



**Grand Blanc Township Technology Village**  
Master Plan/Framework Study  
December 2016

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DESIGN & INNOVATION FOR THE FUTURE





## HISTORY

### Why a Technology Village?

“In order to establish itself as a focal point for regional growth within the knowledge economy, Grand Blanc Township has initiated the Technology Village Area Plan. The overwhelming motivation for the plan is this: To create a community that promotes and fosters the knowledge economy in order to retain the human capital that is developed in the Grand Blanc Community.”

“Grand Blanc Township is well-positioned to enter the New Economy. Human capital is largely the product of Grand Blanc’s school system, which is consistently ranked among the best in the state. The hope in generating this Plan is to create a dynamic Grand Blanc that features the jobs, resources, amenities, and quality of life to attract and retain an educated and talented workforce.”

(from the 2008 Tech Village Plan)

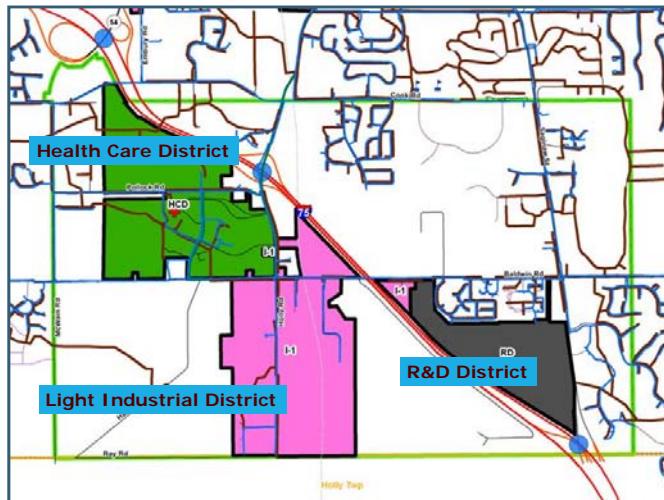
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## HISTORY

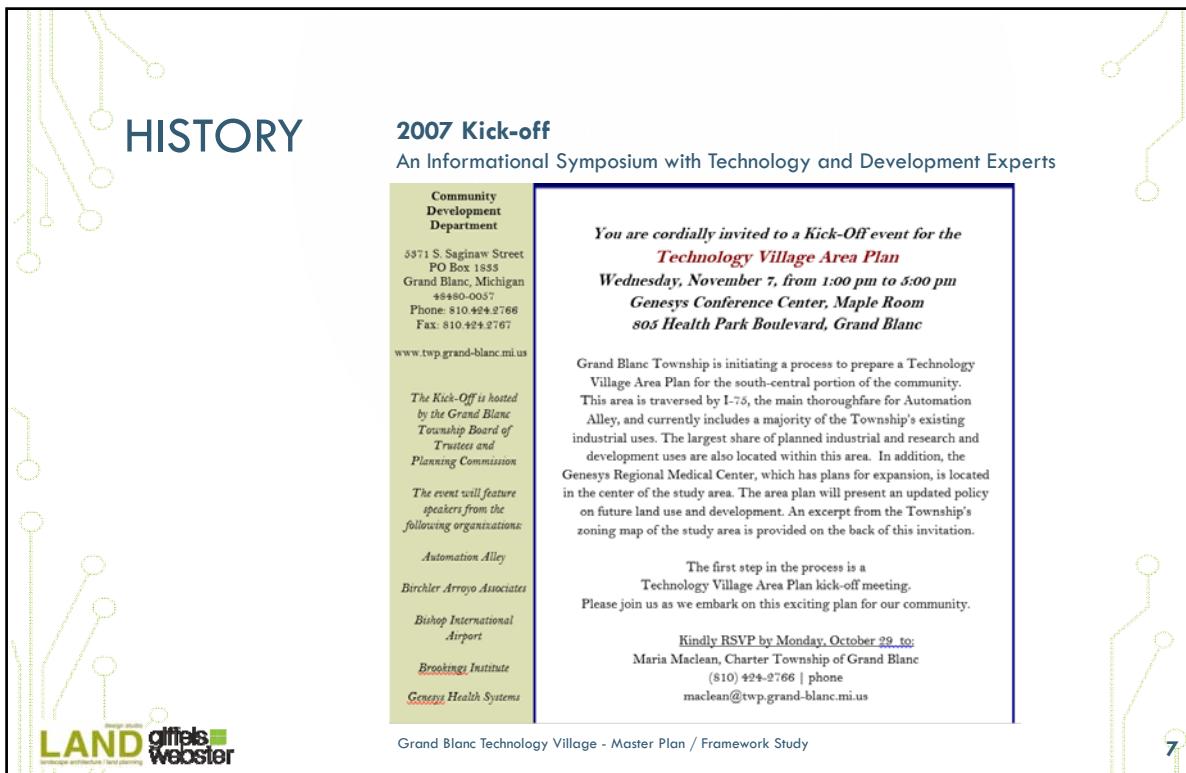
### The Tech Village Area



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# HISTORY

**2007 Kick-off**  
An Informational Symposium with Technology and Development Experts

**Community Development Department**  
5871 S. Saginaw Street  
PO Box 1855  
Grand Blanc, Michigan  
48440-0057  
Phone: 810.424.2766  
Fax: 810.424.2767  
www.twp.grand-blanc.mi.us

*The Kick-Off is hosted by the Grand Blanc Township Board of Trustees and Planning Commission*

*The event will feature speakers from the following organizations:*

- Automation Alley*
- Birchler Arroyo Associates*
- Bishop International Airport*
- Brookings Institute*
- Genesys Health Systems*

**You are cordially invited to a Kick-Off event for the Technology Village Area Plan**  
**Wednesday, November 7, from 1:00 pm to 5:00 pm**  
**Genesys Conference Center, Maple Room**  
**805 Health Park Boulevard, Grand Blanc**

Grand Blanc Township is initiating a process to prepare a Technology Village Area Plan for the south-central portion of the community. This area is traversed by I-75, the main thoroughfare for Automation Alley, and currently includes a majority of the Township's existing industrial uses. The largest share of planned industrial and research and development uses are also located within this area. In addition, the Genesys Regional Medical Center, which has plans for expansion, is located in the center of the study area. The area plan will present an updated policy on future land use and development. An excerpt from the Township's zoning map of the study area is provided on the back of this invitation.

The first step in the process is a Technology Village Area Plan kick-off meeting. Please join us as we embark on this exciting plan for our community.

**Kindly RSVP by Monday, October 29 to:**  
Maria Maclean, Charter Township of Grand Blanc  
(810) 424-2766 | phone  
maclean@twp.grand-blanc.mi.us

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# HISTORY

**2007 Kick-off**  
An Informational Symposium with Technology and Development Experts

**The Diagnostic Picture of the Great Lakes Region** - John C. Austin, Senior Fellow, Brookings Institution.

**The Knowledge Economy Report** - Faron Supanich-Goldner – Michigan State University, Center for Community and Economic Development.

**Emerging Business Sectors** - Maureen Donohue Krauss, Deputy Director, Oakland County Department of Economic Development & Community Affairs.

**Attracting National and International Business to Southeastern Michigan** - Thomas Anderson, Ph. D., MBA, Senior Director, Automation Alley.

**Economic Development in Genesee County** - Edward Donovan, Genesee Regional Chamber of Commerce.

**The Grand Blanc Township Technology Village Area Plan** - Rodney Arroyo, Vice President, Birchler Arroyo Associates, Inc.

**The Future of Health Care** - Michael H. James, J.D., President, Genesys Ambulatory Health Network.

**The Genesys Learning Institute** - Norma Hagenow, RN, MBA, Chief Learning Officer, President Emeritus, Genesys Health System.

**Intermodal Transportation Center** - James Rice, Airport Director, Bishop International Airport Authority.

**Introducing Hybrids - Cleaner Air, Brighter Future** - Robert Foy, General Manager, Mass Transportation Authority, Flint, Michigan.

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## HISTORY

**2007 Kick-off**  
Over 120 attendees – representatives from around the region

**2008 Public Workshop**  
Over 50 attendees, primarily residents and business interests from the Township

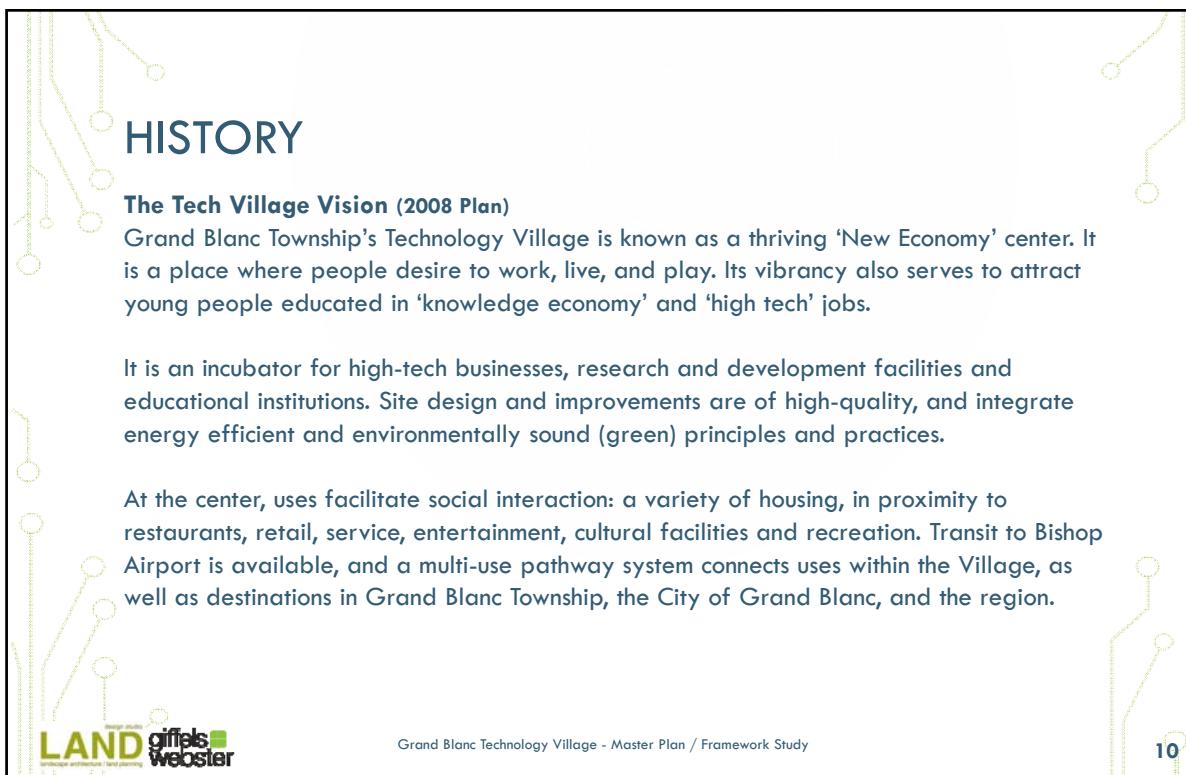
Public Workshop / Input Session was held on May 15, 2008 at the Grand Blanc West Middle School in the Lecture Hall

**Goals**  
The Tech Village Plan called for a conceptual site plan of the mixed-use Tech Village area that respectfully integrates the rural character in area and the natural features present throughout

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## HISTORY

**The Tech Village Vision (2008 Plan)**  
Grand Blanc Township's Technology Village is known as a thriving 'New Economy' center. It is a place where people desire to work, live, and play. Its vibrancy also serves to attract young people educated in 'knowledge economy' and 'high tech' jobs.

It is an incubator for high-tech businesses, research and development facilities and educational institutions. Site design and improvements are of high-quality, and integrate energy efficient and environmentally sound (green) principles and practices.

At the center, uses facilitate social interaction: a variety of housing, in proximity to restaurants, retail, service, entertainment, cultural facilities and recreation. Transit to Bishop Airport is available, and a multi-use pathway system connects uses within the Village, as well as destinations in Grand Blanc Township, the City of Grand Blanc, and the region.

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**Existing Conditions**

Context of the Development Area

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**Existing Conditions**

- Overall district is approximately 4,100 acres and includes Genesys Health Park, a 500+ acre campus that includes a regional medical center, medical office buildings, and a wellness facility/conference center.
- This concept plan focuses on approximately 200 undeveloped acres in two parcels located in the triangle bounded by I-75, Saginaw Street, and Baldwin Road.
- These two parcels feature stunning views of wetlands and woodlands; the topography and natural features will contribute to unique building sites with enhanced views and opportunities for recreation.

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## Existing Conditions

- Technology Village has regional and international accessibility by way of interstate highways.
  - I-75 connects Technology Village north to Sault Ste. Marie Canada and south to Miami, Florida.
  - Approximately 50,000 to 70,000 vehicles travel through the Township on I-75 every day.
  - Three I-75 interchanges are located within or immediately adjacent to the boundaries of the Technology Village Area. I-475 is a 17-mile loop that provides direct access to downtown Flint.
  - I-69 runs from the Canadian border crossing in Port Huron to Indianapolis and carries approximately 85,000 daily vehicles just north of the township.



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## Existing Conditions

- Site constraints include:
  - Nearly 50 acres of wetlands
  - Development buffers from existing residential development at northern end of area



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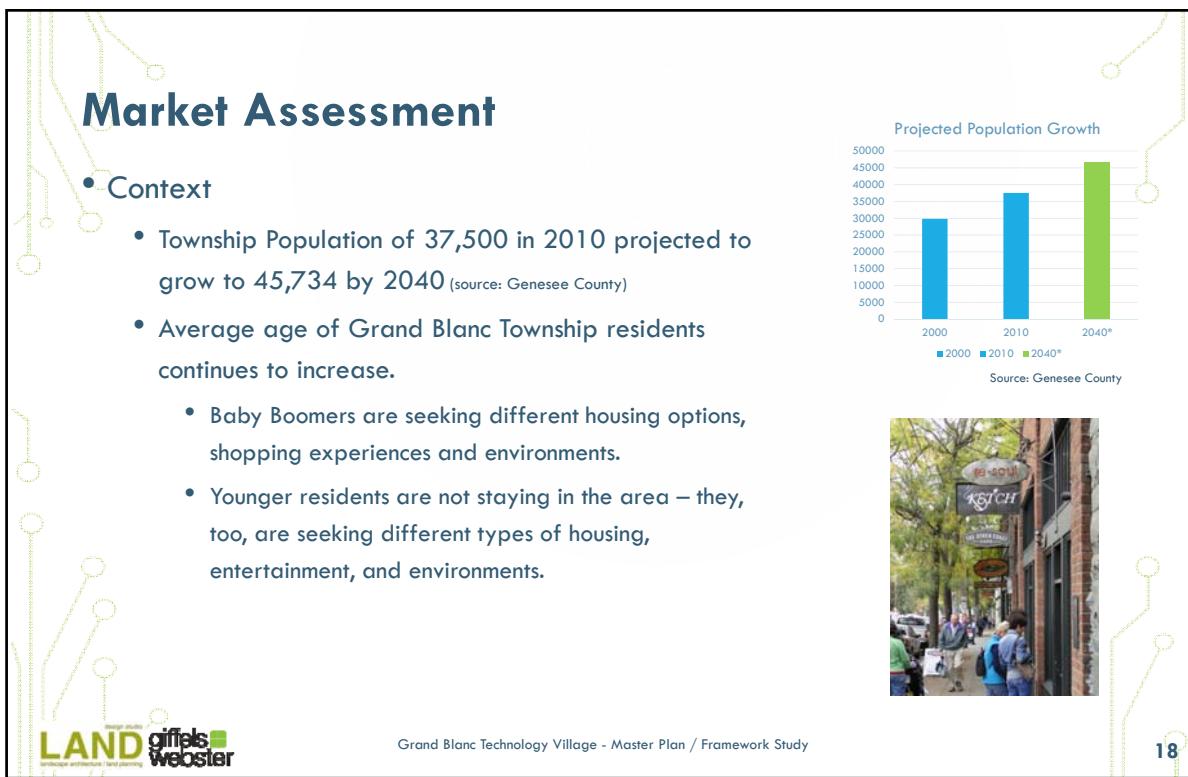
## Market Assessment

Trends In Michigan And Beyond

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## Market Assessment

- Context
  - Township Population of 37,500 in 2010 projected to grow to 45,734 by 2040 (source: Genesee County)
  - Average age of Grand Blanc Township residents continues to increase.
    - Baby Boomers are seeking different housing options, shopping experiences and environments.
    - Younger residents are not staying in the area – they, too, are seeking different types of housing, entertainment, and environments.

**Projected Population Growth**

| Year  | Population |
|-------|------------|
| 2000  | 30,000     |
| 2010  | 35,000     |
| 2040* | 45,000     |

\*Source: Genesee County



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## Market Assessment

- Context
  - Retail is changing where, when, and how people shop
    - Smart mobile devices enable consumers to shop online anywhere and anytime
    - Virtual showrooms and 3D display of merchandise will continue to change
    - Entertainment increasingly a component of the shopping experience
  - Housing is changing to reflect demographic shifts
    - Both Millennials and Baby boomers seek more walkability, lower maintenance, and amenities



Source: Samsung



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## Market Assessment

- Context
  - Manufacturing: Technology is changing the way goods are processed and assembled
    - On-demand production is evolving
    - Manufacturing is migrating towards locations that are reasonable distances from larger population centers



Source: 3ders.org (above); Autodesk (below)



Enterprise 3-D printing...

Autodesk's 3-D printing facility, Pier 9 San Francisco  
<http://www.autodesk.com/3d-printing/pier9>

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## Market Assessment

- Residential Market Forecast for Tech Village
  - 2016-2026: 625 new housing units
  - Mix of housing in a dense, walkable development pattern



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## Market Assessment

- Non-Residential Market Forecast
  - 2016-2026 Retail: Based on new households, 230,786 sf
    - General merchandise
    - Transportation/utilities
    - Hardware
    - Restaurants



Source: Scott Lewis via Flickr

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## Market Assessment

- Non-Residential Market Forecast
  - 2016-2026 Traditional Office: 60,000 sf
    - In addition to medical office uses associated with Genesys.
    - Professional services: accounting, payroll, legal, industrial design, management consulting, and the like
    - Finance, Insurance, and Real Estate (FIRE): consumer lending, savings institutions, real estate agents and brokers, investment advisors, etc.



Source: Wikimedia Commons

Source: Scott Lewis via Flickr

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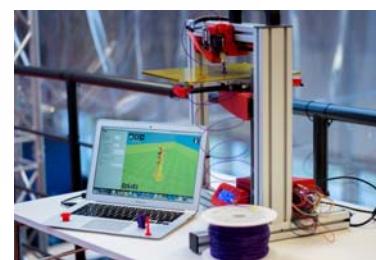
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## Market Assessment

- Non-Residential Market Forecast
  - 2016-2026 R&D Office: 354,000 sf
    - 100% automated food preparation and food server robotic equipment
    - Surgical robots
    - Pharmaceutical and dispensing robotics
    - Robotic security guards
    - Non-weaponized and weaponized drones
    - Robotic sales "people" for telephone and major company displays
    - 3D printed office and clothing manufacturing



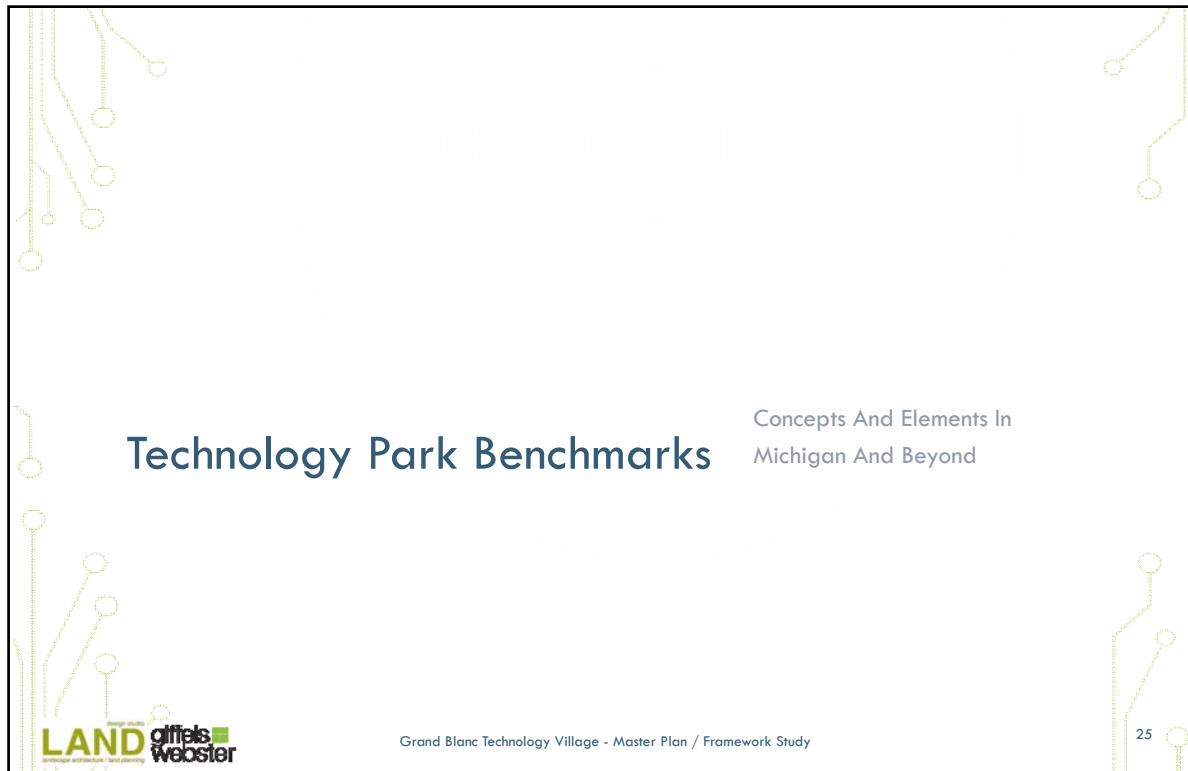
Source: Andreas Bauer via Wikimedia Commons



Source: Jonathan Juursema via Wikimedia Commons

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**Technology Park Benchmarks**

Concepts And Elements In Michigan And Beyond

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**Western Michigan Business, Technology, and Research Park – Kalamazoo, MI**

- 265 acres, including 128 acres WMU College of Engineering & Applied Sciences
- SmartZone – Tax revenues from resident companies returned to development for infrastructure upgrades
- Central park area w/ walkways throughout
- Regional stormwater management system
- Curved roadway system
- Native plantings
- Wet ponds as focal features
- Unified lighting and signage standards
- Minimal curbs on roadways
- Paved shoulder used as bike lane
- Bus transit for students
- Outdoor seating areas provided



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## Western Michigan Business, Technology, and Research Park




- High quality architecture & landscape on individual parcels
- Varied stormwater management methods
  - Open water
  - Wetland areas
  - Naturalized & manicured streams



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## Western Michigan Business, Technology, and Research Park





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# Bosch North America Research Center

## Plymouth Township, MI

- 75 acres; 445,000 sf
- Unified lighting and signage standards
- Native Prairie plantings
- Parking lot bioswales / no curbs
- Large bold masses of ornamental grass
- Quality Architecture



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## Prairie Stone Business Park Chicago, IL (Hoffman Estates)

- 780 acres; 445,000 sf
- Designated “Economic Development Area” (similar to TIF)
- Mix of uses, including residential
- Public gathering spaces
- 12 acre park with amphitheater (seats 1,000)
- Wet ponds as focal features
- Native plantings
- Unified lighting and signage standards
- Entertainment district



Village of Hoffman Estates  
Development Services Department  
June 30, 2015

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**Prairie Stone Business Park**

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**Downtown Benchmarks**

Concepts And Elements In Michigan And Beyond

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## Downtown Benchmarks

### Precedent Images - Buildings

- 2-3 story buildings that include retail, restaurant, office, and residential uses
- Buildings have ample ground floor windows and architectural details that encourage pedestrians to walk and explore
- A variety of architectural styles and materials that contribute to a sense of authenticity.



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## Downtown Benchmarks

### Precedent Images - Streets

- Streets that accommodate vehicles, pedestrians, and cyclists
- Incorporate on-street parking, unique paving techniques, and landscaping to create places where people want to be.



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## Downtown Benchmarks

### Precedent Images - Gathering

- A variety of plazas and open spaces that allow people to gather, formally or informally
- Spaces may be private/semi-private – like outdoor dining or courtyards
- Flexible spaces offer opportunities to host events and other activities.



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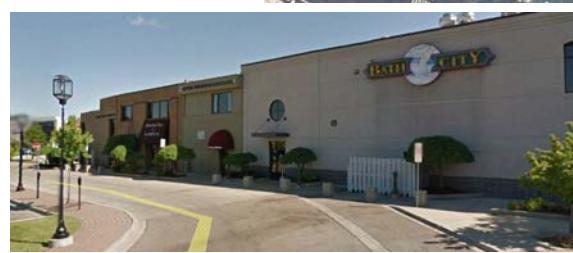
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## Downtown Benchmarks

### Precedent Images – Service Areas

- Service functions behind buildings
- Parking behind buildings
- Create mid-block alleys, paseos, and passages to connect parking areas to the main street.



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**Sustainable Site Practices** Precedent Images

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**Sustainable Site Practices**

- To maximize development within the context of a village environment, innovative stormwater management techniques will be integrated into site development and should include a variety of techniques, such as rainwater harvesting, rain gardens, and wetlands.

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## Sustainable Site Practices

- Solar and wind energy structures can be used on buildings as well as throughout the site.



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## Sustainable Site Practices

- Quality landscaping contributes to the character of individual sites and the entire village area
- Landscaping beds within paved areas helps mitigate the “heat-island” effect.
- Using native plantings help with long-term management of landscaping.



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## Sustainable Site Practices

- Electric vehicle charging
- Transit opportunities
- Car sharing





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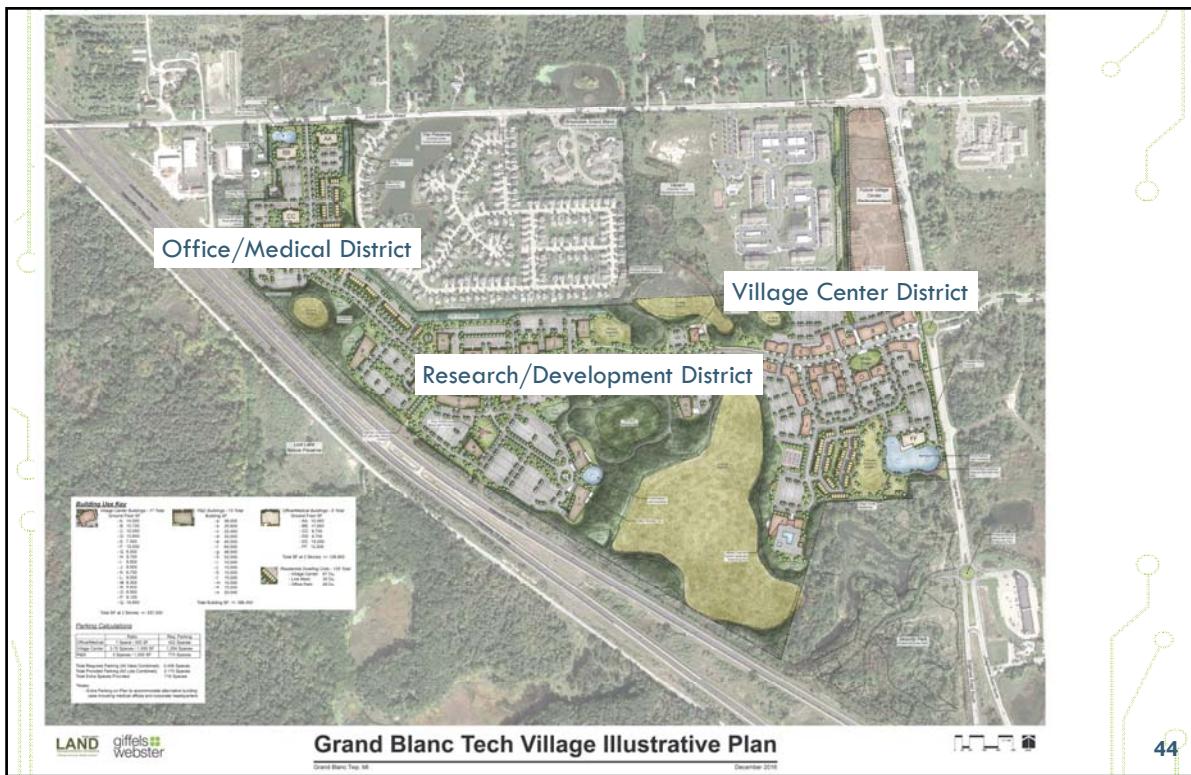
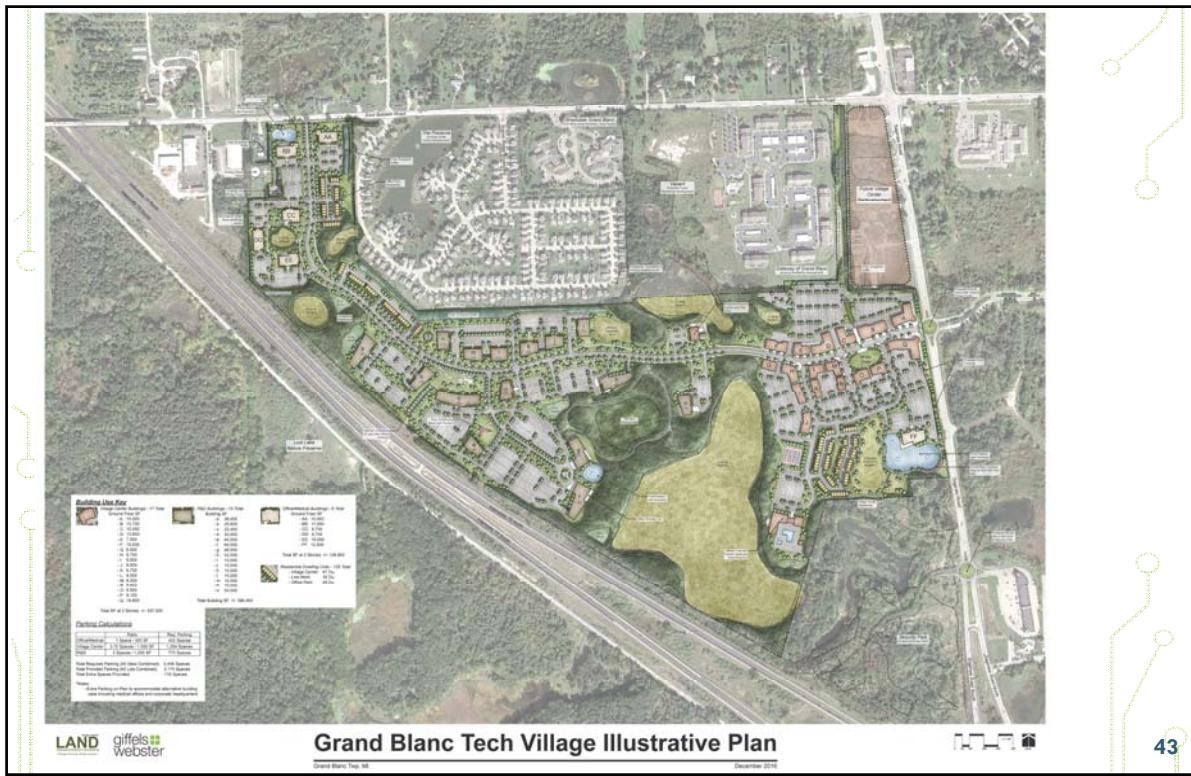
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## Conceptual Master Plan

Vision For Grand Blanc Township

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## Conceptual master plan

- **Office/Medical District:**
  - Entry feature and sign at Baldwin entrance
  - Interconnected pathways for non-motorized circulation
  - AA-EE: Six buildings between 9,700 sf-12,500 sf on ground floor
  - Two story total = 126,600 sf
  - Office park residential: 28 units
  - 422 parking spaces



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## Conceptual master plan



## • Research/Development District:

- Connects office/medical to village center
- Interconnected pathways for non-motorized circulation
- 15 buildings (a-o) from 10,000 sf – 60,000 sf
- One story total = 386,400 sf
- Live Work residential: 30 units
- Three park areas – one w pavilion for special events
- 773 parking spaces







## Conceptual master plan

- Village District:**
  - Gateway signage at Saginaw
  - Interconnected pathways for non-motorized circulation
  - 17 buildings (A-Q) from 5,400 sf – 18,800 sf
  - Two story total = 337,000 sf
  - Live Work residential: 67 units
  - Village green for special events
  - 1,264 parking spaces



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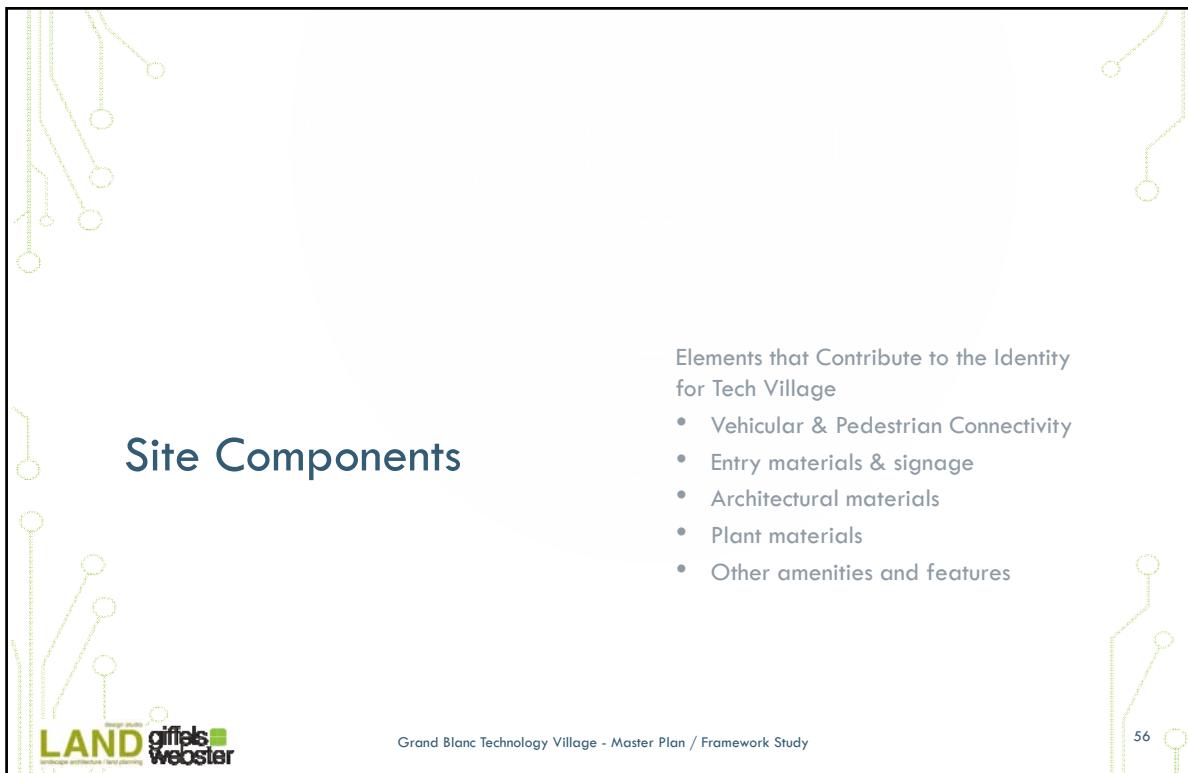
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## Site Components

- Vehicular & Pedestrian Connectivity.
  - Streets and sidewalks will be designed to provide for mobility throughout the site in a variety of modes.

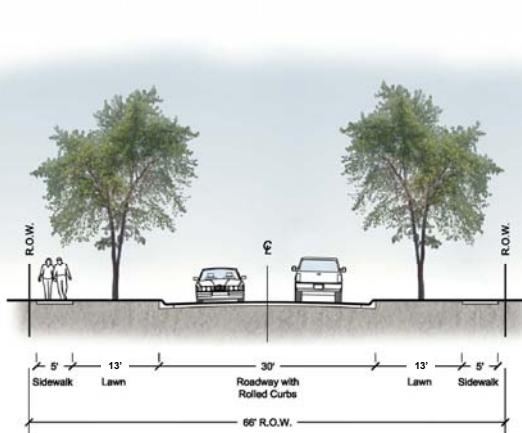


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## Site Components



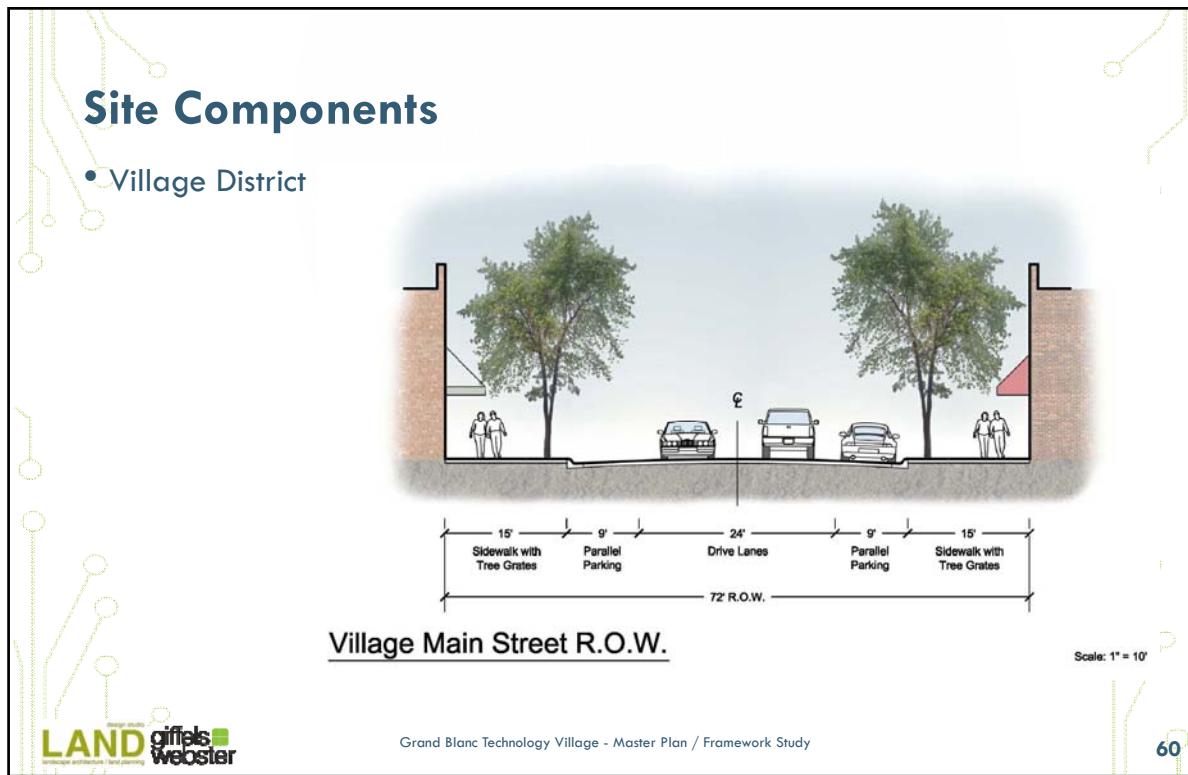
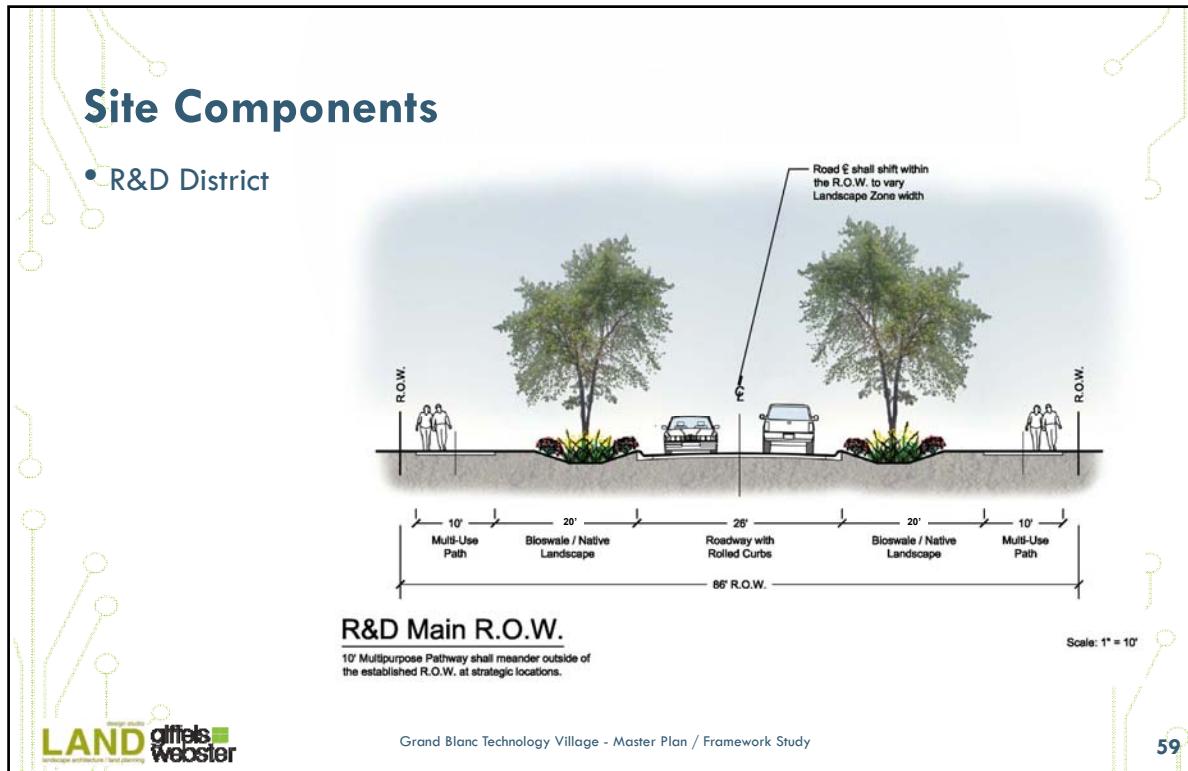
Standard Genesee County ROW

Scale: 1" = 10'

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## Site Components

- Vehicular & Pedestrian Connectivity. Roadway Prototypes – Good Option
  - Standard Curb & Gutter road
  - Construction
  - Traditional ‘Piped’ Stormwater System
  - 5’ Sidewalks (each side)
  - Standard Cobra Head street lights
  - Street Trees
  - Maintained Lawn

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## Site Components

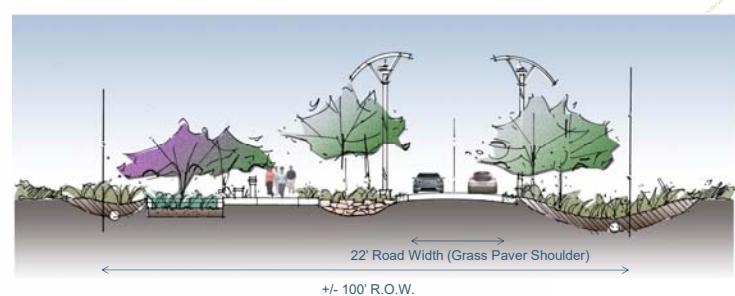
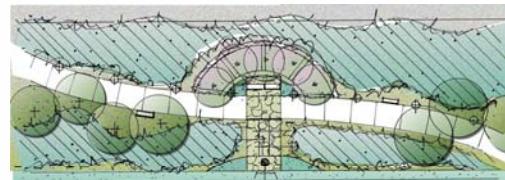
- Vehicular & Pedestrian Connectivity. Roadway Prototypes – Better Option
  - Standard gravel shoulder road construction
  - Sustainable bioswale stormwater system
  - 5’ Sidewalks (each side optional)
  - High tech street lights
  - Native tree groves
  - Prairie ground plane plantings
  - Maintained lawn strip only adjacent to walks & road
  - Benches

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## Site Components

- Vehicular & Pedestrian Connectivity. Roadway Prototypes – Best Option
  - 22' paved road with grass paver shoulder
  - Sustainable bioswale stormwater system
  - 5'- 8' Sidewalks (one side)
  - Rain garden focal points
  - Native stone used for check dams, pavement, planter walls
  - Solar street lights
  - Native tree groves
  - Prairie ground plane plantings
  - Maintained lawn strip only adjacent to walks & road


good – better – **“BEST”**

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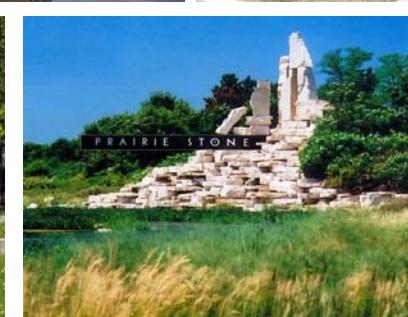
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## Site Components

- Gateway signage
  - Proper text size
  - High contrast
  - Material choices
  - Incorporation of logos
  - Text as logo







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## Site Components

- Gateway materials
  - Machine Cut Stone (Napoleon Sandstone)
  - Corten Steel
  - Stainless Steel
  - Decorative Block
  - Exposed Concrete
  - Michigan Field Stone
  - Other.....?

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## Site Components

- Architectural materials should reflect the natural characteristics of the area, but include other materials as accent including:
  - Wood
  - Stone
  - Glass
  - Brick
  - Metal

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## Site Components

- Landscaping: Plantings should incorporate native species that require low maintenance
- Landscape treatments should be more formal in the village portion of Tech Village, and more natural around the research park area

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## Site Components: Native Prairie Plants

Native Shade Trees      Native Ornamental Shrubs      Native Wildflowers

Native Grasses

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## Site Components: Street furnishings

- Lighting (street & pedestrian)
- Benches & receptacles
- Transit shelters
- Bicycle parking

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## Site Components: Unique Features

- Public art






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## Site Components: Unique Features

- Water tower lighting
  - LED Programmable Lighting
  - Reach Fixtures on Ground
  - Business Sponsors Opportunities
  - Evening Focal Point
  - \$2,500 for Site Demonstration






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## Site Components: Pathway features

- Boardwalks
- Fitness stations
- Art



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## Next Steps

Implementation for Tech Village

- Create zoning standards that support these concepts
- Marketing materials

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## Next Steps: Zoning Standards

- Option: Update Planned Unit Development standards
  - Include design and materials standards
  - Define public enhancements
  - Offers flexibility, but is unpredictable from the developers standpoint
- Option: Create new zoning district
  - Require defined form-based elements and design features
  - Require specific treatments and amenities in the public realm

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## Next Steps: Marketing materials

- Beyond the scope of this phase, but should include:
  - Materials dedicated to marketing this parcel
    - Conceptual plans, images
    - Explanation of public investments
    - Contact information
    - Market information
  - Hard copy for distribution to Realtors, developers, businesses
  - Electronic copy for website
  - Active recruitment of businesses and developers
    - Attend networking events, including International Council of Shopping Centers (ICSC)

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## Tech Village Consulting Team



THE CHESAPEAKE GROUP, INC.



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