENERGY

GEOTHERMAL ENERGY

HYDROGEN ENERGY

HYDROPOWER

SOLAR ENERGY +
PHOTOVOLTAIC (PV) PANELS

WIND ENERGY

NATURAL GAS



CAMPUS

TECHNOLOGY/ALTERNATIVE ENERGY

ALTERNATIVE ENERGY RESEARCH
+ DEVELOPMENT OPPORTUNITIES

ENERGY-EFFICIENT TECHNOLOGIES

ENERGY STORAGE SYSTEMS

ENERGY MONITORING + MANAGEMENT

ENERGY SHARING

DISTRICT COOLING + HEATING
VIA MICROGRID

HEAT EXCHANGE

COMPRESSED AIR/UNDERWATER
PUMPED ENERGY STORAGE

FLYWHEEL ENERGY STORAGE

CURRENT/TIDAL GENERATOR

ALGAE BIOREACTOR

VIVA CENTER | 11445 COMPAQ CENTER W DR, HOUSTON, TX 77070



CAMPUS

TECHNOLOGY/ALTERNATIVE ENERGY

ADVANCED TECHNOLOGY
RESEARCH & DEVELOPMENT

IMMERSION COOLING

MACHINE LEARNING

PERFORMANCE TESTING

EDGE COMPUTING

IOT

AI (ARTIFICIAL INTELLIGENCE)

ROBOTICS

NATURAL GAS TURBINE
ENERGY PLANT

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POTENTIAL PARTNERSHIPS [BRANDS + COMPANIES]

LOCAL ENERGY COMPANIES

Centerpoint Energy
Constellation Energy
Flagship Power
Frontier Utilities
Gexa Energy
TXU Energy
Reliant

RENEWABLE ENERGY PROVIDERS

ChariotEnergy
Cemvita Factory
Quidnet Energy
Spark Energy
IntegrateSun
Green Mountain Energy
Engie
ConnectGen

DATA CENTERS

CyprusOne Data Center
DataBank Data Center Houston HOU2
Data Foundry
Equinix Data Center
Fibertown
Netrality
Quasar Data Center
SunGard Availability Services
TRG Datacenters
Wyoming Hyperscale White Box

ADVANCED TECHNOLOGY

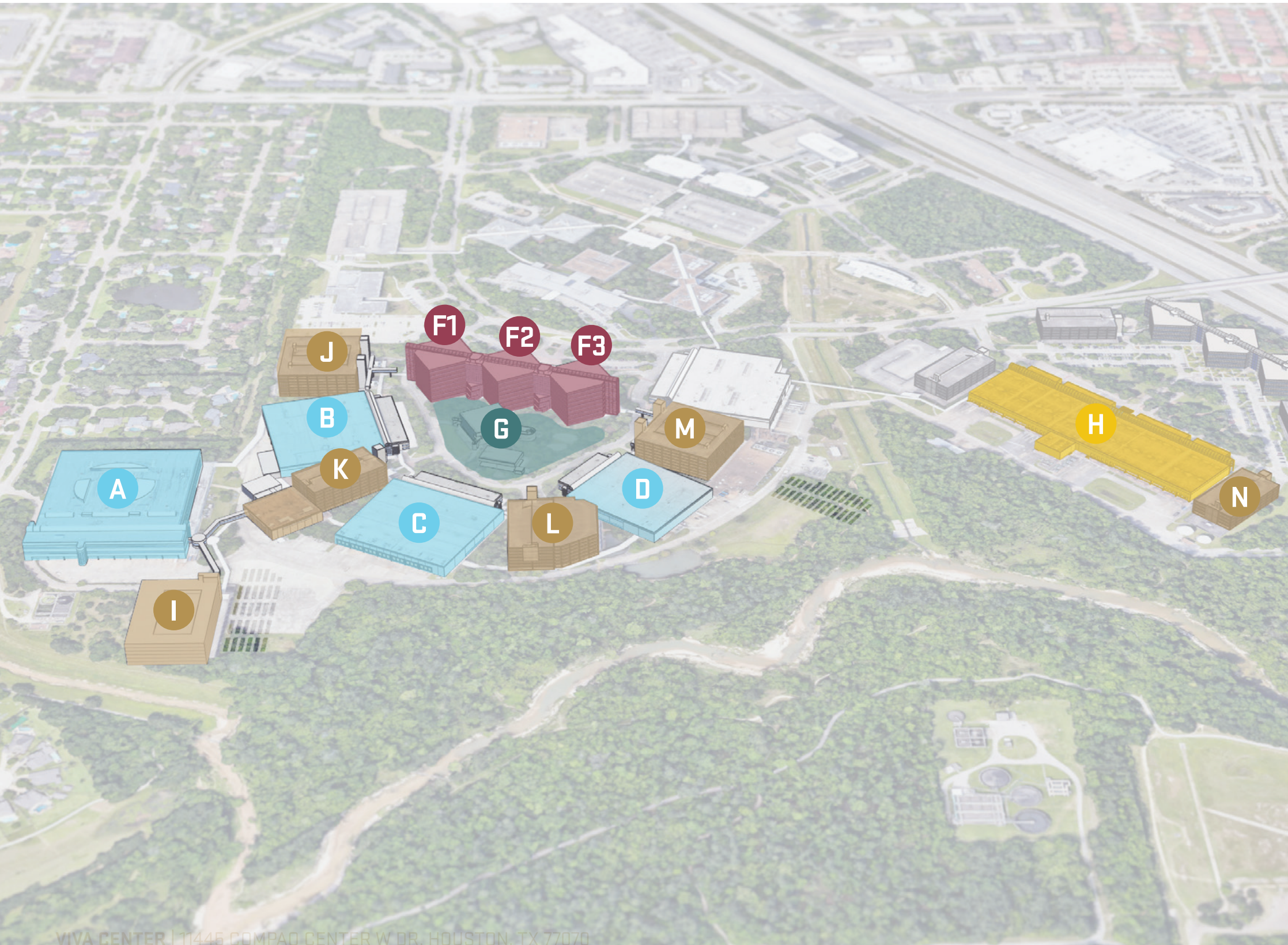
HTS
Submer
LiquidStack
Hypertec
Green Revolution Cooling
Upsite Technologies
Dell
EdgeConneX
AWS
Cisco
Coston Dynamics
KUKA
ABB

NATURAL GAS/ TECHNOLOGY R&D

ExxonMobil
Jacobs
Lockheed Martin
Williams
Kinder Morgan Energy Partners
Cheniere Energy Inc
Targa Resources

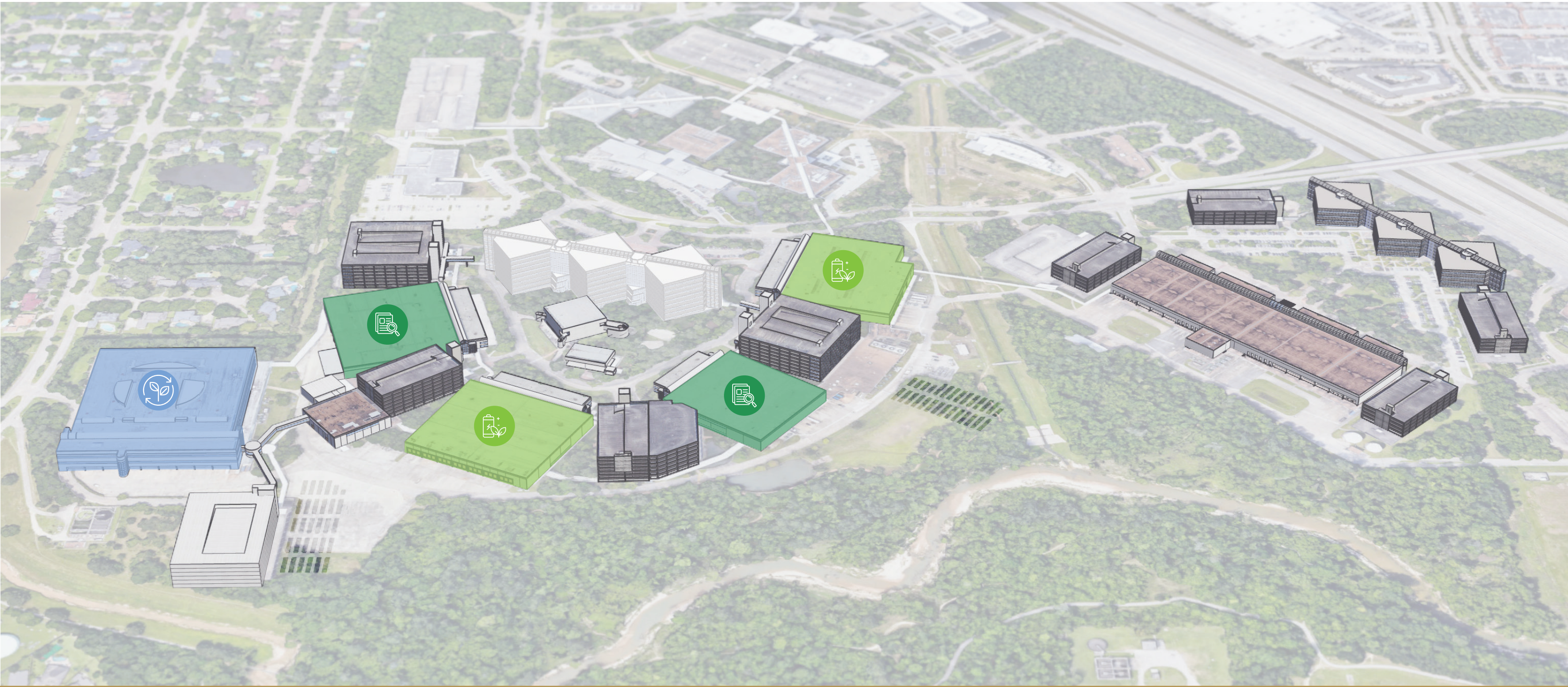


CAMPUS | BUILDING METRICS



<p>A</p> <p>CCM-07</p> <p>LEVELS 4</p> <p>HEIGHT 18' (WAREHOUSE LVL 1)</p> <p>TOTAL SQ FT 695,000</p>	<p>B</p> <p>CCM-06</p> <p>LEVELS 1 + MEZZANINE</p> <p>HEIGHT 30'</p> <p>TOTAL SQ FT 182,000</p>
<p>C</p> <p>CCM-05</p> <p>LEVELS 1 + MEZZANINE</p> <p>HEIGHT 30'</p> <p>TOTAL SQ FT 182,000</p>	<p>D</p> <p>CCM-04</p> <p>LEVELS 1</p> <p>HEIGHT 12'</p> <p>TOTAL SQ FT 208,000</p>
<p>F1 F3</p> <p>CCA-06 / CCA-04</p> <p>LEVELS 8</p> <p>HEIGHT 90'</p> <p>TOTAL SQ FT 226,000</p>	<p>F2</p> <p>CCA-05</p> <p>LEVELS 8</p> <p>HEIGHT 90'</p> <p>TOTAL SQ FT 237,000</p>
<p>G</p> <p>CONFERENCE + FITNESS</p> <p>TOTAL SQ FT 33,200</p>	<p>H</p> <p>CCM-01 + 02</p> <p>LEVELS 1 + MEZZANINE</p> <p>HEIGHT 30'</p> <p>TOTAL SQ FT 250,000</p>
<p>I</p> <p>PG-13</p> <p>LEVELS 3</p> <p>HEIGHT 40'</p> <p>TOTAL SQ FT 90,135</p>	<p>J</p> <p>PG-8</p> <p>LEVELS 7</p> <p>HEIGHT 80'</p> <p>TOTAL SQ FT 421,806</p>
<p>K</p> <p>PG-7</p> <p>LEVELS 8</p> <p>HEIGHT 90'</p> <p>TOTAL SQ FT 461,104</p>	<p>L</p> <p>PG-6</p> <p>LEVELS 7</p> <p>HEIGHT 80'</p> <p>TOTAL SQ FT 913,997</p>
<p>M</p> <p>PG-5</p> <p>LEVELS 8</p> <p>HEIGHT 90'</p> <p>TOTAL SQ FT 449,808</p>	<p>N</p> <p>GARAGE</p> <p>LEVELS 3</p> <p>HEIGHT 34'</p> <p>TOTAL SQ FT 108,000</p>

CAMPUS SITE PLAN



POSSIBLE USE CASE EXAMPLES



RENEWABLE ENERGY



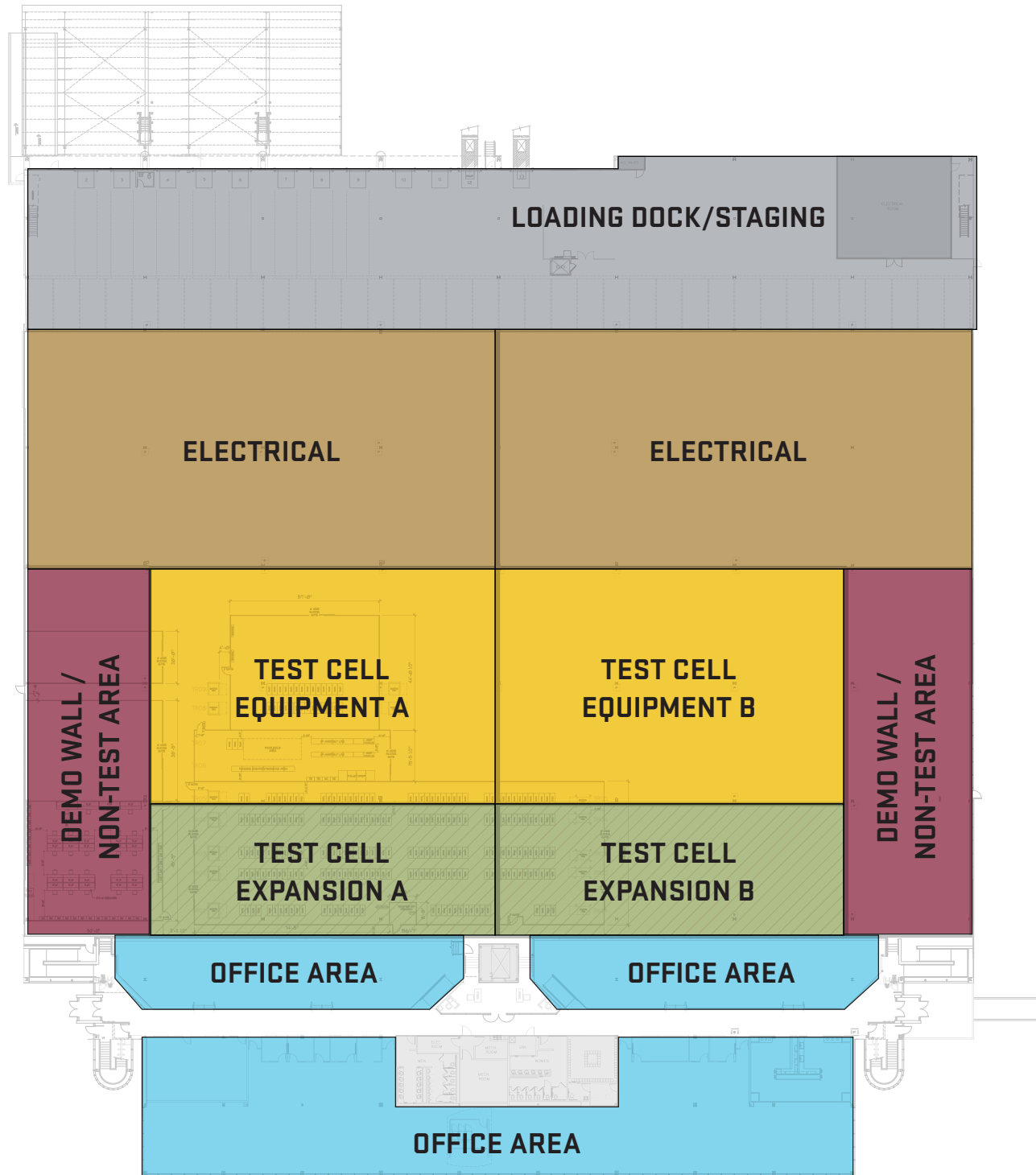
ALTERNATIVE ENERGY RESEARCH & DEVELOPMENT



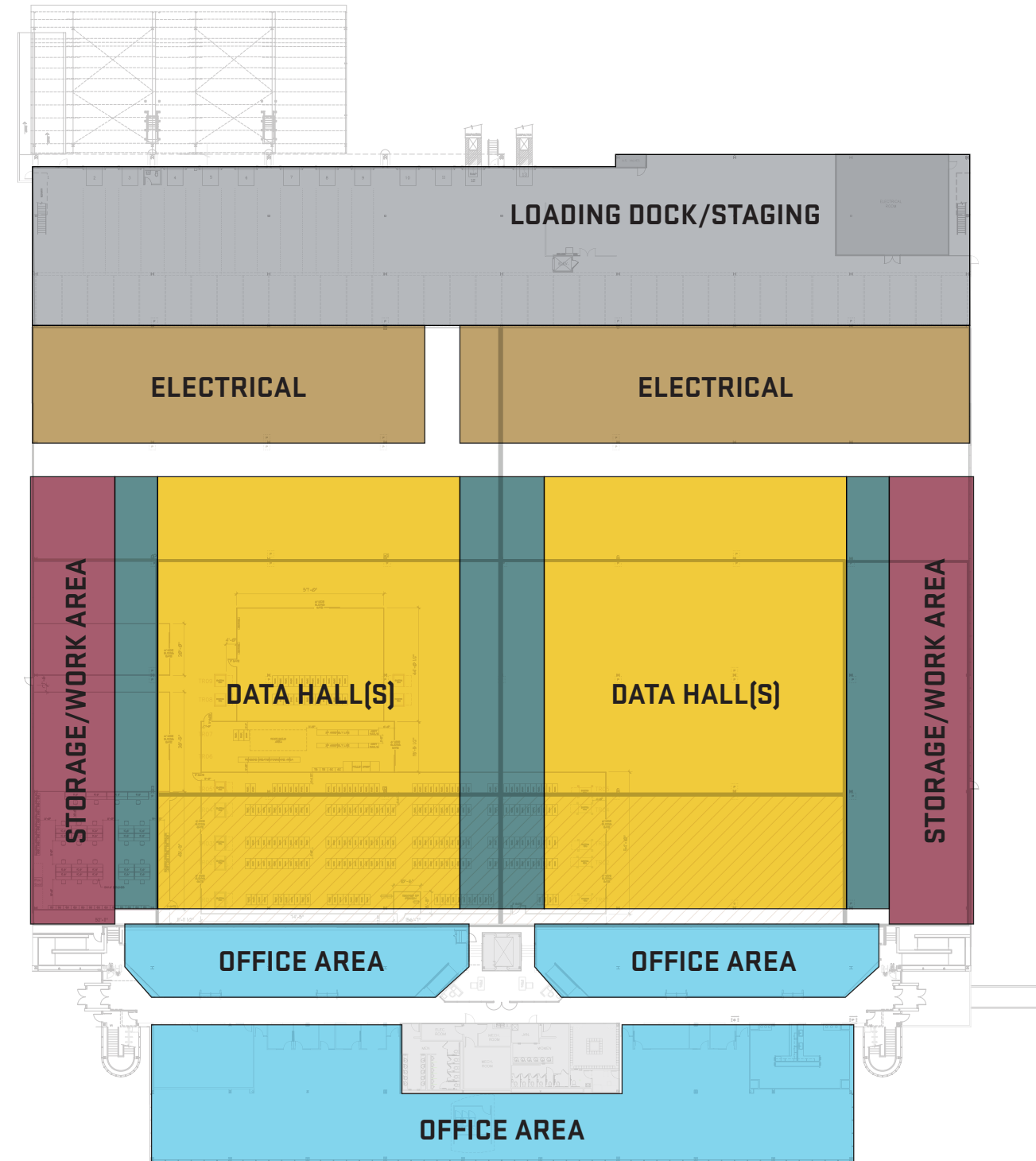
ADVANCED TECHNOLOGY RESEARCH & DEVELOPMENT

CCM-06 | OVERVIEW OF EXAMPLE USES

MULTI-TENANT LIQUID COOLED TEST LAB



TRADITIONAL DATA CENTER





THANK YOU

11445 COMPAQ CENTER WEST DRIVE



Brandi Sikes, MCR, CRE
281-367-2220 EXT: 171
Brandi.Sikes@svn.com

Liz Westcott
281-367-2220 EXT: 146
Liz.Westcott@svn.com



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