

The Woodlands® Innovation District

BIOMANUFACTURING AT RESEARCH FOREST IN THE WOODLANDS, TX

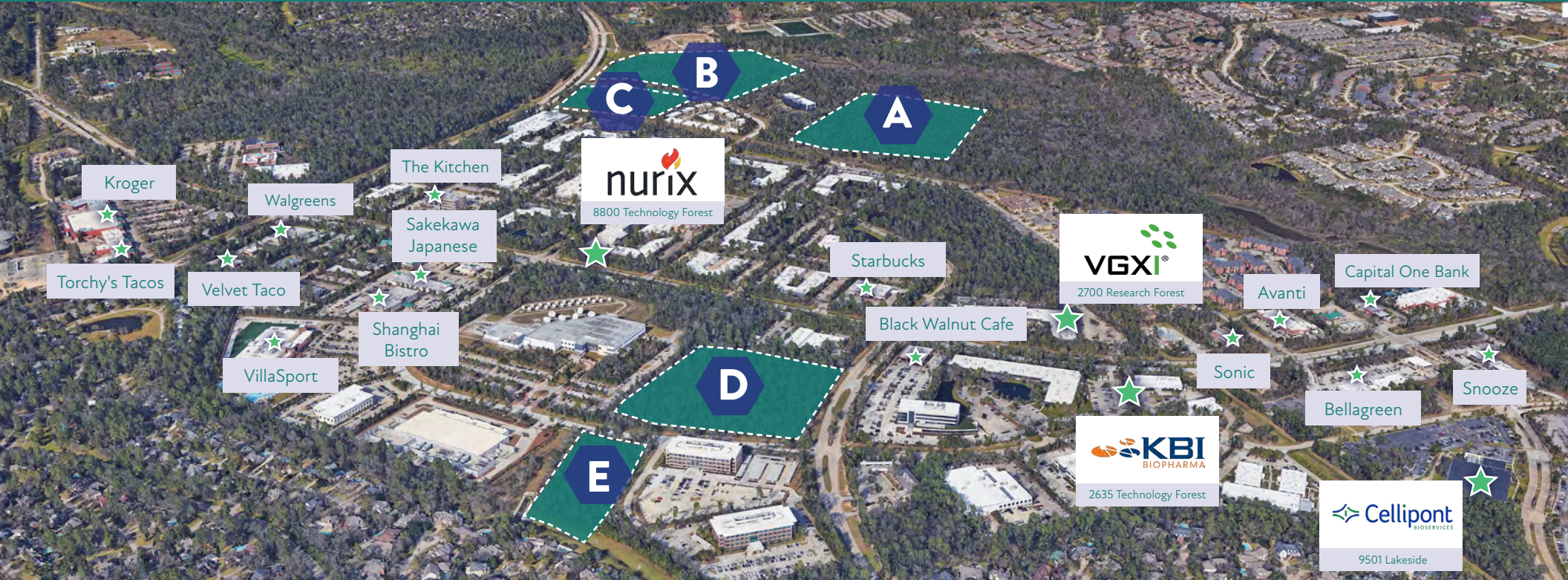
Shell delivery as early as Q3 2024

 VITRIAN

Howard Hughes



FLEXIBILITY ACROSS FIVE SITES TOTALING OVER 80 ACRES AND OVER 1M SF OF POTENTIAL



Proximate to Emerging Life Science Cluster, All Surrounded By a Walkable Amenity Base

- Multiple sites providing varied facility sizes for tenant needs ranging from 40,000 to 200,000+ SF
- Entitlements in place to allow build-to-suit shell delivery by Q3 2024
- The rapidly growing cluster of life science in The Woodlands has emerged as an ideal location for advanced biomanufacturing
- The Woodlands consistently tops the lists of top places to live with accessible amenities and affordable living

Tract	Acreage
A	43.1
B	20.8
C	9.5
D	7.6
E	5.3

BIOMANUFACTURING IN THE HEART OF RESEARCH FOREST WITH ROOM TO GROW



Accelerate Your Speed to Market



Site is served with power, water and gas utilities



60-day permitting review process



No zoning review required

ILLUSTRATIVE SPECS FOR 100K SF FACILITY

Electrical

- 4000 kVA Transformer (3PH 277/480V)
- 40W/SF

Plumbing

- 6" domestic water
- 8" sanitary line
- Natural Gas Service: 180 BTUs/SF

Structure

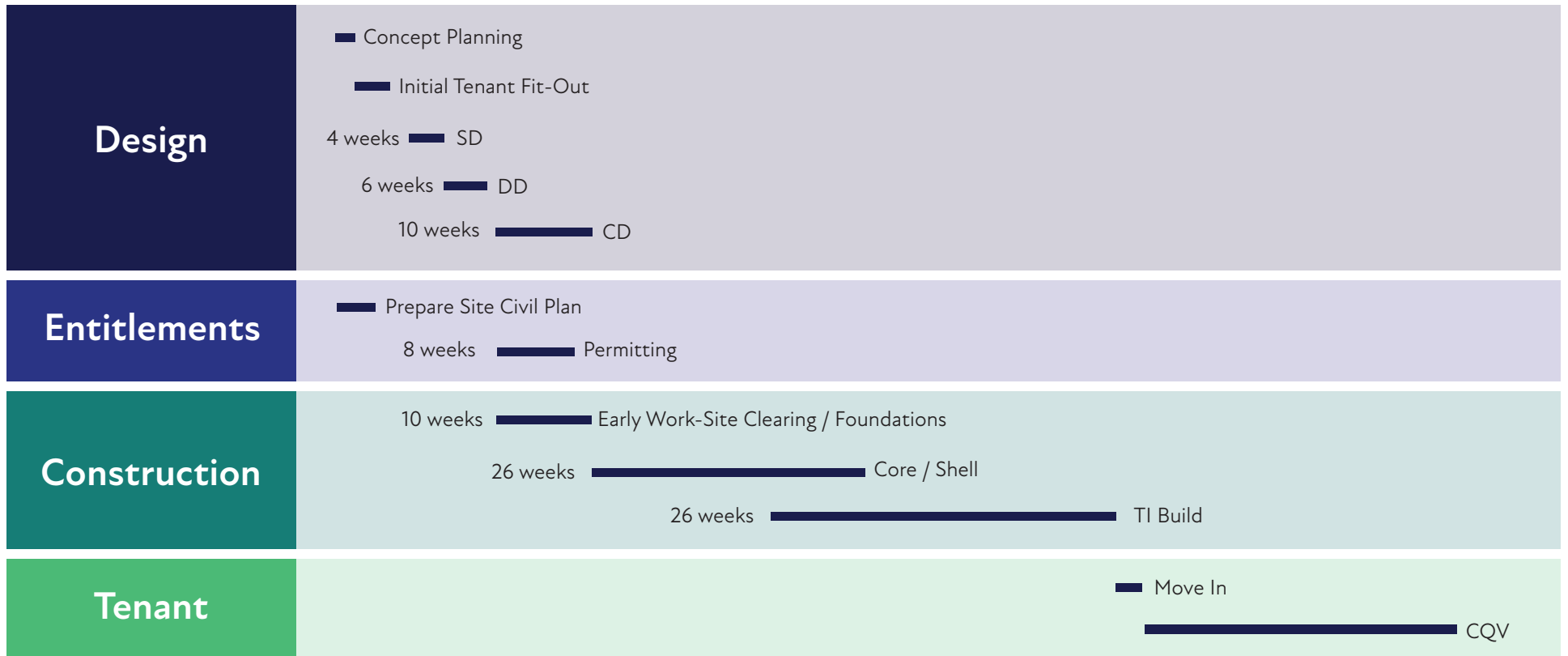
- 32ft clear story height
- 40ft x 40ft column bay spacing

Architectural

- Roofing: 60mil TPO membrane with R-30 insulation
- Parking Ratio: 2.5/1000 SF
- Loading: 4 recessed dock doors



PROJECT SCHEDULE



TRACTS D & E



Tract D



80,000 – 100,000 SF
facility options



200 – 265 parking spaces

Tract E



60,000 SF
facility options



150 – 265 parking spaces

TRACT D – 100,000 SF CONCEPT



TRACT E – 60,000 SF CONCEPT



TRACTS B & C



Tract B



80,000 – 160,000 SF
facility options



200 – 529 parking spaces

Tract C



80,000 – 100,000 SF
facility options



200 – 255 parking spaces

TRACT B – 160,000 SF (2 X 80,000 SF) CONCEPT



TRACT C – 100,000 SF CONCEPT



HOUSTON REGION

The Nation's #4 Ranked Market for Pharma & Medicine Manufacturing Performance*

*Source: Bureau of Labor Statistics



RESEARCH FUNDING & WORKFORCE IN HOUSTON

Houston's Robust Research Funding and Workforce Provide the Optimal Environment for cGMP Facilities

270%

Growth in Workforce
Over the Last Decade

17,450

Pharma & Medicine
Manufacturing Professionals

The Brightest Minds in Medicine

26,000+

Core Life Science
Industry Employees

15,400

Life Science and
Biotech Researchers

3,000

Biomed, Bioengineering, and
Pharma Science Degrees
Awarded Regionally (2020)

Nearly \$900M in Annual Research Awarded in the Region in 2021

\$864M

National Institutes of Health
Medical Research Grants (2021)

1,649

Medical Research Grants
Awarded (2021)

4,906+

Active Clinical Trials
(15% of all trials in the U.S.)

LIFE IN THE WOODLANDS



#1 Best Community to Live in America (Niche, 2021, 2022)

#1 Best Place to Raise a Family in Texas (Niche, 2023)

Community Highlights

- 200+ Restaurants
- 151 Neighborhood Parks
- 220 Miles of Trails
- Top-Rated Schools from Pre-Schools to Undergraduate and Graduate Degrees

Community Demographics

- 120,000 Township Population
- \$130,011 Median Household Income (compared to \$74,223 Houston MSA)
- 34,865 Single Family Homes
- 39.6 Median Resident Age
- 61.3% with Bachelor's Degree or Higher (compared to 32.9% Houston MSA)

VITRIAN'S VALUE PROPOSITION: END-TO-END FACILITY AND REAL ESTATE SOLUTION

Vitrian's platform is built to mitigate risk as cGMP users look to identify and expand mission critical biomanufacturing. Traditional real estate platforms are ill-suited to address these challenges.

Challenges

Client needs to focus balance sheet capital on nearer term revenue generation and operations



Client has important growth goals but lacks the internal resources or staffing to efficiently manage facility development



Client desires to grow in diverse, more cost-effective locations but is unsure about where to start or who to contact



Client's growth plans require significant workforce development or local stakeholder buy-in



Vitrian Approaches

- Define long term growth goals with Client
- Significant capital investment

- Full-service platform supplements existing project teams; delivers all-in-one project execution

- Nationwide network of development opportunities
- Emerging market relationships

- Novel engagement with numerous economic development, educational, non-profit and government stakeholders

Results

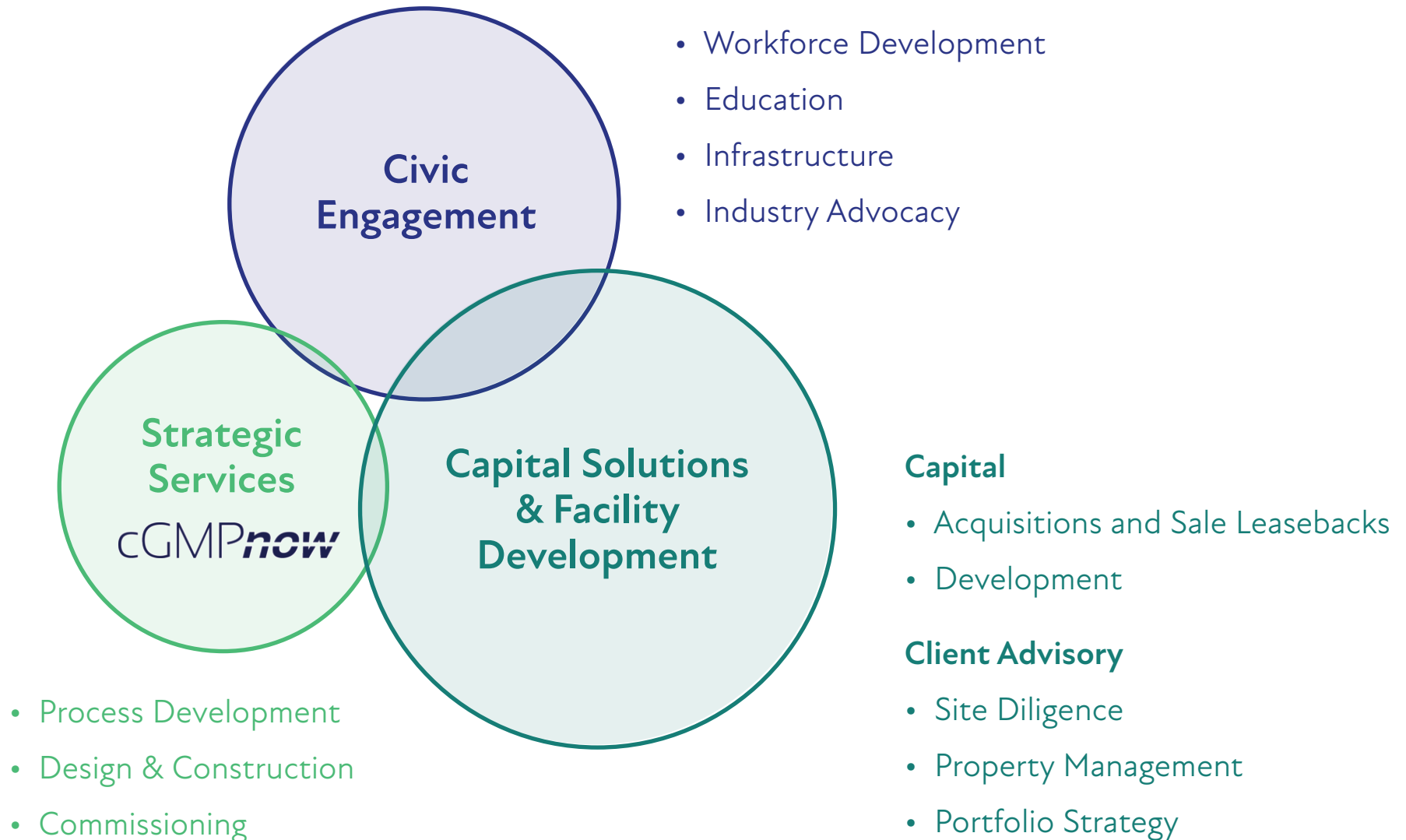
- Balance sheet efficiency and capital preservation

- Client maintains focus on their core business
- Risk mitigation
- Speed to market

- Optimal market selection
- Seamless growth and expansion in any market of interest

- Maximization of incentives and community benefits
- Optimal market selection

VITRIAN'S END-TO-END SOLUTION FOR FASTER AND MORE PRODUCTIVE CGMP FACILITIES



VITRIAN CASE STUDIES

SALE-BUILDOUT-LEASEBACK Cellipont Bioservices | Houston Region

In August 2022, Vitrian entered into a sale-buildout-leaseback partnership with Cellipont Bioservices on their headquarters and commercial cell therapy facility in Greater Houston. The business plan contemplates a full buildout of the entire facility and up to 18,500 SF of clean room space across 12 cGMP flex suites. Construction began in October 2022 and the first phase of PD/QC labs will be operational in the first half of 2023, with cleanrooms to follow in second half 2023.



PRE-DEVELOPMENT & BUILD TO SUIT Undbio | Morgantown, WV

Vitrian has been engaged to manage the pursuit, design, entitlement, construction and economic incentive negotiation for Undbio, a South Korean company which is in the process of ramping up US-based pilot production in conjunction with clinical trials in the mid-Atlantic. The facility will be constructed to accommodate commercial manufacturing within 24 months of FDA approvals. In addition to traditional real estate responsibilities, Vitrian is also liaising on behalf of Undbio with stakeholders including a major research university, local foundations and VC investors, and federal, state, and local government leadership.



SALE-BUILDOUT-LEASEBACK Confidential | Boston Region

In April 2023, Vitrian entered into a sale-buildout-leaseback partnership with a confidential client on a regenerative medicine biomanufacturing facility in Greater Boston. The business plan contemplates a partial buildout of the building into a commercial-scale facility to service and manufacture multiple FDA-approved products. Construction is scheduled to begin by Q4 2023. Vitrian is providing “end-to-end” oversight of the project development process beginning with core-and-shell delivery, on behalf of the client.





Vitrian is the first fully integrated company dedicated exclusively to providing end-to-end solutions for biomanufacturing and cGMP facilities. Its mission is to foster the next generation of drugs and therapies through facility real estate development, improving the capitalization process, and building capacity for future growth through civic engagement and workforce development.

Vitrian is a member of the Greater Houston Partnership's Life Sciences committee and is actively engaged in training/capacity building for entry-level biomanufacturing workforce. Vitrian's current engagements span modalities from advanced therapeutics to synthetic biology to regenerative medicine. For more information, visit www.vitrian.com.

Howard Hughes

The Howard Hughes Corporation owns, manages and develops commercial, residential and mixed-use real estate throughout the U.S. Its award-winning assets include the country's preeminent portfolio of master planned communities, as well as operating properties and development opportunities including: the Seaport in New York City; Downtown Columbia®, Maryland; The Woodlands®, Bridgeland®, and The Woodlands Hills®, in the Greater Houston, Texas area; Summerlin®, Las Vegas; Ward Village® in Honolulu, Hawai'i; and Teravalis™ in the Greater Phoenix, Arizona area.

The Howard Hughes Corporation's portfolio is strategically positioned to meet and accelerate development based on market demand, resulting in one of the strongest real estate platforms in the country. Dedicated to innovative placemaking, the company is recognized for its ongoing commitment to design excellence and to the cultural life of its communities. The Howard Hughes Corporation is traded on the New York Stock Exchange as HHC.

Supported by a Team of Best-in-Class Experts:



Architecture



Clinical Ops & Facility Services

The Woodlands[®] Innovation District

THANK YOU

Interested? Please visit:
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