

City of Marshall

Local Development Finance Authority

Development and Tax Increment Financing Plan

The Marshall Local Development Finance Authority (LDFA) was established in November 1991 under Michigan's Local Development Financing Act (MCL 125.4401 *et. seq.*) for the purpose of eliminating conditions of unemployment, joblessness, and to promote the expansion of the City of Marshall's tax base and economic viability.

The original Development Plan and Tax Increment Financing Plan were adopted in April 1992 and updated in June 2005 and are incorporated herein by reference. The Tax Increment Financing Plan provided that it would "continue until December 31, 2028 or until the final payment of the debt or such point that the development of public improvements are completed through other means, which ever (*sic*) is the latter."

The work of the LDFA continues, as do the conditions for which the authority was formed. In light of the numerous changed circumstances, the following revisions are adopted:

Marshall Local Development Finance Authority Development Plan

Section 415 of the Act (MCL 125.4415) requires that the development plan shall consider the following factors, set out in bold face type:

- (a) **description of the property to which the plan applies in relation to the boundaries of the authority district and a legal description of the property.**

A complete legal description of all areas known as the L. Alta Brooks Industrial Park Area, phases I, II, III and proposed IV (Phases III and IV are being marketed as The Brooks Industrial & Research Park) as well as the addition of the Quigley and Lafferty properties are attached and incorporated as **Exhibit A**. Note that, notwithstanding the references to Fredonia Township in the legal description, all of the lands within the authority district are within the City of Marshall.

- (b) **The designation of boundaries of the property to which the plan applies in relation to highways, streets, or otherwise.**

The property lies on the southern edge of the City of Marshall and is bisected by a State of Michigan trunk line, Old U.S. Highway 27, currently identified as M-227. The following streets are located within the project: Oliver Drive, George Brown Drive, Woolley Drive, Adams Avenue, Pratt Avenue and Brooks Drive.

Exhibit A depicts the boundaries of the development in relation to the above routes. The Development Area boundaries are conterminous with the LDFA District

boundaries.

- (c) **The location and extent of existing streets and other public facilities in the vicinity of the property to which the plan applies; the location, character, and extent of the categories of public and private land uses then existing and proposed for the property to which the plan applies, including residential, recreational, commercial, industrial, educational, and other uses.**

The district is served by the streets and roads previously identified, as well as by municipal sewer, water, stormwater infrastructure, and electrical service. Telephone service is available through commercial providers. High speed internet service is currently available through various providers, including the City FiberNet system.

As of the date of adoption, all available building sites in the L. Alta Brooks Industrial Park, phase I and phase II are developed as industrial or commercial property under private ownership. Phase III has building sites that are ready for sale and property that is currently farmed. Proposed phase IV is currently farmed, but will be developed when market demand dictates such action. There is also land adjacent to the district which could be developed if economic factors are favorable.

- (d) **A description of public facilities to be acquired for the property to which the plan applies, a description of any repairs and alterations necessary to make those improvements, and an estimate of the time required for completion of the improvements.**

The expansion of the L. Alta Brooks Industrial Park phases III, IV and additional future expansion will require the extension of public roadways, sanitary and storm sewers, curb and gutters, electrical system (including lines and substations), lighting, municipal water service, lift stations, and communication infrastructure (including high speed fiber optic service).

Additional activities, projects and infrastructure work is planned within the LDFA District over the remainder of the Plan period, which ends December 31, 2046, or after the payment of all incurred bonded or other indebtedness, whichever is later. A list of the planned projects, and estimated cost for the Plan period from 2022-2041 is attached as **Exhibit B**.

- (e) **The location, extent, character, and estimated cost of the public facilities for the property to which the plan applies, and an estimate of the time required for completion.**

In 2003, the LDFA contracted with JJR, LLC to conduct an analysis of the current park and to address opportunities in the district and surrounding areas. This exercise resulted in a preliminary design of the proposed completion of phase III and all of phase IV of the L. Alta Brooks Industrial Park. This analysis is attached as **Exhibit**

C.

The LDFA proposes to improve the property within the boundaries of the District in various ways, including, but not limited to the following:

- Design and construct signage adequate to maximize the appreciation of the Park's unique characteristics.
- Construction of a new electric substation on the former Lafferty property.
- Construction of a new sanitary sewer pump station upon development of Phase IV

Two projects were identified for inclusion in Phase 4 of the Industrial Park. Since the plan was approved in 2005, land has been sold to the proposed Marshall Energy Center that would impact the two projects. If the proposed MEC project does not move forward, the following projects may be built:

- Construct an entryway to Phase IV of the Park from M-227.
- Design and install a landscaping plan at or near the entrance into Phase IV of the Park.

Other projects may be considered during the Plan period subject to the availability of funds. These projects would address the legislative findings set forth in Section 1 of the Local Development Financing Act. Further, these projects would advance the purpose for which the LDFA was established, i.e., to eliminate conditions of unemployment, joblessness, and promote tax base expansion and economic viability for the City of Marshall. These projects include but are not limited to the following:

- Extension of water, sanitary sewer, storm sewer, electrical lines, in-kind project management and marketing services adequate to service: 1) the former Quigley farm property to the south and west of the current industrial park; 2) areas immediately north or east of the current District, but not into the Brooks Nature Preserve; 3) lands with excellent development potential in Marshall over which the City of Marshall would exercise jurisdiction pursuant to an agreement under PA 425 of 1984; 4) lands to the south and west of the LDFA District, subject to some future agreement with Fredonia Township.
- Placement of directional and promotional signage at or near Interstate 69 and Interstate 94.
- Improvements to runways, taxiways, and aprons at the Brooks Municipal Airport, adjacent to the District.
- Entrepreneur training and development.
- Creation and continuation of a business revolving loan program.
- Partner with community marketing and promotions initiatives.

- (f) **A statement of the construction or stages of construction planned, and the estimated time of completion of each stage.**

Please see attached updated estimates for work remaining to be completed from the original JJR plan to allow for the expansions to the L. Alta Brooks Industrial Park phases III and IV (**exhibits B and C**). Airport improvements, if deemed beneficial to the LDFA district, would be completed in conjunction with FAA grants. A revolving loan program would be accomplished in conjunction with federal grants as well. Additional projects and their associated costs will be considered on a case-by-case basis.

- (g) **A description of any portions of the property to which the plan applies, which the authority desires to sell, donate, exchange or lease to or from the municipality and the proposed terms.**

The LDFA plans to finance the construction of the Brooks Electric substation, Udell property sanitary lift station, road improvements, and water/sewer main improvements. These items will be owned by the respective utility/governmental fund upon completion of the project. Portions of the LDFA property are being leased for farming with the proceeds being deposited to the LDFA's operating budget. The LDFA intends to negotiate with the City of Marshall regarding the terms of the use of rights of way and other transportation facilities within the LDFA District and outside the District.

- (h) **A description of desired zoning changes and changes in streets, street levels, intersections, and utilities.**

While current zoning appears to be sufficient, the LDFA will work with current staff and officials if needs change in the future. The LDFA also desires to improve access to the Industrial Park by various means, including but not limited to:

- The creation of left-turn lanes at appropriate locations in and around the Industrial Park.
- The improvement of portions of M-227 that create barriers to truck access into the LDFA District.
- The improvements of portions of Brewer Street/Kalamazoo Avenue from I-94 exit 110 to the Industrial Park.
- The improvements of portions of Michigan Avenue/Partello Road between I-94 exit 112 and I-69 exit 36.
- The extension of utilities to areas outside of the LDFA District which will encourage economic development within the district.
- Extension of Oliver Drive to the east to provide access to the former Udell property.
- If the Marshall Energy Center does not move forward, a road connecting M-227 and Pratt Avenue may be built providing direct access to Phase IV.

- (i) **An estimate of the cost of the public facility or facilities, a statement of the proposed method of financing the public facility or facilities, and the ability of the authority to arrange the financing.**

- Road improvements to the industrial park will be determined on a case-by-case analysis and therefore have not been determined.
- A new electric substation, located on the former Lafferty farm, is estimated to cost \$5.5 million and will be financed using a tax-increment financing bond.
- Exhibit B contains a summary of the rest of the projects proposed during the twenty (20) year period covered by the plan.

- (j) **Designation of the person or persons, natural or corporate, to whom all or a portion of the public facility or facilities is to be leased, sold, or conveyed and for whose benefit the project is being undertaken, if that information is available to the authority.**

The LDFA is not aware of lessees, purchasers, or beneficiaries the proposed public facilities may be leased, sold, or conveyed, or of who may directly benefit from such projects.

- (k) **The procedures for bidding for the leasing, purchasing, or conveying of all or a portion of the public facility or facilities upon its completion, if there is no express or implied agreement between the authority and persons, natural or corporate, that all or a portion of the development will be leased, sold, or conveyed to those persons.**

Lease or sale of lands or facilities for manufacturing or industrial purposes will be negotiated with the interested parties by the City of Marshall and Marshall Area Economic Development Alliance, with the consultation and advice of the LDFA Board, the City of Marshall's Economic Development Corporation, the City Attorney, and ultimately subject to the approval of the Marshall City Council.

- (l) **Estimates of the number of persons residing on the property to which the plan applies and the number of families and individuals to be displaced. If occupied residences are designated for acquisition and clearance by the authority, a development plan shall include a survey of the families and individuals to be displaced, including their income and racial composition, a statistical description of the housing supply in the community, including the number of private and public units in existence or under construction, the condition of those in existence, the number of owner-occupied and renter-occupied units, the annual rate of turnover of the various types of housing and the range of rents and sale prices, an estimate of the total demand for housing in the community, and the estimated capacity of private and public housing available to displaced families and individuals.**

There are no residential structures within the LDFA District. To the extent that this plan contemplates development outside of the district, there would be no direct displacement of any residences.

- (m) **A plan for establishing priority for the relocation of persons displaced by the development.**

Not applicable.

- (n) **Provision for the costs of relocating persons displaced by the development, and financial assistance and reimbursement of expenses, including litigation expenses and expenses incident to the transfer of title, in accordance with the standards and provisions of the federal uniform relocation assistance and real property acquisition policies act of 1970, 42 U.S.C. 4601 to 4655.**

Not applicable.

- (o) **A plan for compliance with Act No. 227 of the Public Acts of 1972, being sections 213.321 to 213.332 of the Michigan Compiled Laws.**

Not applicable.

- (p) **Other material which the authority or governing body considers pertinent.**

Not applicable.

Sec. 412. (1) If the board determines that it is necessary for the achievement of the purposes of this act, the board shall prepare and submit a tax increment financing plan to the governing body. The plan shall be in compliance with section 413 and shall include a development plan as provided in section 415. The plan **shall also contain the following:**

- (a) **A statement of the reasons that the plan will result in the development of captured assessed value that could not otherwise be expected. The reasons include, but are not limited to; activities of the municipality, authority, or others undertaken before formulation or adoption of the plan in reasonable anticipation that the objectives of the plan would be achieved by some means.**

In 2006, The Brooks Industrial and Research Park (The Brooks) was opened. The Brooks was constructed because all lots in the L. Alta Brooks Industrial Park Phases I and II had been sold. The LDFA has a track record of success and believes that this success can be duplicated as it looks to the future. The business environment in Michigan has improved greatly and The Brooks is poised for success as these changes take place.

Over the years since the LDFA was formed, the City and many other public and private organizations, businesses, individuals and others have made significant investments in this community. Much of these were financed through increasing Taxable Values of both real & personal property within the City. The increasing

values of taxable property within the City has a direct correlation to the number, type, and compensation for full- and part-time jobs that are either directly created or retained by businesses that Marshall Economic Development services in the Industrial Park or on Industrial Road, or are indirectly created or retained through the economic multiplier effect resulting from the directly created positions.

- (b) **An estimate of the captured assessed value for each year of the plan.** The plan may provide for the use of part or all of the captured assessed value or, subject to subsection (3), of the tax increment revenues attributable to the levy of any taxing jurisdiction, but the portion intended to be used shall be clearly stated in the plan. The board or the municipality creating the authority may exclude from captured assessed value a percentage of captured assessed value as specified in the plan or growth in property value resulting solely from inflation. If excluded, the plan shall set forth the method for excluding growth in property value resulting solely from inflation.

Please refer to **Exhibit D** at the end of this plan for an estimate of Captured Taxable Value for each year of the plan.

- (c) **The estimated tax increment revenues for each year of the plan.**
Please refer to **Exhibit D** at the end of this plan for an estimate of "available" tax increment revenues for each year of the plan.

- (d) **A detailed explanation of the tax increment procedure.**
Tax increment financing permits the Authority to capture tax revenues attributable to increases in the value of real and personal property resulting from the acquisition and construction of eligible property as defined in Act 281. Property value increases, in the case of the Industrial Park, have been and will be directly & indirectly attributable to the construction of the projects and improvements in the Park.

At the time the original TIF Plan was approved by the City Council in 1992, the value of the eligible property to which the plan pertains (the "Initial Assessed Value") was established.

The Initial Assessed Value is the State Equalized Value of the eligible property on that date. For the LDFA District, that initial value was \$6,139,393.

In each subsequent year for the duration of the TIF Plan, the "Current Taxable Value" (TV) of the eligible property will be determined. This change to the use of TV was due to the adoption by the voters of "Proposal A" to the State Constitution in 1994. The TV of a property is now calculated using the Assessed Value as of 1991 (which became the base year Taxable Value) and increasing that TV each year by an annual inflation factor, or 5%, whichever is less. If a property is sold or changes ownership, the TV is raised to whatever the State Equalized Value (SEV) is for the property at the time of the sale. The SEV is theoretically set at 50% of the True Cash

Value (TCV) of the property and is adjusted periodically based on market fluctuations, additions, deletions, and other physical property changes. Since Proposal A took effect, the Taxable Value upon which taxes are levied, has lagged significantly behind the market based SEV for a property. This has led to a substantial amount of "untaxed value" of properties and to the unequal taxation of identical properties due to one of them having recently sold.

The amount by which the Current Taxable Value exceeds the Initial Assessed Value in any one year is the "Captured or Capturable Taxable Value." For the duration of any TIF Plan, the local taxing jurisdictions continue to receive tax revenues based upon the initial Assessed Value. The Authority receives that portion of the tax levy of all taxing jurisdictions paid each year on the Captured Taxable Value of the eligible property included in the TIF Plan and TIF District; provided, however, that the Authority does not receive any part of a millage specifically levied for the payment of principal of and interest on obligations approved by the electors or obligations pledging the unlimited taxing power of the local governmental unit. Since Proposal A, the TIF Authority can no longer capture "education" millages once prior obligations (bonds & other eligible debts) are paid off. This includes local school operational millages, as well as millages levied by Intermediate School Districts and the State Education Tax (SET.)

Future captures for the LDFA will be limited to millage levied by the City, Calhoun County, Kellogg Community College, the Marshall Ambulance Authority, and the Marshall Area District Library. If new taxing bodies are formed or additional noneducational millages are levied, they will be subject to capture.

The original LDFA district as contained in the description of the L. Alta Brooks Industrial Park will maintain its current capture structure at 100% capture by the LDFA. The tax capture that is derived from additional land that was incorporated into the LDFA district in 2005 (i.e., the Quigley property and the Lafferty property as described in exhibit A) is prorated with 65% of the tax capture going to the LDFA and 35% distributed to each of the taxing entities in proportion to their relative millage rates.

(e) The maximum amount of note or bonded indebtedness to be incurred, if any.

The LDFA will cap the maximum amount of indebtedness at \$10 million or the maximum permitted by LDFA revenues.

(f) The amount of operating and planning expenditures of the authority and municipality, the amount of advances extended by or indebtedness incurred by the municipality, and the amount of advances by others to be repaid from tax increment revenues.

As of June 30, 2021, the LDFA has no outstanding debt.

- (g) **The costs of the plan anticipated to be paid from tax increment revenues as received.**

All of the cost of improvements, projects, and activities to and for the benefit of the L. Alta Brooks Industrial Park and the Brooks Industrial and Research Park will be paid from tax increment revenues, proceeds of bonds issued in anticipation or receipt of those revenues or other sources of funds legally available to the Authority. The acquisition of all or a portion of property identified for expansion of the of Industrial Parks is also a planned expense. Engineering, land surveys, planning, administrative and other costs associated with the enhancement improvements, projects, or activities is also to be included in the project costs.

- (h) **The duration of the development plan and the tax increment plan.**

This Plan shall not expire until December 31, 2046 or until all bonds, loans and other debt is repaid, whichever occurs later.

- (i) **An estimate of the impact of tax increment financing on the revenues of all taxing jurisdictions in which the eligible property is or is anticipated to be located.**

Please see Exhibit E.

- (j) **A legal description of the eligible property to which the tax increment financing plan applies or shall apply upon qualification as eligible property.**

See Exhibit A, attached hereto.

- (k) **An estimate of the number of jobs to be created as a result of implementation of the tax increment financing plan.**

The LDFA district currently has approximately 1080 employees, with another 200-300 expected to be added in the next 18 months. The vacant land could support a minimum of another 1200 plus employees, depending on the types of industry attracted to the sites.

- (l) **The proposed boundaries of a certified technology park to be created under an agreement proposed to be entered into pursuant to section 12a, an identification of the real property within the certified technology park to be included in the tax increment financing plan for purposes of determining tax increment revenues, and whether personal property located in the certified technology park is exempt from determining tax increment revenues.**

The proposed boundaries are included in the legal description in **Exhibit A**. Both

real and personal property located in the certified business park will be included in the tax increment financing plan for the purposes of determining tax increment revenues

City of Marshall - LDEA

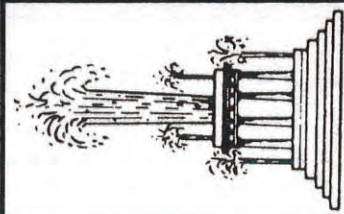
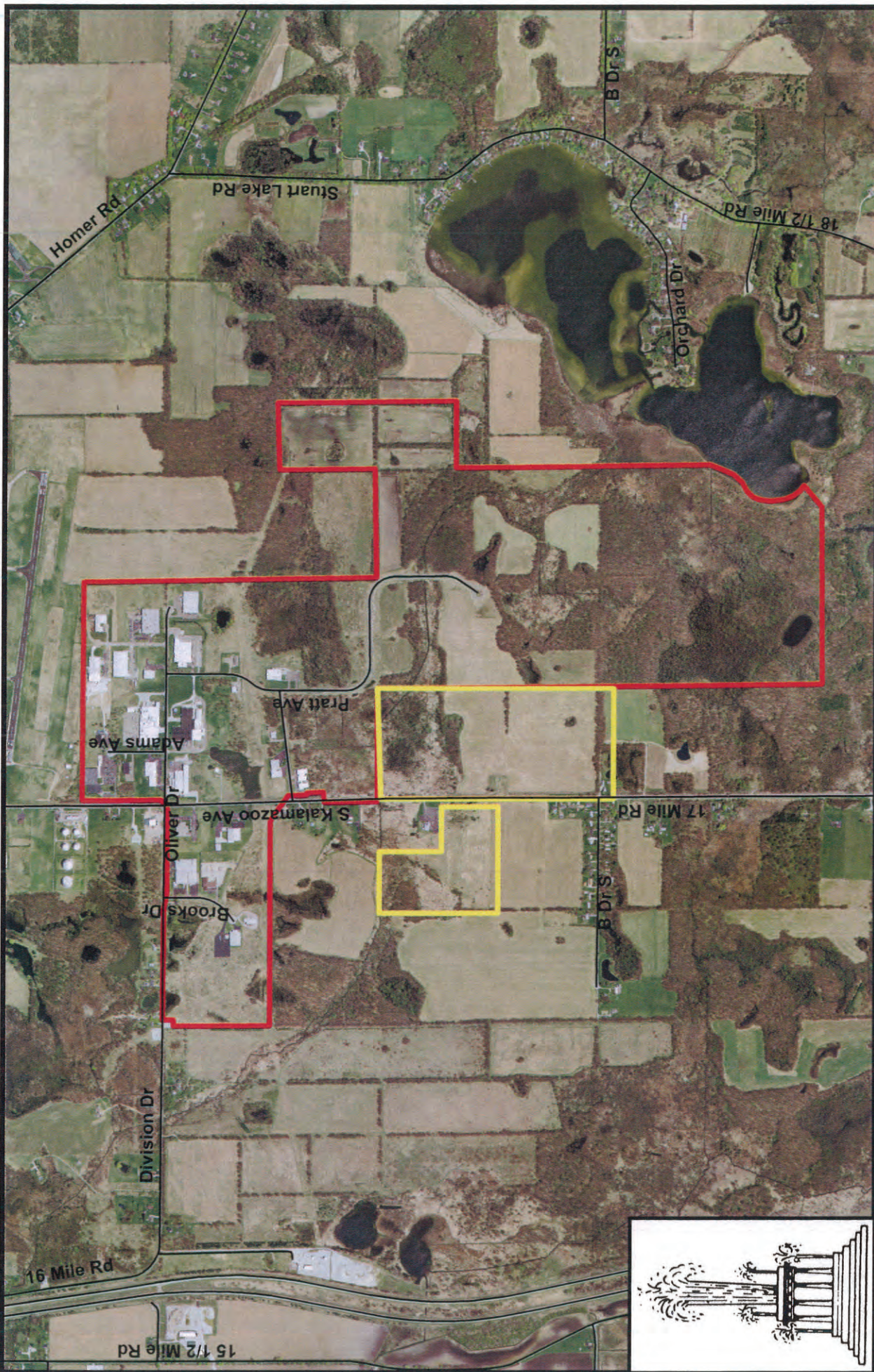


EXHIBIT B- PROJECTS FROM 2005 UPDATE AND OTHER ADDITIONS

| PROJECT | PHASE ONE | PHASE TWO | PHASE THREE | TOTAL |
|----------------------------------|-------------------|---------------------|---------------------|---------------------|
| DEMOLITION/ SITE PREPARATION | \$ 16,250 | \$ 121,000 | \$ 269,000 | \$ 406,250 |
| GRADING/STORM WATER MANAGEMENT | \$ 17,700 | \$ 586,000 | \$ 1,200,000 | \$ 1,803,700 |
| SOIL EROSION AND SEDIMENTATION | \$ 8,600 | \$ 77,000 | \$ 182,835 | \$ 268,435 |
| WATER SERVICE AND SANITARY SEWER | \$ - | \$ 743,035 | \$ 972,000 | \$ 1,715,035 |
| ELETRICAL/LIGHTING | \$ - | \$ 425,000 | \$ 709,000 | \$ 1,134,000 |
| PAVEMENT AND WALKS | \$ 178,000 | \$ 815,000 | \$ 1,350,000 | \$ 2,343,000 |
| LANDSCAPING | \$ 38,000 | \$ 138,280 | \$ 234,000 | \$ 410,280 |
| CONSTRUCTION SUBTOTAL | \$ 258,550 | \$ 2,905,315 | \$ 4,916,835 | \$ 8,080,700 |
| DESIGN CONTINGENCY (15%) | \$ 38,783 | \$ 435,797 | \$ 737,525 | \$ 1,212,105 |
| CONSTRUCTION ADMINISTRATION | | | | |
| INSPECTION (5%) | \$ 12,928 | \$ 145,266 | \$ 245,842 | \$ 404,035 |
| ENGINEERING/DESIGN (15%) | \$ 46,539 | \$ 522,957 | \$ 885,030 | \$ 1,454,526 |
| PROJECT GRAND TOTAL | \$ 356,799 | \$ 4,009,335 | \$ 6,785,232 | \$11,151,366 |

Projects above were identified in 2005 LDFA plan update. Identified costs are projected from original estimates. Project scope wasn't chaged. The various phases are expected be completed by 2046.

| OTHER PROJECTS | COST | COMPLETION DATE |
|----------------------------|----------------------|------------------------|
| UDELL SEWER LIFT STATION | \$ 600,000 | 2029-2030 |
| OLIVER DRIVE EXTENSION | \$ 600,000 | 2026-2027 |
| BROOKS ELECTRIC SUBSTATION | \$ 6,500,000 | 2022-2023 |
| STREET RESURFACING | \$ 773,200 | 2027-2028 |
| PEDESTRIAN PATH | \$167,000 | 2027-2028 |
| LDFA GRAND TOTAL | \$ 19,624,566 | |

EXHIBIT C

The Brooks: An Industrial & Research Park

Design Guidelines



323 West Michigan Avenue • Marshall, MI 49068 • Phone: 269.781.5183 • Fax: 269.781.3835
www.marshalleconomicdevelopment.com

Table of Contents

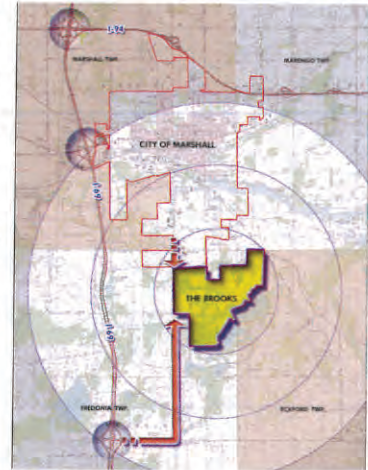
| | |
|----------------------------------------|-----------|
| The Brooks | 1 |
| Introduction..... | 1 |
| Purpose..... | 1 |
| Master Plan..... | 2 |
| Environmental Conservation..... | 3 |
| Park Standards | 4 |
| Introduction | 4 |
| Park Standards..... | 4 |
| Allowed Uses..... | 4 |
| Edges..... | 4 |
| Entrances..... | 5 |
| Circulation..... | 5 |
| Exterior Lighting and Signage..... | 6 |
| Landscaping..... | 6 |
| Services and Utilities..... | 7 |
| Storm Water Management..... | 7 |
| Natural Areas Preservation..... | 8 |
| General Design Guidelines | 9 |
| Site Planning..... | 9 |
| Architecture..... | 10 |
| Site Design..... | 11 |
| Design Performance..... | 13 |
| Design Review and Approval | 14 |
| Design Review Committee..... | 14 |
| Submittal and Approval Procedures..... | 14 |
| Resources | 16 |
| Appendix | 17 |
| Recommended Plant Palette..... | 17 |

The Brooks

Introduction The Brooks Industrial and Research Park is Marshall's vision for the future. It is a comprehensive planned environment designed to attract and retain state-of-the-art research and manufacturing facilities, facilitate collaboration among its businesses, foster sustained economic growth in the region, and draw the most talented people to make Marshall their home. The Brooks offers a unique environment that encourages a work-live-play setting that is harmonious with its environment and promotes connections and continuity with the historic Marshall community.



The Brooks is located in Marshall, Michigan, just south of the City center along Interstates 94 and 69. Interstate 94 is the east – west corridor that runs from Chicago to Detroit. Interstate 69 is the north – south highway known as the North American Free Trade Agreement Corridor. Interstate 69 is also a designated Recreation Heritage Route in Calhoun County wherein scenic, historic, and recreational resources of the region are identified and positive economic growth is encouraged. The Brooks is also in strategic proximity to the major economic centers of Detroit, Toledo, Chicago, and Indianapolis.



Purpose

The campus-like character and natural setting of The Brooks provides a truly unique environment. These Design Guidelines have been established to provide development direction to ensure that The Brooks' character and quality are sustained, protecting long-term value for its businesses.

The Guidelines are divided into two broad categories and reinforce the highest standards of quality and identity. They create the basis for consistent overall character, defining those elements that have the greatest physical and visual impact. The Brooks endeavors to present a unique and enduring image of environmentally responsible and sustainable development for its businesses, Marshall, and Michigan.

Photograph - TBD

The Design Guidelines have been organized into two broad categories: Park Standards and General Design Guidelines.

Park Standards have been established and implemented for those common design elements that contribute greatly to the overall quality of development or are of significance to environmentally appropriate development.

General Design Guidelines create the basis for consistency with the overall development character and have been defined to guide parcel owners and their consultants in developing their individual parcels.

The recommendations contained within this document are a guide. Creative freedom, innovation, and the ability to meet newer standards or adopt emerging technologies are encouraged, provided they complement the vision. Additionally, the Local Development Finance Authority (LDFA), the Park's governing board, has appointed a Design Review Committee to facilitate and offer guidance to businesses in adopting these Design Guidelines.

Master Plan The context for The Brooks is exceptional. It carefully balances the economic aspirations of the Marshall community with environmentally sustainable development. The emphasis, therefore, on preserving Marshall's culture, values, and heritage have been foremost.

The Brooks is a 125-acre master planned campus-like development, which will be implemented in phases. Additionally, a variety of both active and passive recreation opportunities have been included in The Brooks Development Plan. The proposed offerings for The Brooks were independently confirmed by a market study for their potential demand and long-term economic viability.

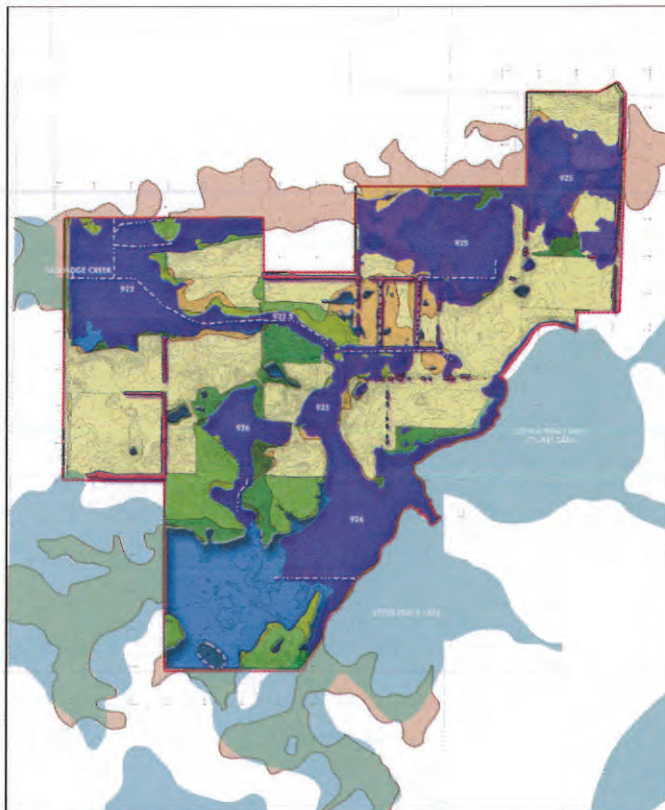
Master Plan Graphic



Environment Environmental conservation is a priority at The Brooks. Of approximately 335 acres of land available, only 125 acres are proposed for development. Preservation of its natural systems, water resources, flora, and fauna, and their careful integration with the development has been foremost. Both environmentally sensitive and high quality areas such as wetlands, floodplains, and mature forest areas are protected and will be retained as a community resource.

Photograph - TBD

A series of attractive open spaces connected by trails across the entire development will characterize The Brooks. Several large wetland systems, the Talmadge Creek corridor, and vast expanses of forested areas grace the site and further add to its inherent beauty. Existing hedgerows create several landscape rooms and reduce the visual scale of development. Lower and Upper Brace Lakes are significant visual and environmental assets that have been carefully included to create both physical and visual connections to the surrounding communities. Together, the environmental assets and conservation approaches adopted add significant long-term value to The Brooks.



Park Standards

Introduction Park Standards define those elements that are critical to establishing the overall standard and consistency of character. These are the most specific of all applicable design guidelines and have been addressed in the initial development of The Brooks.

Park Standards

Park Standards have been established for the following elements:

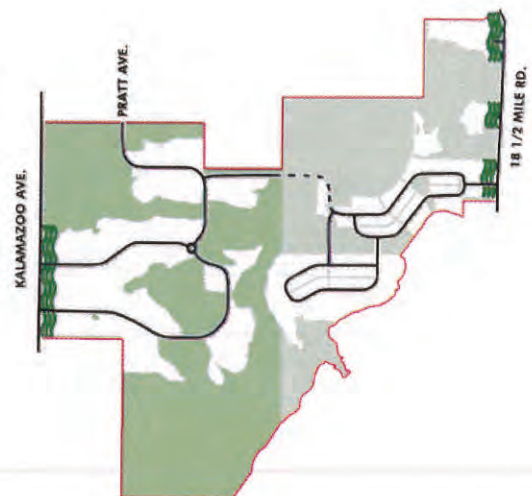
Allowed Uses

In order to maintain the overall quality of the development, the following types of facilities and uses have been identified as being appropriate and supportive of the vision for The Brooks:

- *Research* – Research, testing and experimental product development facilities, offices, training and conference centers, incubator facilities, convenience retail, daycare, and other related support facilities
- *Industrial* – Non-polluting production and testing facilities that include the assembly, compounding, manufacturing, processing, packaging or treatment of material or products and related support facilities

Edges

Edges establish the first impressions of a development and the larger Marshall community. The Brooks is primarily observed by the community and visitors along its public edges on Kalamazoo Avenue (M-227). This corridor is characterized by landscape buffers to frame views of development and screen backdoor service and parking areas.

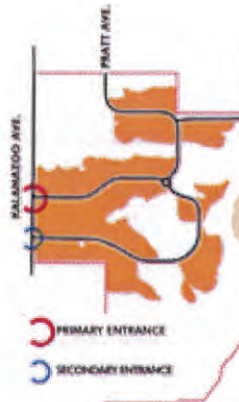


Entrances

Entrances reflect the relevance and importance of the development, symbolically announcing arrival and setting the image. Entrances to The Brooks have been identified along its public edges on:

Kalamazoo Avenue (M-227)

- Two new entrances have been established along Kalamazoo Avenue (M-227). While the northern most entrance is envisioned as the primary entry and identity element, all other entries will serve as alternative points of ingress and egress.



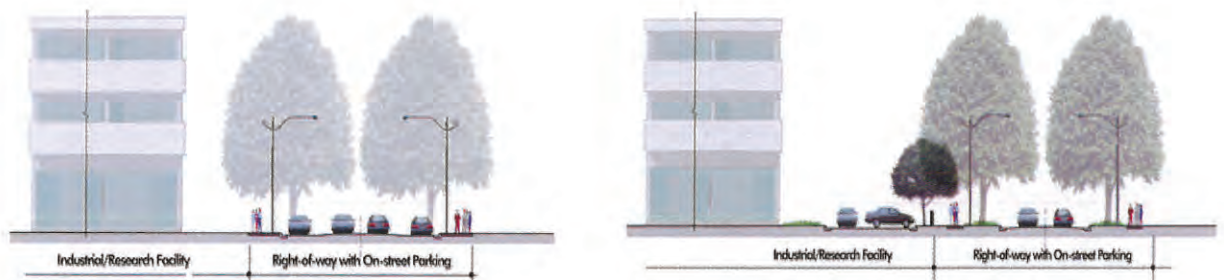
Signage Sketch – to be developed



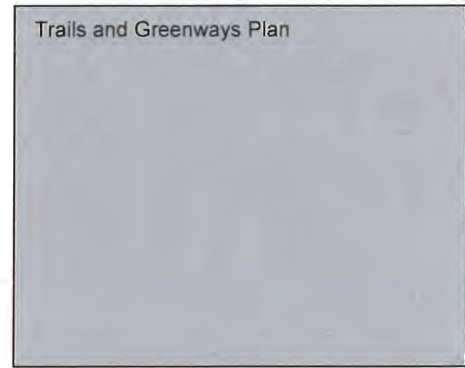
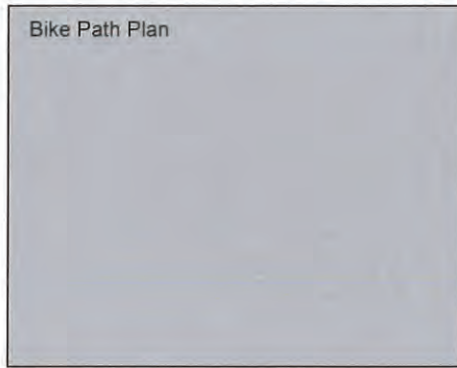
Circulation

Street networks form the framework for development, supporting the movement of vehicles. Quality and cohesiveness of the development become apparent in the layout and detailing of its circulation system.

Vehicular Circulation – The layout of streets conforms to the opportunities and constraints imposed by specific site characteristics. A typical street section will be lined with trees and sidewalks on either side, adequately lit, and will have the ability to accommodate future on-street parking. Setback and build-to requirements will ensure consistency of street character.



Pedestrian and Bicycle Movement – Alternate modes of movement are important for environmental and health benefits. They create a sense of community, allowing for an intimate experience of the natural environs. The Brooks has been designed to be both pedestrian and bicycle friendly with sidewalks and bike paths connecting all developed areas.



Trails and Greenways – A system of trails connects open space amenities including Upper and Lower Brace Lakes, forested areas, wetland and creek edges, and prime views. Key connections have been established to the trail system from within the park, and connections to the Marshall Riverwalk and other regional trails are proposed.

Exterior Lighting and Signage

A unified system of lighting and signage presents a consistent image to passersby and to those within. Appropriate lighting levels are important for promoting a sense of security while ensuring that the existing character of Marshall and night sky is preserved. Salient features of the exterior lighting and signage elements implemented are:

Exterior Lighting

- Designed to promote safety while complementing the built environment
- Entrances identified and travel routes (both vehicular and pedestrian) delineated with appropriate lighting
- Unified system of fixtures and luminaire types adopted for streets and common areas
- Preservation of the night sky a priority

Common Area Signage

- A custom entry sign marks the entrance to The Brooks on Kalamazoo Avenue (M-227)
- A pre-manufactured signage system has been adopted as the standard for all common signage elements
- Signage has been strategically placed to aid in orientation, identify uses, and inform on regulations

Landscaping

The design approach to landscaping common areas is critical to maintaining and strengthening the overall character of The Brooks while enhancing identity and individuality. The landscape for The Brooks is characterized by:

- Planting that is reflective of the ecological character of the region; locally native species have been used in appropriate groupings
- Hedgerows, vegetated swales, and detention basins maintained regularly to control the spread of non-native invasive species
- The following environmentally sustainable strategies have been promoted:
 - Limited use of fertilizers, pesticides, and herbicides
 - Phosphate-containing fertilizers avoided
 - Mowed lawns maintained at 3-4" height
 - Natural fertilizers, herbicides, and pesticides specifically targeted to the identified need

Services and Utilities

A coordinated system for incorporating service access and utility infrastructure without detracting from the overall image is of primary importance. Planning for The Brooks has included the following priorities:

Service

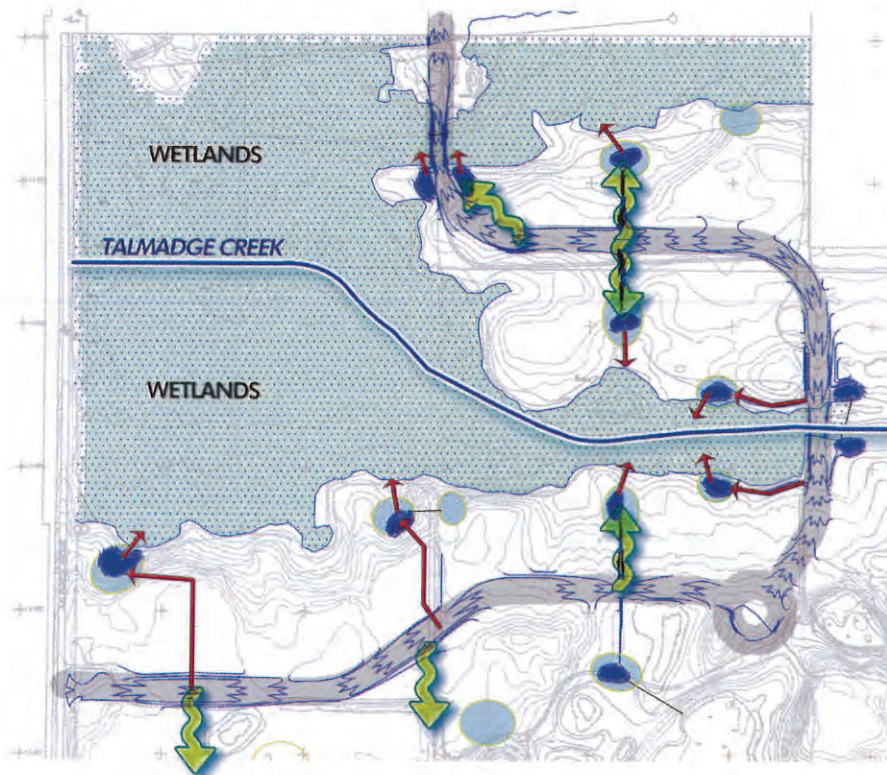
- Anticipated service traffic needs have been taken into account within the planned circulation framework

Utilities

- Comprehensive long-term utility framework has been outlined to guide installation of utility infrastructure
- Adequate capacity and redundancy has been built into all elements of the infrastructure
- All public utilities have been buried
- Operation and continued maintenance will place emphasis on coordinating the activities of utility agencies to minimize conflicts and service disruptions
- Outdoor utility equipment has been consolidated where feasible, screened from public view, and equipped with adequate security

Storm Water Management

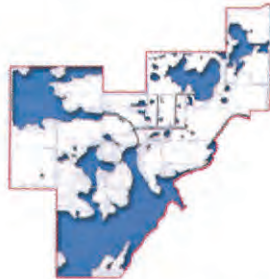
An appropriate and environmentally sensitive approach to storm water management is critical. The Brooks has adopted an integrated storm water management plan, the overriding goal of which is to decrease runoff volumes and velocities that normally cause erosion and filter pollutants to avoid loading downstream, thereby minimizing impacts to the local and regional hydrology.



Natural Areas Preservation

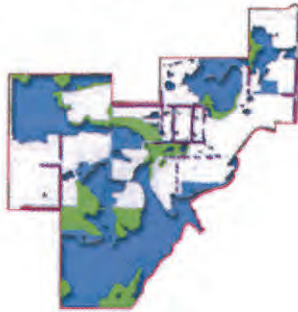
The image of a development is greatly determined by the treatment of its open space resources. To this end, The Brooks endeavors to retain its natural character. Natural areas (floodplains, regulated wetlands, drainage ways, and mature forests) have been maintained as common property owned by the City of Marshall, thereby preserving them for the enjoyment of all.

Consistent preservation strategies for open space elements (forested areas, wetlands, streams/creeks, and lake edges) will establish and reinforce the image and identity of The Brooks. In an effort to preserve the unique character of the site and keep the impacts to the natural environment from development minimal, the following preservation priorities have guided the project:



Wetlands

- Impacts to wetland areas kept minimal
- Appropriate wetland buffers maintained
- Wetland enhancement projects identified
- Opportunities for re-establishing wetlands on existing hydric soils as wetland banks for future mitigation requirements identified



Upland Natural Areas

- All high quality forest areas preserved; development within secondary growth areas will be assessed on an individual basis
- Wildlife corridors within the site preserved and off-site habitat corridor links maintained
- Critical habitat areas protected



Talmadge Creek and Other Drains

- A 50-foot buffer maintained for all water bodies
- A 50-foot setback from the drip-line of all wooded areas
- No development proposed within floodplain areas
- Environmentally sensitive areas protected
- Impacts to existing flows/hydraulics minimized



Upper Brace Lake

- A 100-foot conservation easement for the edge of Upper Brace Lake
- Trails and boardwalks planned to allow access to the lake edge
- Viewing areas/pavilions planned at strategic locations along the lake edge and recreational trails

General Design Guidelines

Introduction The design treatment outlined thus far is the standard for The Brooks as implemented in the initial development. General Design Guidelines shape the development of individual parcels by their owners.

This section addresses site planning considerations followed by an overview of the architectural and site design guidelines and recommendations for achieving a high level of design performance.

Industrial & Research Parcels

Site Planning

General guidelines for site planning are required to establish a sense of order across the development. The scale and character of development are determined by the following key parameters and are defined as follows:

Setbacks and Build-To Requirements provide adequate separation from natural features, adjacent developments, and road right-of-ways. The following guidelines have been established:

Setbacks to Natural Features

| | |
|-------------|------------------------------------------------------------|
| Wetlands | 50 feet |
| Floodplains | First Floor finish floor elevation 1 foot above floodplain |
| Wooded Area | 50 feet from drip-line |

Building/Parking Setbacks and Build-To Requirements

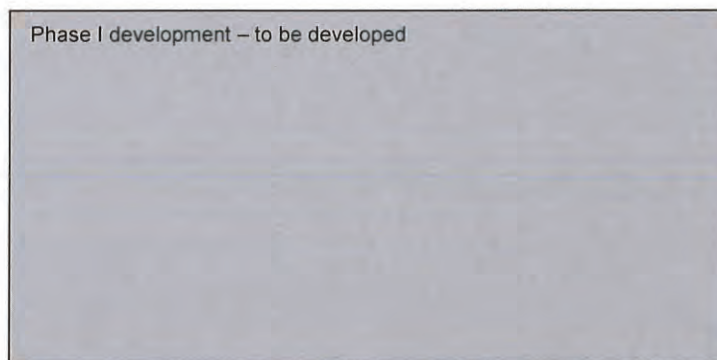
| | <i>Min. Setback</i> | <i>Build To (max.)</i> |
|-------|---------------------|------------------------|
| Front | 20 | 60 |
| Side | 20 | None |
| Rear | 50 | None |

Development Density – While the scale of development is a factor of each individual project, it has an impact on the overall character. The following factors determine development density:

- *Floor Area Ratio (FAR)* – Ratio of gross floor area of all buildings on site to the gross site area; maximum recommended: 0.40.
- *Ground Coverage* – Ratio of building footprint to the gross site area; maximum recommended: 40%.

Other Site Planning Considerations – In addition, the following development criteria are included to guide the planning of individual parcels:

- Buildings and front entrances should face the primary roadway.
- Where feasible, buildings should be oriented along the east-west axis to reduce building energy loads.
- Plans for future expansion of buildings should be made in a manner that is minimally disruptive.
- Shared entry drives should be considered, where feasible.
- Parking areas should be located to the side or rear of the building.
- Options to connect parking areas across parcels should be explored to balance parking demand and minimize parking areas.
- The established storm water management system should be followed; detention capacity should be share with adjoining parcels.



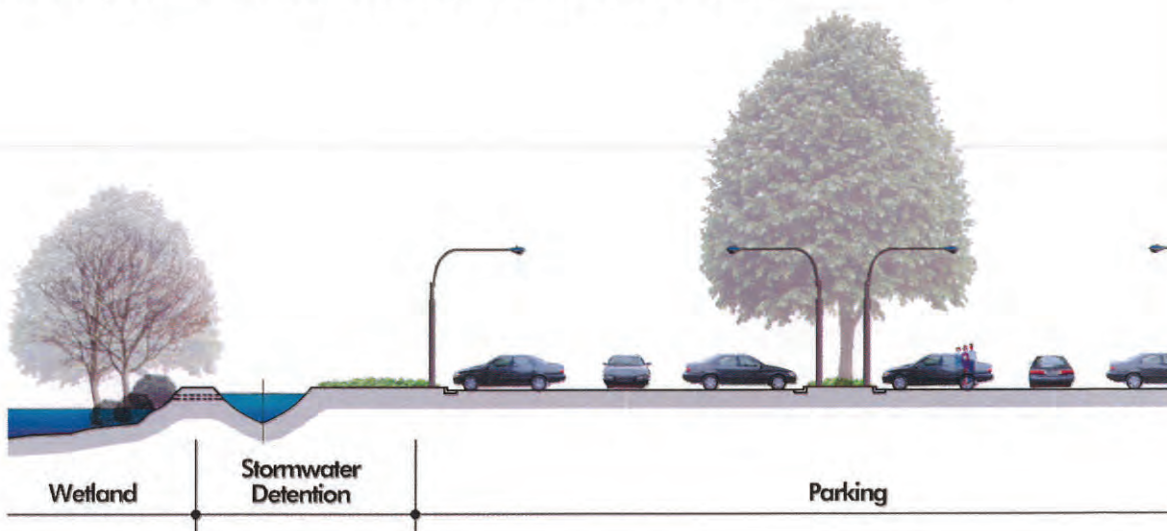
Architecture

The relationship of the buildings with the environment greatly influences the general character of the development. The following general architectural guidelines are included to shape the appearance and massing of the buildings while allowing for individual expression.

The building design vocabulary should be one of an integrated campus. Buildings must relate to each other in terms of massing, color, scale, and general styling. Additionally, their design should be sensitive to the historic context of Marshall and the regional landscape.

While industrial buildings may not have the same visual richness, they should be tastefully designed to conform to the general architectural guidelines outlined.

Research and Industrial buildings typically have larger spans and often need taller spaces. With the general objective of restricting building heights below the existing tree line, the maximum prescribed height should not exceed 45 feet.



Site Design

A successful site design must be developed in an integrated manner, giving careful consideration to the following elements of site development:

Approach and Entry

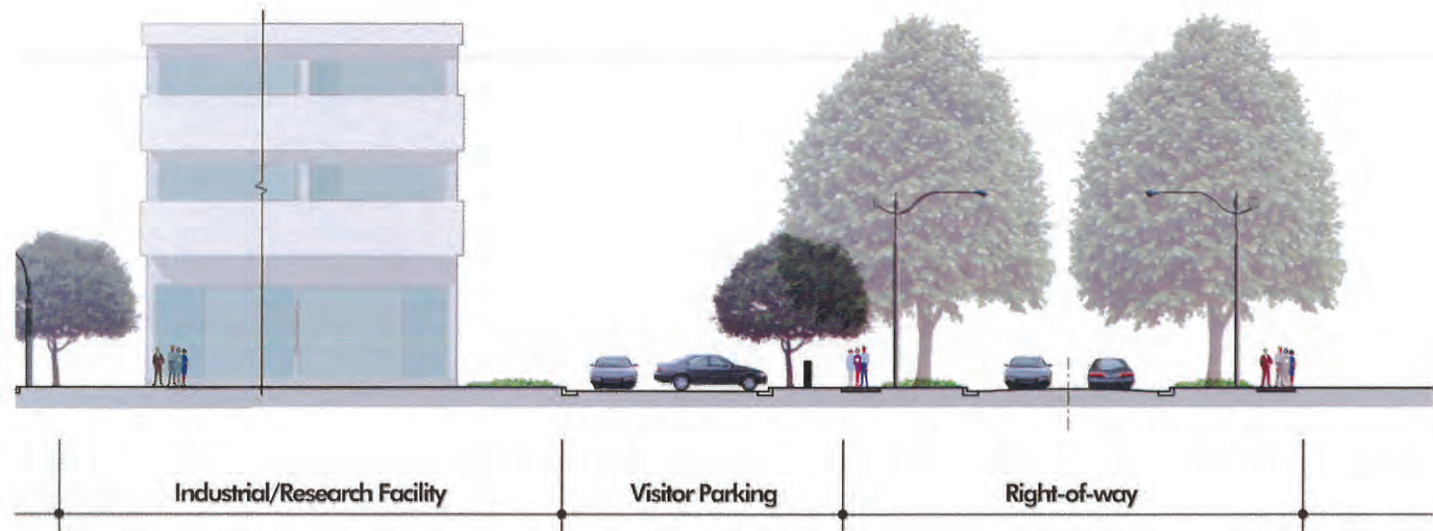
- Provide an adequate visual cue to the upcoming facility/building entry.
- Afford a smooth transition from the scale of the approach road to the entry drive.

Site Circulation

- Utilize the site in an efficient manner.
- Effectively separate pedestrian and vehicular movement to ensure safety.
- Ensure service and emergency accesses are adequately sized and easily utilized.

Surface Parking

- Locate parking on the side or rear of a building.
- Provide adequate signage for parking.
- Carefully fit parking into the site. Preserve existing vegetation and incorporate planted areas in parking islands and medians.
- Organize parking in a series of smaller parking units not exceeding 20 cars separated by landscape islands; use a 90-degree parking layout.
- Ensure that views from roads and adjacent natural areas are not detracted by parking.
- Provide adequate shade to minimize heat islands.
- Recommended parking requirements:
 - Maximum parking for research: 1 space per 400 GSF
 - Maximum parking for industrial: 5 plus 1 for every 1½ employees in the largest working shift
- Consider sharing parking capacity with adjacent facilities.
- Provide short-term on-street visitor parking.
- Manage storm water runoff from parking areas in a manner consistent with the storm water management plan.



Paving

- Pave all heavily trafficked areas as appropriate to the use.
- Ensure that all paving surfaces are dust-free and all-weather; recommended materials include asphalt, concrete, pavers, and brick.
- Encourage the use of pervious paving systems to decrease storm water runoff.
- Use lighter colored pavements where feasible to minimize heat islands.

Landscaping

These general design guidelines should be applied to each site and are intended to encourage a common landscaping approach between properties in order to give the overall Park landscape an integrated appearance. Within these guidelines, individual property owners are encouraged to be creative. Landscaping for each property should:

- Preserve existing high quality vegetation to the maximum extent possible.
- Minimize high maintenance landscapes through the use of locally native species.
- Consider using grey water or collected rainwater for irrigation systems.
- Follow the recommended plant palette (See Appendix).
- Plant a minimum of 50 percent of the building setbacks with native species to restore habitat and integrate parcel edges.
- Implement small rain gardens and vegetated swales to carry storm water.
- Coordinate landscape plans with utility routings to minimize conflicts.
- Restore all disturbed areas caused by new construction.

Exterior Lighting and Signage

Lighting and signage elements should be expressive of the individual identity of the respective businesses while maintaining overall consistency. General guidelines for signage and lighting for individual site development include:

- *Exterior Lighting*
 - Create safe lighting conditions for visibility.
 - Use appropriate levels of lighting and light fixture by use/area.
 - Accent key elements (roads, walks, parking, signage, etc.) to create a clear visual order.
 - Minimize up-lighting and floodlighting of buildings and signs.
 - Follow Illuminating Engineering Society of North America (IESNA) guidelines for reducing light pollution and preserving the night sky.
 - The standard light fixture, as specified by the LDFA, must be installed at the entry drives in order to maintain a consistent visual character along roadways.
- *Business Signage*
 - Limit one sign per parcel at the parcel entry; ground/monument signs are preferred.
 - Match sign material to the building exterior.
 - Place signage on buildings that are closer to the street.

Screening

- A solid wall or fence (at least 10 feet in height) with solid entrance gates should be constructed to screen exterior equipment and outdoor storage areas. Chain link fences are prohibited except those that have obscuring inserts in the mesh.
- A natural barrier (evergreens, shrubs, etc.) should be created whenever the wall or fence is in view from any public thoroughfare or neighboring property.

- Consider using screens of the same character as the main building.
- Adequately buffer noise generating equipment.

Loading Docks and Service Areas

- Locate at the side or rear of a building, rather than facing a street. Exceptions must be approved by the Local Development Finance Authority.
- Allow for easy access while minimizing the use of parking areas for through-traffic.
- Screen service areas from public view.
- Use buffers to localize noise caused by regular activities in loading areas.

Miscellaneous Outdoor Equipment

- *Solar Collectors:* Encourage use; consider potential glare; permitted on rooftops or integrated into the building façade.
- *Satellite Dishes, Antennae, and Other Communication Equipment* – Screen from public view to the maximum extent possible.
- *Rooftop Mechanical Equipment* – Screen from public view; preferably integrate within the building structure (rooftop penthouse).

Waste Management

- Safeguard public health in the collection and storage of waste material.
- Collect and store waste away from public view within the parcel.
- Provide for screening of dumpster areas.
- Encourage recycling and provide adequate area for collection and storage of recyclable items.

Design Performance

In an effort to position The Brooks at the forefront of innovation, the City of Marshall encourages creative thinking and will work jointly with businesses to consider alternate technologies and implement suitable strategies.

New facilities are encouraged to meet a benchmark for high performance building design and environmentally appropriate site development such as those developed by the U.S. Green Building Council. The intent of these benchmarks is to promote a sustainable approach to the development of building sites, and the construction and operation of buildings. The advantages of adopting an environmental benchmark can be multifold and may include:

- *Environmental Benefits* – Reduce the impacts of natural resource consumption.
- *Economic Benefits* – Reduce the long-term operating cost of the project.
- *Health and Safety Benefits* – Enhance occupant comfort and health.
- *Community Benefits* – Minimize strain on local infrastructure and improve quality of life.

Technologies that are environmentally sustainable, and reduce resource use, demand on public infrastructure, and long-term operating costs will be given priority. Some strategies to consider include grey water reuse, alternative energy sources, and integrated approaches to building mechanical systems.

For those items not included in the above list, consult with the Design Review Committee for input and advice on appropriate strategies.

Design Review and Approval

Design Review Committee

LDFA has constituted a Design Review Committee (Committee) to manage the development of The Brooks, maintain conceptual integrity, and preserve its aesthetics. The Committee will include representatives from the Local Development Finance Authority, Marshall Economic Development, and other individuals, as necessary, to guide businesses in developing their properties. The Committee will oversee the application of the Design Guidelines, providing clarification as needed and ensure conformance with The Brooks Protective Covenants.

Submittal and Approval Procedures

The following is a general description of the Design Review submittal and approval procedures. The Committee will make every effort to complete its review and approval prior to the site plan approval by the City of Marshall Planning Commission. Specific details regarding the approval process, and submission requirements should be obtained from Marshall Economic Development.

Pre-Application Submittal

A pre-application conference may be held prior to submittal, if requested by the applicant. The intent of this meeting shall be to review the project, the Design Guidelines, The Brooks Protective Covenants, development timelines and plans and to identify development challenges and opportunities.

Design Review & Approval

The Applicant shall submit one (1) copy of the full size 24"x36" (minimum) site plans to the Economic Development Director or City Manager. Upon submittal of the site plan, the applicant shall be invited to attend the Design Review Committee meeting. The purpose of this meeting shall be to review the site plan submitted and to ensure the applicant adheres to the Design Guidelines and The Brooks Protective Covenants. The applicant is strongly encouraged to attend the Committee meeting to answer questions that the Committee may have. If the Committee approves the site plan as presented, no further action is needed. If the Committee requests amendments to the site plan, the applicant shall re-submit the revised sheet to Staff or the full Committee for approval. If the applicant is not able to attend the Committee meeting, he/she shall be notified, in writing, of the site plan approval or further requested changes.

Resources

City of Marshall Zoning Ordinance

The City of Marshall Zoning Ordinance is located on the City's website at <http://www.cityofmarshall.com>. For further information on the Zoning Ordinance, please contact the Planning/Zoning Administrator at 269.781.3985.

The Brooks Protective Covenants

The Brooks Protective Covenants are located on the City's website at <http://www.cityofmarshall.com>. Please click on Economic Development or the Reference Desk. For further information, please contact Marshall Economic Development or the City Manager at 269.781.5183.

The US Green Building Council

www.USGBC.org

The U.S. Green Building Council (USGBC) is the nation's foremost coalition of leaders from across the building industry working to promote buildings that are environmentally responsible, profitable, and healthy places to live and work. The USGBC created and administers LEED™. Their web site includes useful resources for learning more about LEED™ and sustainable design, including case studies, LEED™ credit interpretations, publications, newsletters, educational programs, and metrics on LEED™.

Illuminating Engineering Society of North America

www.IESNA.org

EPA Greenacres

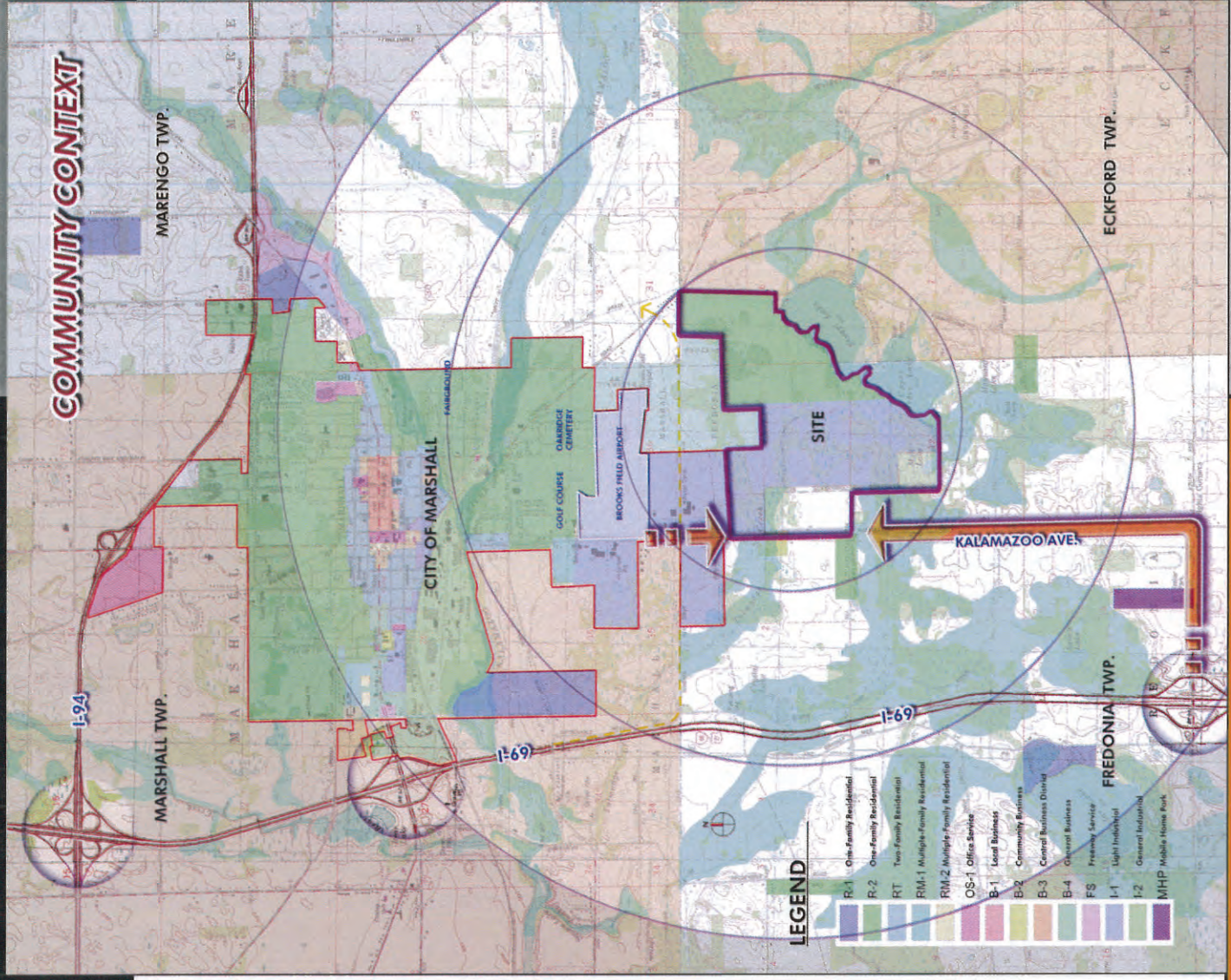
Storm water related

TO BE DEVELOPED FURTHER BY JJR

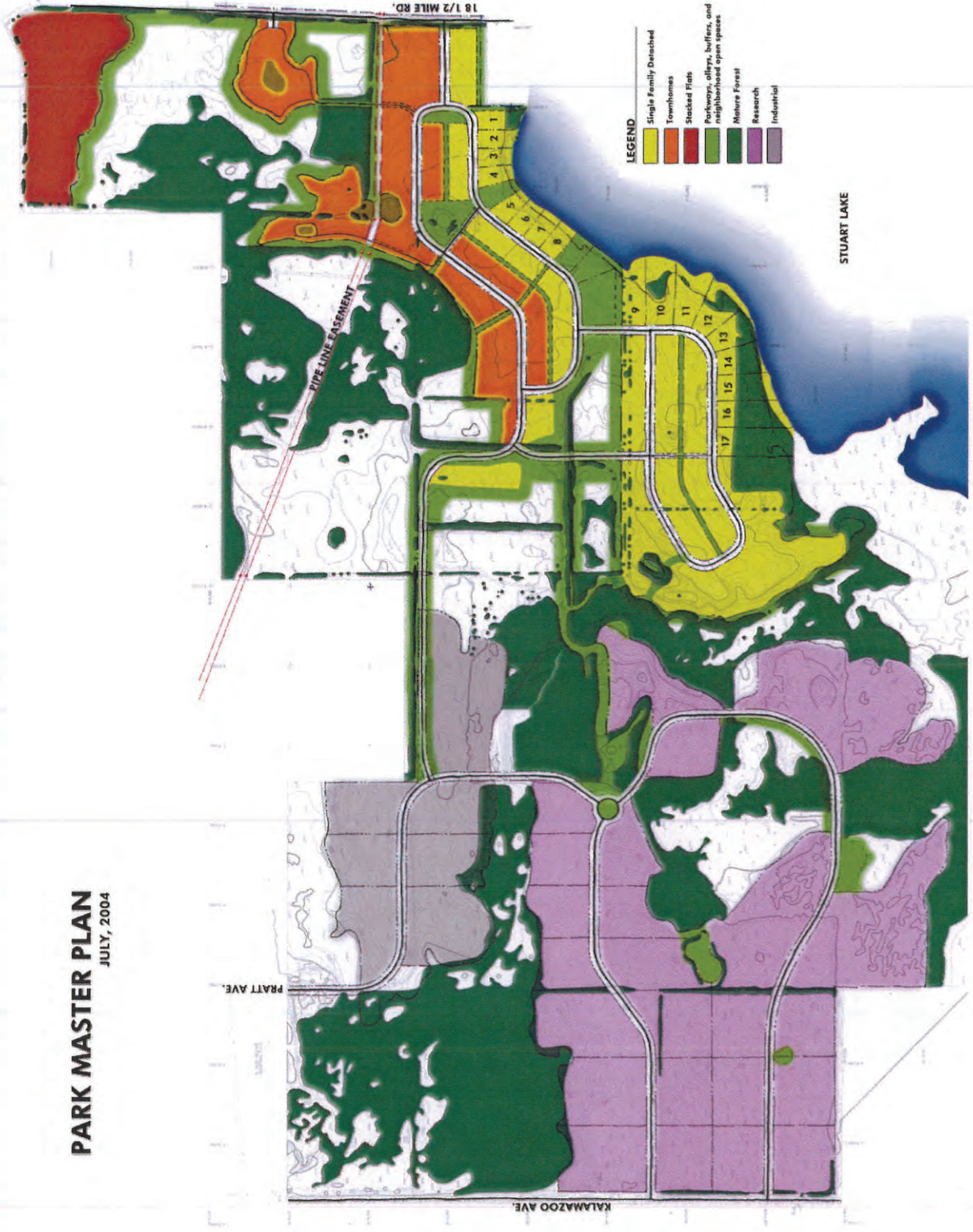
Appendix Recommended Plant Palette

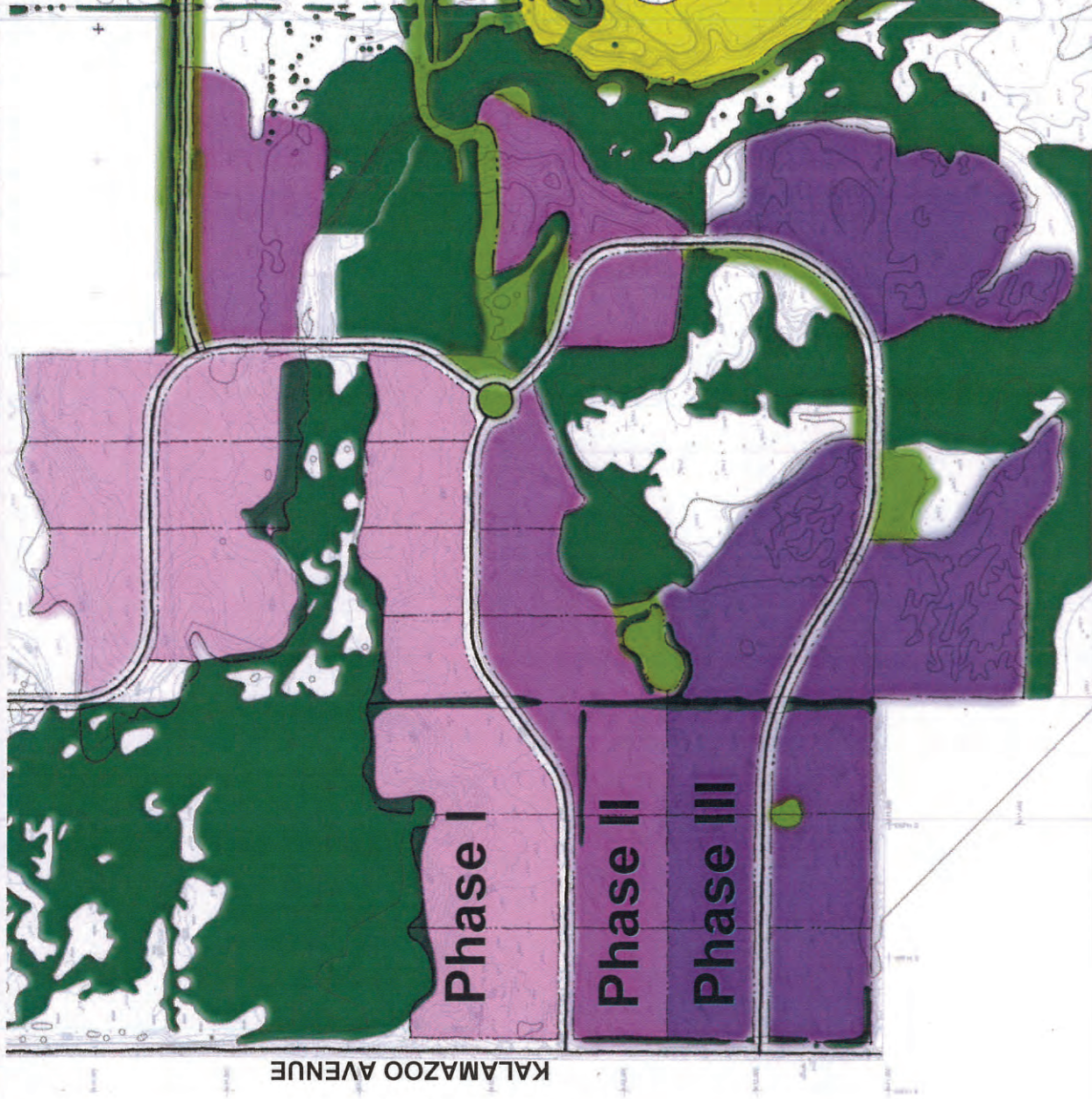
TO BE DEVELOPED FURTHER BY JJR

COMMUNITY CONTEXT

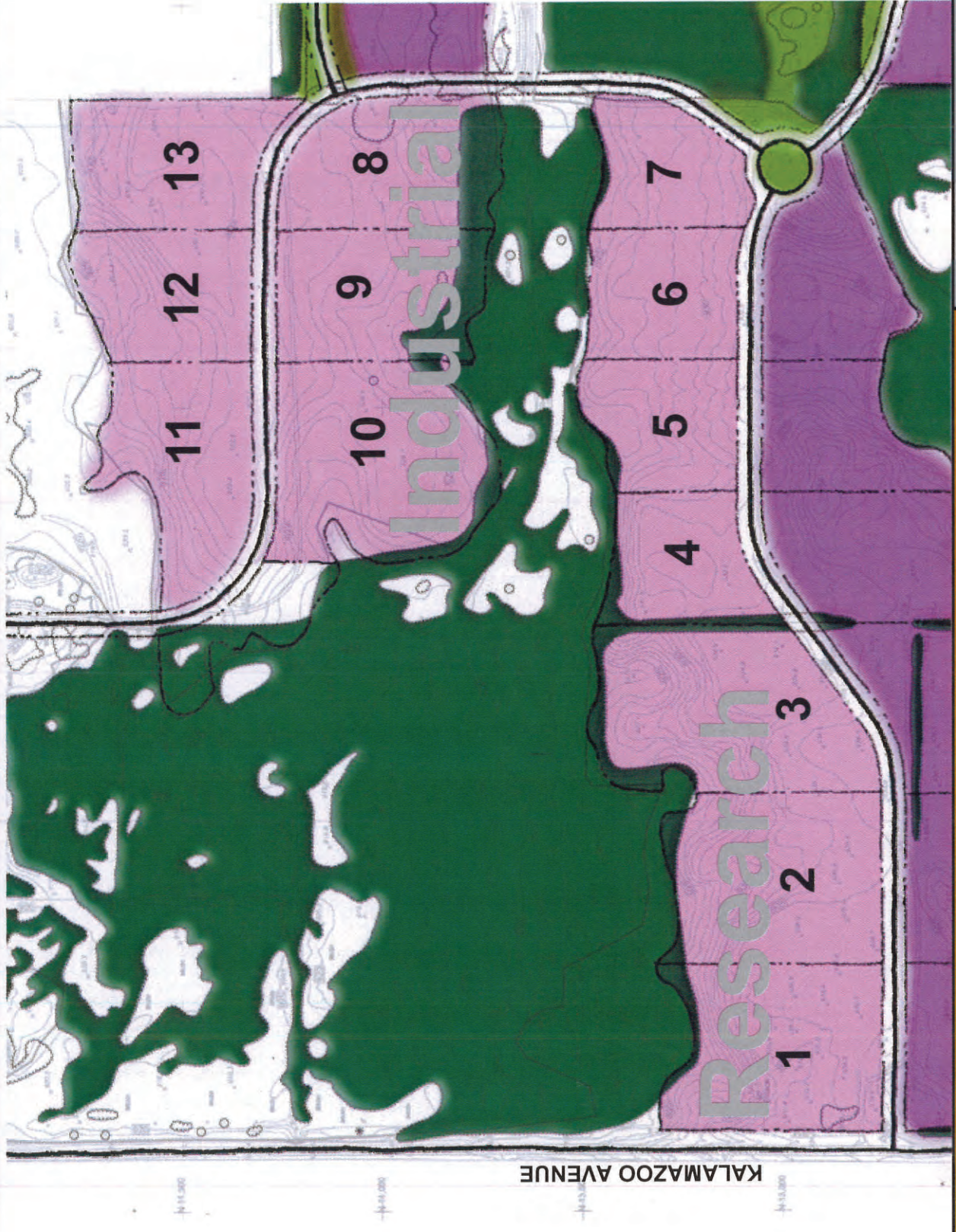


PARK MASTER PLAN JULY, 2004



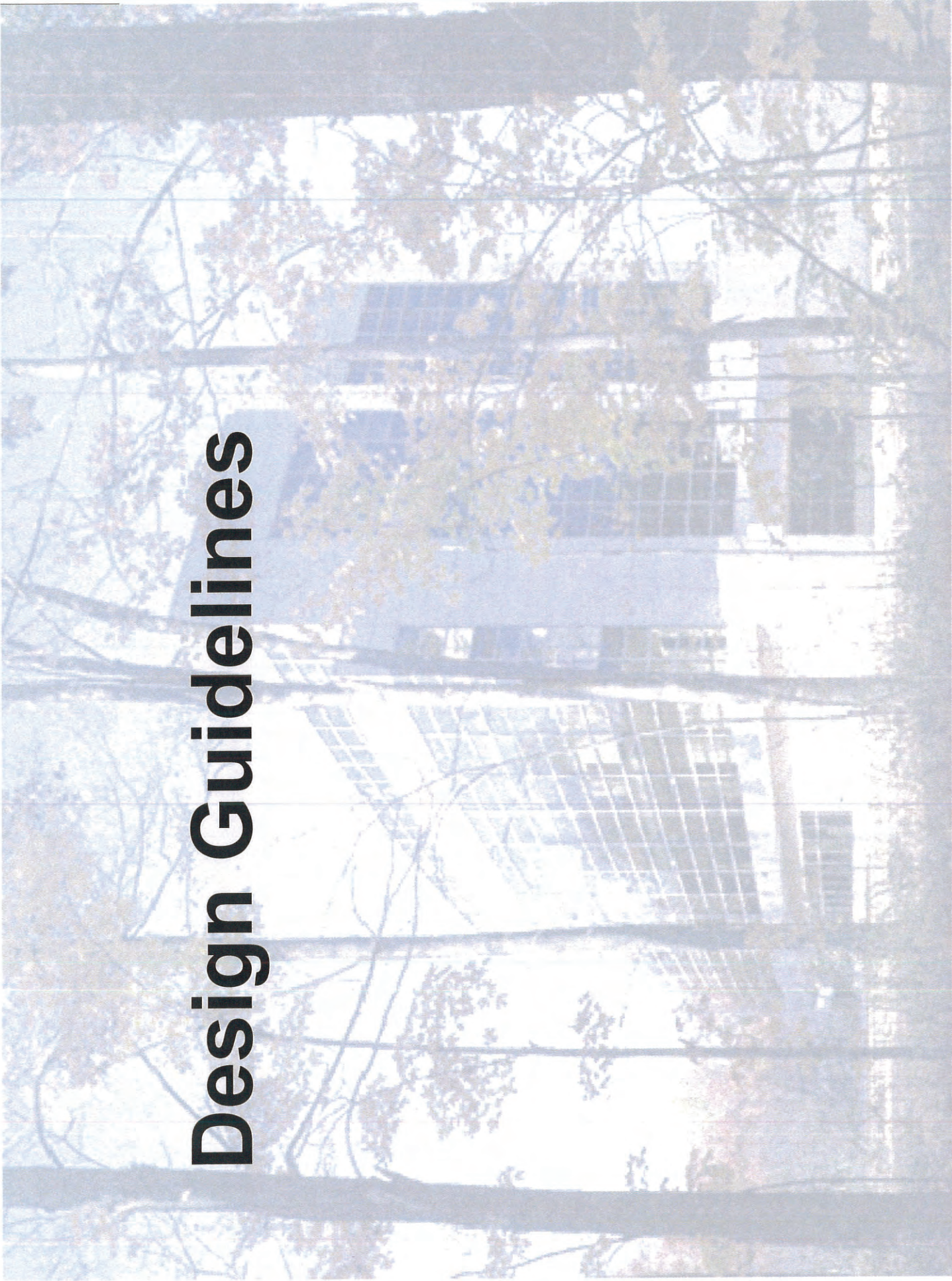


Research/Industrial - Phasing



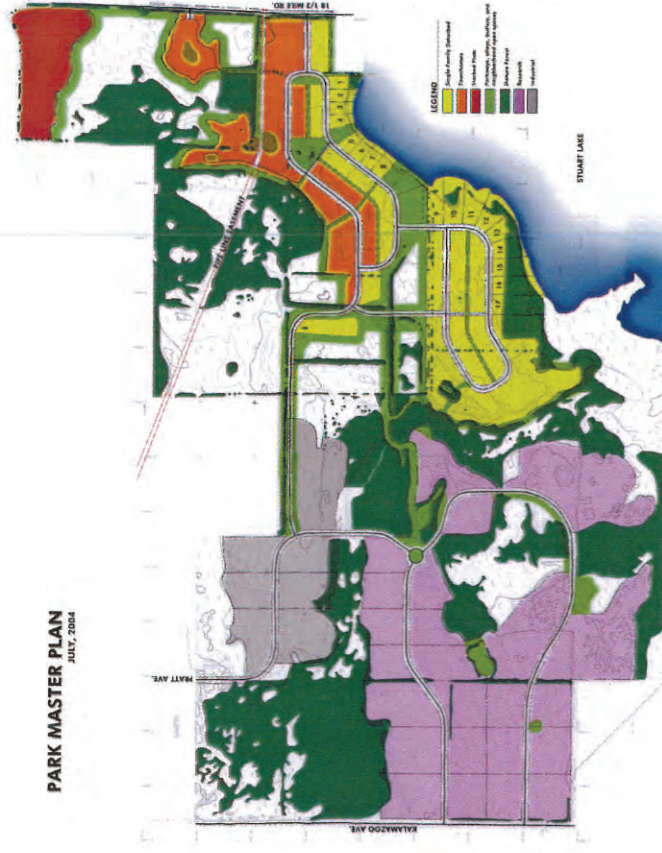
Phase 1 Development

Design Guidelines



Design Guidelines Organization

- Park Standards
- General Design Guidelines
 - Research and Industrial
 - Residential
- Design Review and Approval



The background of the slide is a photograph of a park. In the foreground, there are several tall, thin trees with sparse, light-colored leaves. In the background, a large, multi-story building with a grid-like facade is visible. The overall tone is somewhat muted and artistic.

Design Guidelines

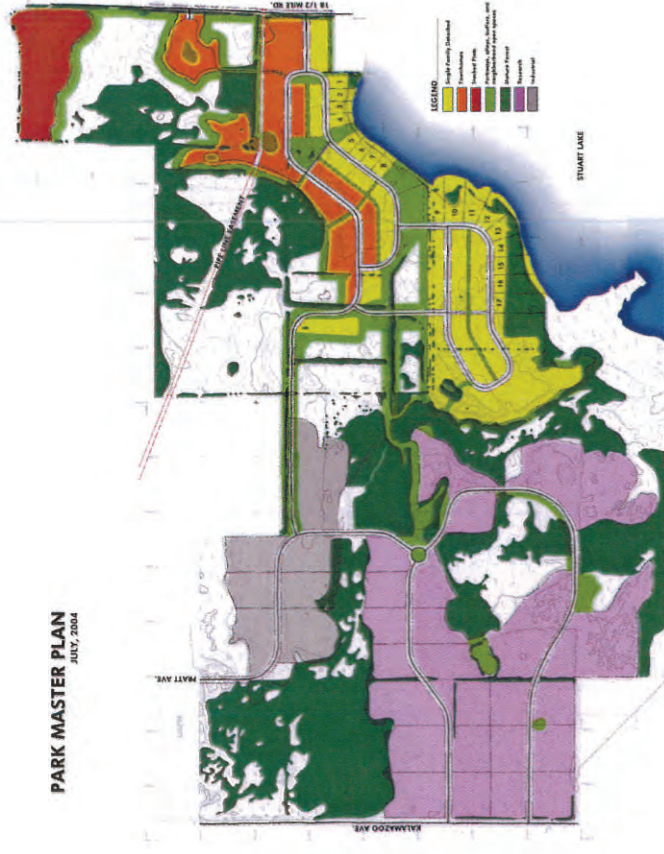
Park Standards – R&D

*Park Standards are critical to establishing the overall standard
and consistency of character for the Park*

Park Standards

Decisions Needed:

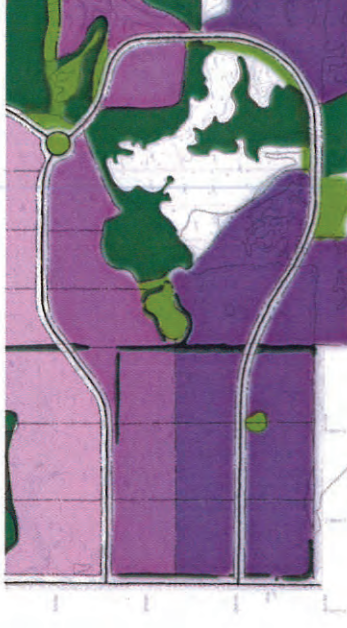
- Street Cross-section
- On-street Parking
- Natural Features
- Site Elements
 - Park Entrance
 - Park Signage
 - Exterior Lighting
 - Landscape Planting
 - Stormwater Management



Street Cross-section

Goals:

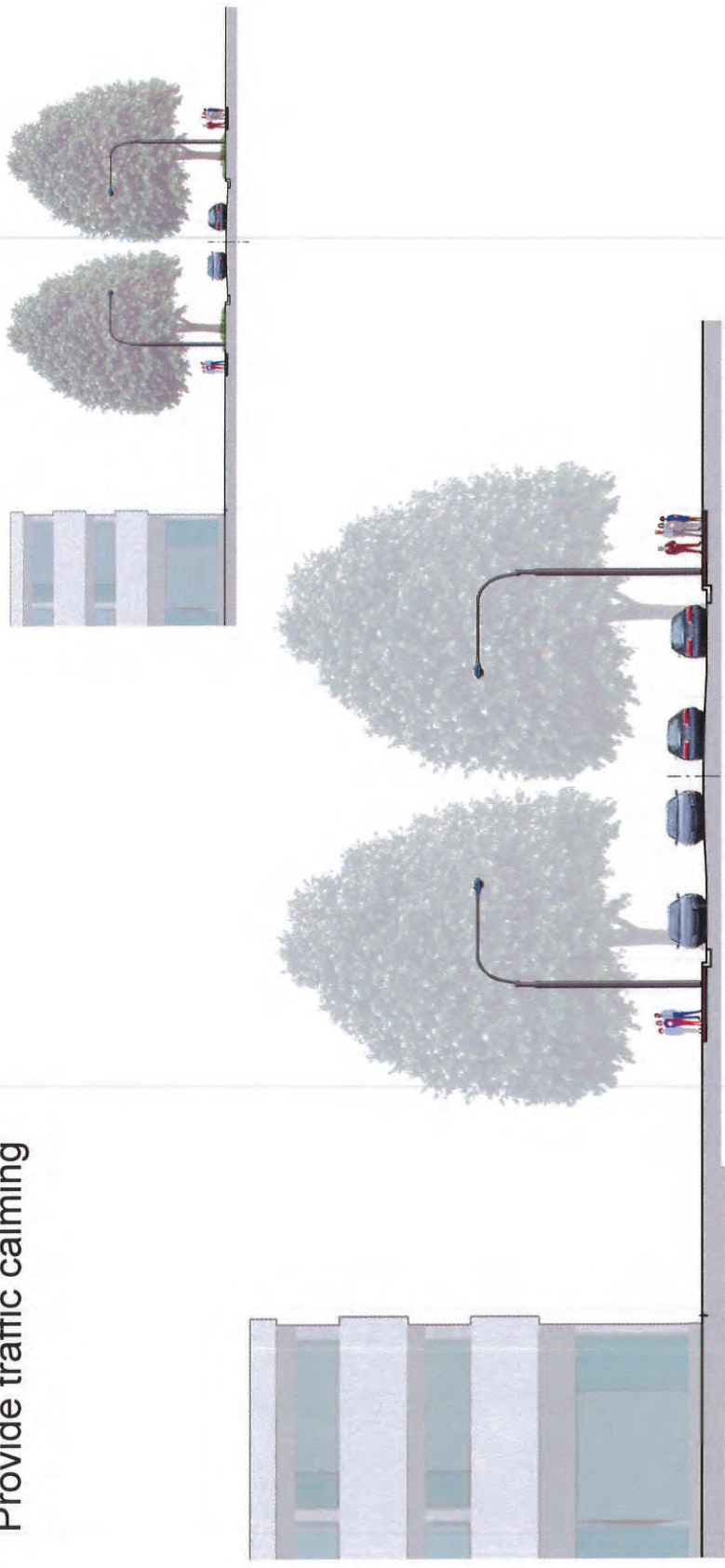
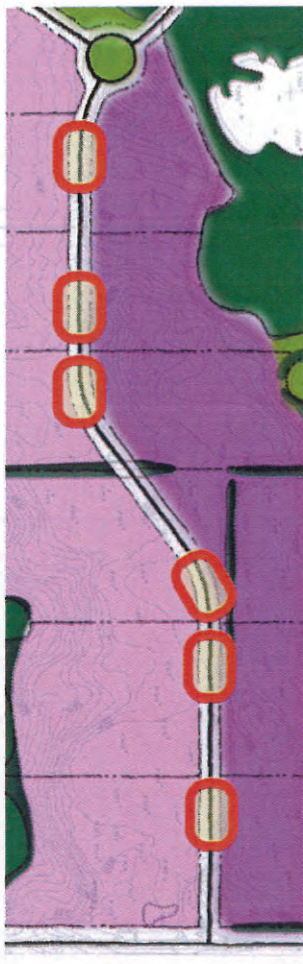
- Ensure ease of vehicular access
- Create an inviting street environment
- Provide adequate pedestrian safety



On-Street Parking

Goals:

- Activate the street
- Provide traffic calming



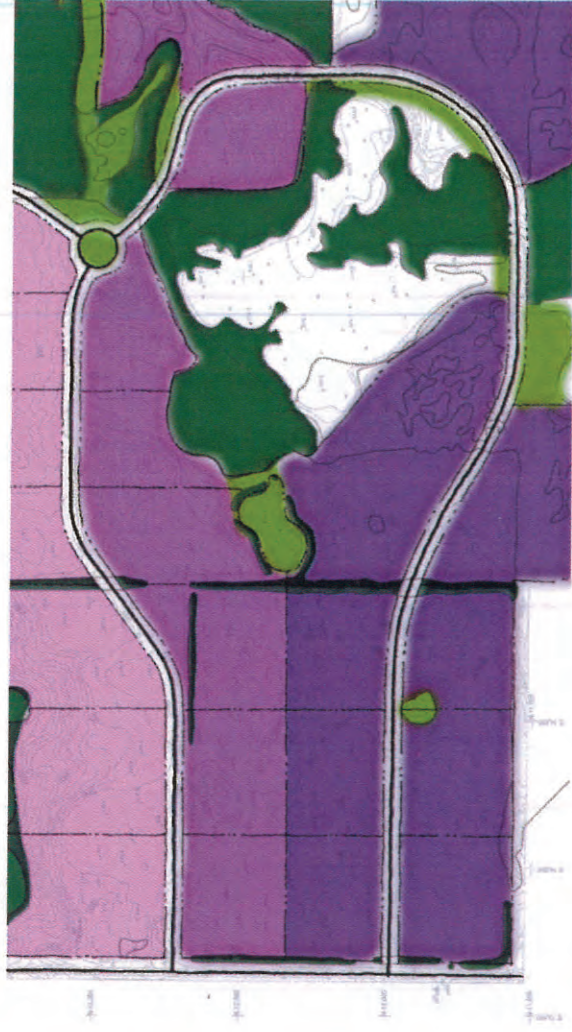
Natural Features

- Wetlands and Forested Areas
 - Conserve as an open space resource for the Marshall Community
 - Develop a Natural Areas Conservation Plan
- Easement for Talmadge Creek
 - Discuss with Calhoun County Drain Commissioner
- Conservation Easement for Stuart Lake
 - Follow City of Marshall Master Plan recommendation – 100' from lake edge



Site Elements

- Park Entrance
 - Stand Alone
 - Monumental
 - Park Name
 - Brand Identity
- Park Signage
- Exterior Lighting
- Landscape Planting
- Stormwater Management



Park Entrance – Stand Alone



Park Standards – R&D

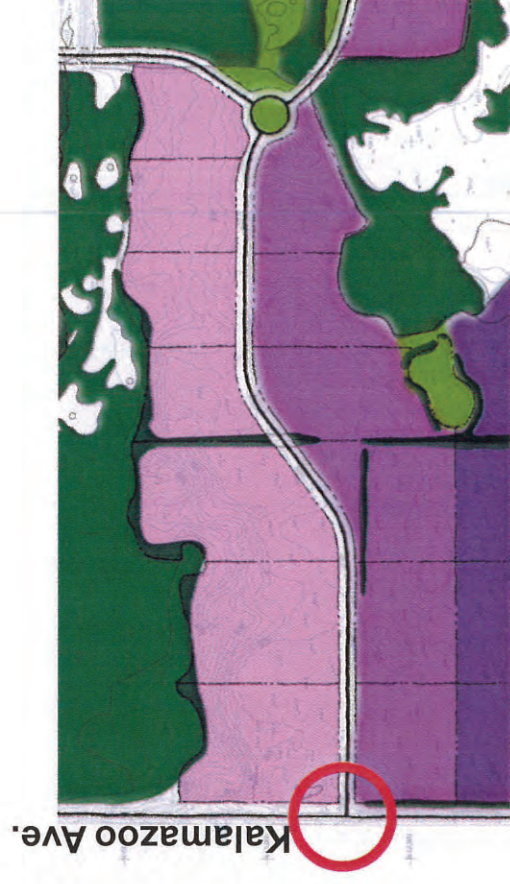
Preferred Examples



Less Preferred Examples



Park Entrance - Monumental



Park Standards – R&D

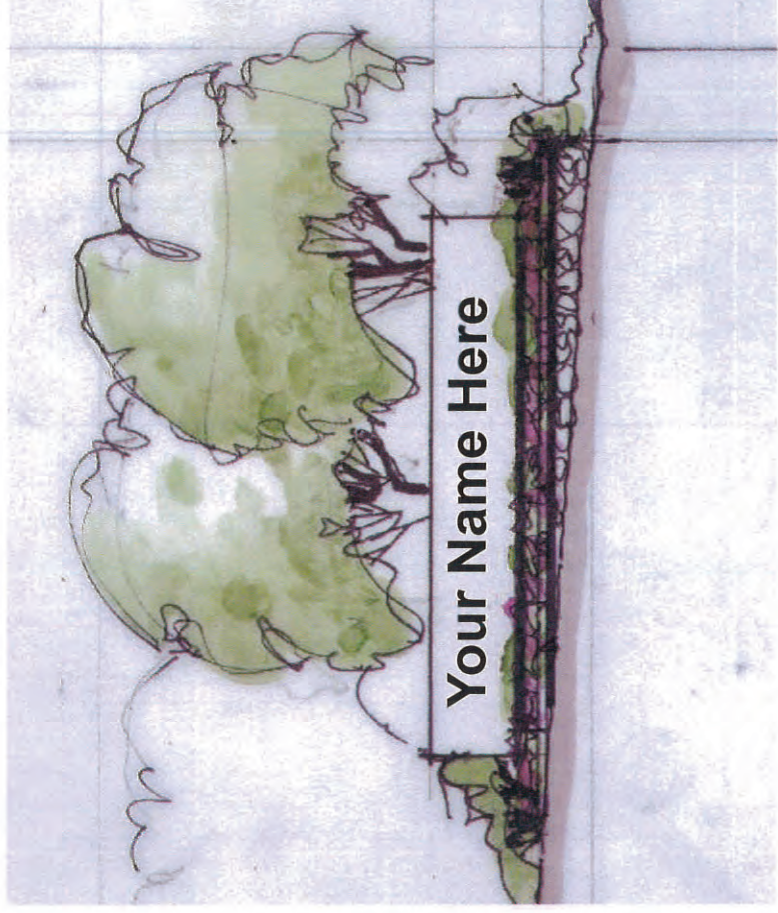
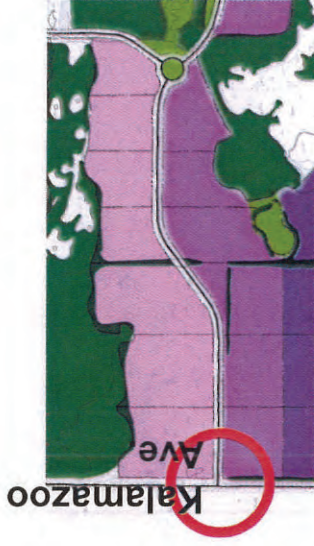
Some Examples



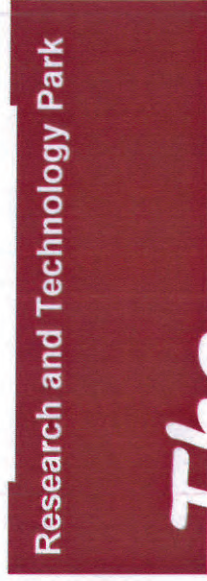
Park Standards – R&D

Park Name

- **Place**
- **Person**
- **Function**
- **Philosophy**
- **Evocative**



Brand Identity



Park Signage

- Purpose
 - Regulatory
 - Directional
 - Identification
- Options
 - Pre-manufactured Modular Systems
 - Custom
- Recommendation
 - Pre-manufactured Modular Systems



Exterior Lighting

- Function
 - Vehicular
 - Pedestrian
 - Combined
- Style
 - Period
 - Contemporary



Landscape Planting

Goal:

- Develop a native, low maintenance planting plan.

Opportunities:

- Park Edge
- Entry Signage
- Streetscape
- Interface With Natural Areas
- Sites For Future Development
- Conservation Areas

Landscape Planting



Park Standards – R&D

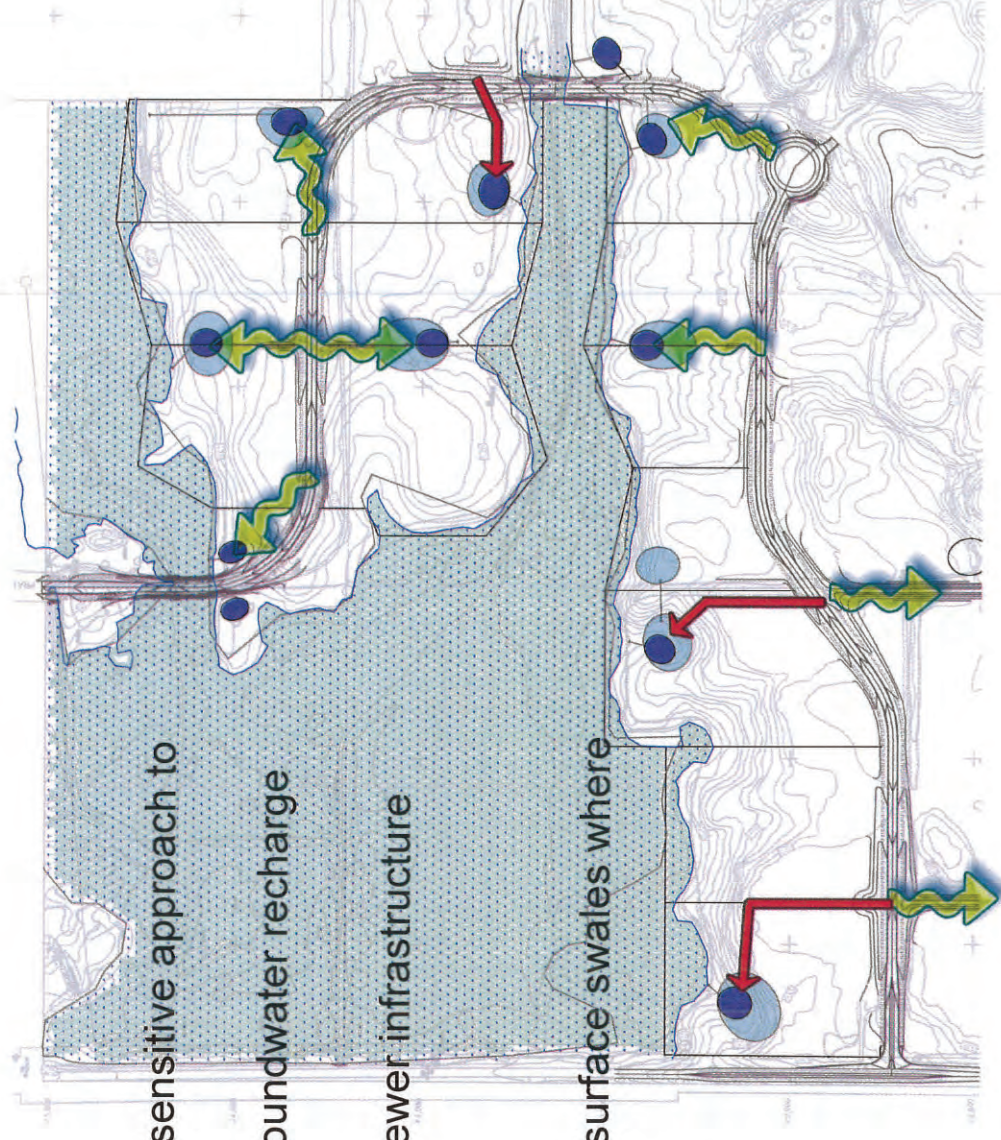
Stormwater Management Plan

Goals:

- Develop an environmentally sensitive approach to stormwater management
- Provide for infiltration and groundwater recharge
- Improve water quality
- Minimize associated storm sewer infrastructure

Strategies:

- Convey stormwater through surface swales where feasible
- Provide localized detention



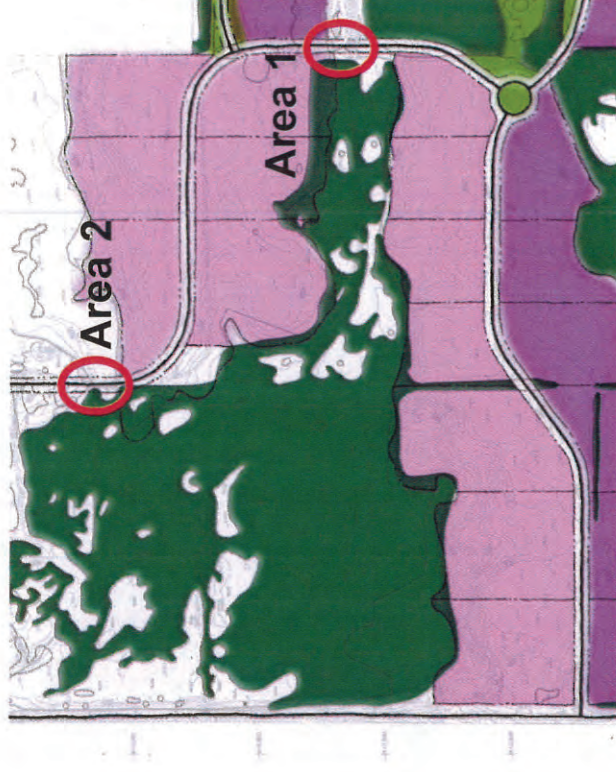
Stormwater Conveyance



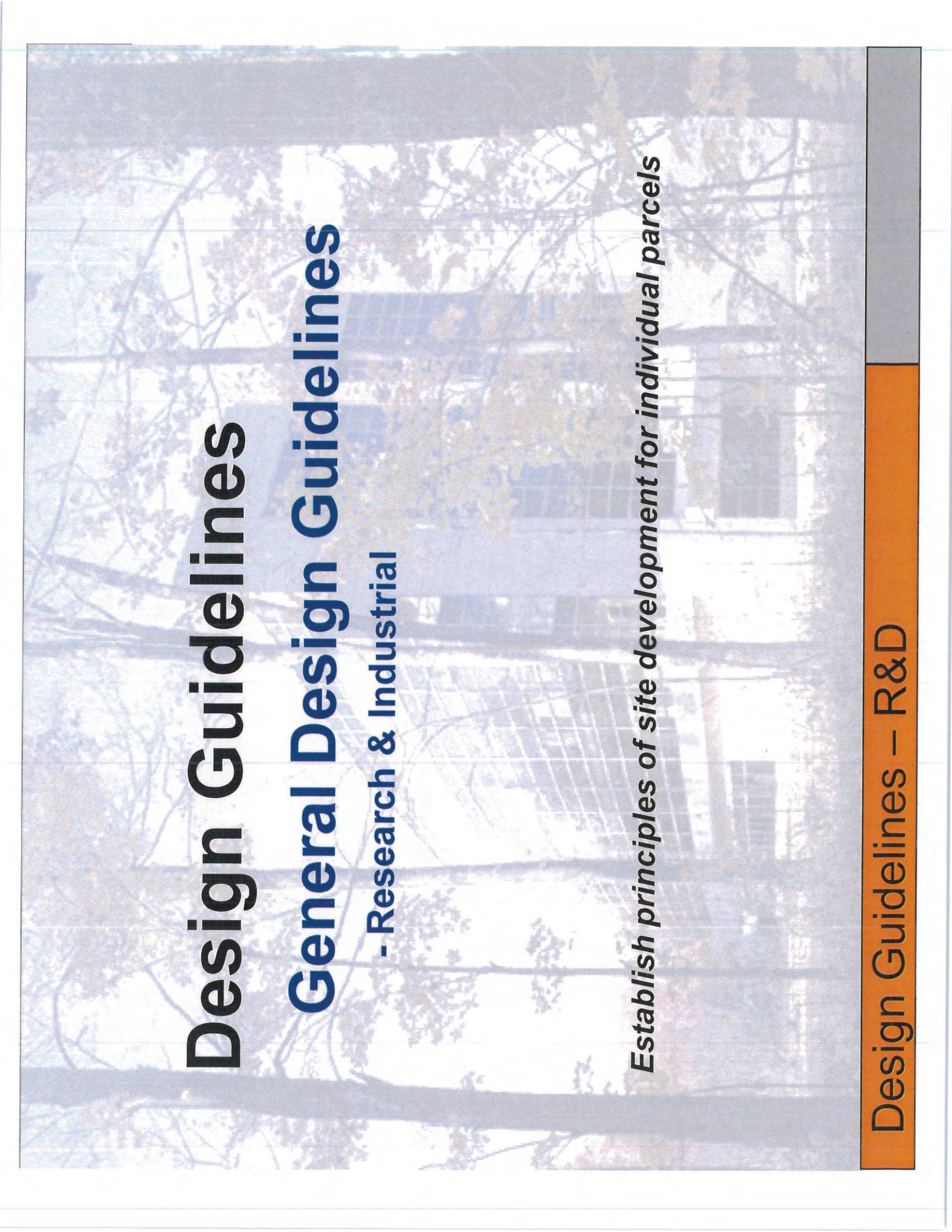
Conceptual Storm Water Treatment Train



Wetland and Flood Plain Impacts



- Wetland Impacts
 - Area 1: 0.16 acres
 - Area 2: 0.26 acres
- Wetland Mitigation Required
 - Area 1: 0.32 acres
 - Area 2: 0.39 acres
 - Total: 0.71 acres
- Flood Plain Impacts
 - Area 1: 0.34 acres (826 C.Y.)
 - Area 2: 0.17 acres (273 C.Y.)
 - Total: 0.51 acres (1,099 C.Y.)
- Wetland Mitigation Strategies
 - Mitigate on site
 - Purchase off-site mitigation credits (subject to MDEQ approval)
 - Develop an on-site wetland bank to comprehensively address future needs



Design Guidelines

General Design Guidelines

- Research & Industrial

Establish principles of site development for individual parcels

Site Development Parameters

- Development Density
- Lot Requirements
- Lot Layout
- Architecture
- Parking Standards
- Parcel Site Design Elements
- Natural Features

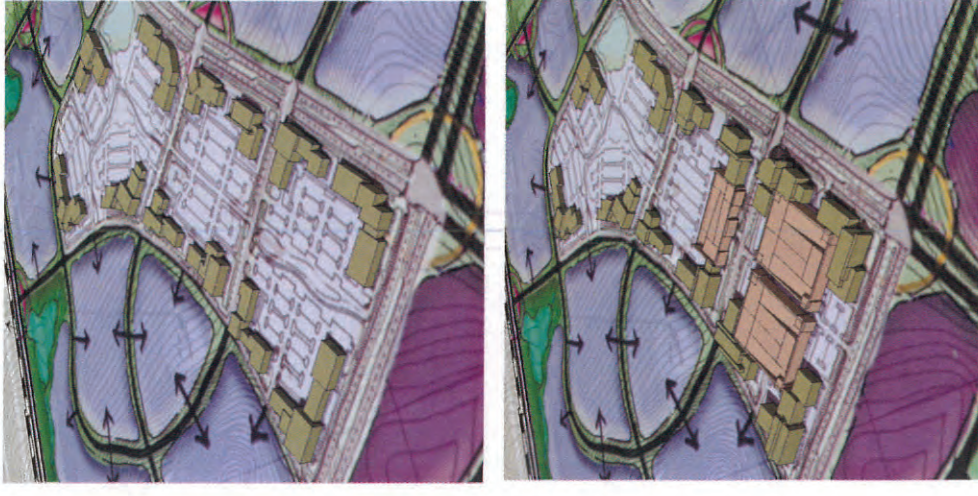
Development Density - Scale

Goals:

- Make the highest and best use of available land
- Provide adequate development capacity
- Define scale appropriate to the context

Options:

- Low density
- Medium density
- High density



Development Density – Factors

Floor Area Ratio (FAR)

Definition – Ratio of lot area to building area

Goal - Maximize development potential

Range

Low – 0.05 to 0.15

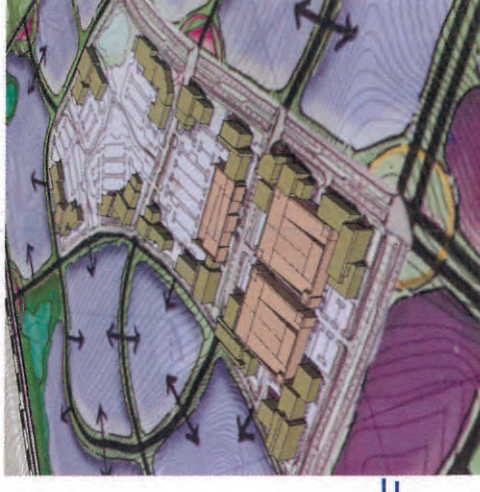
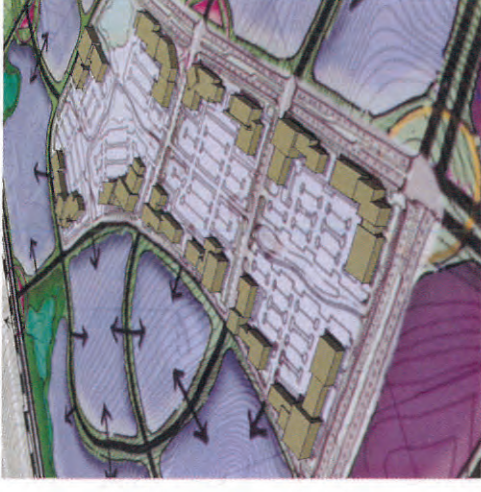
Medium – 0.20 to 0.40

High - 0.5 and above

Recommendation – 0.30 to 0.40

Given that 1 acre equals 11,000 GSF of building

Ultimate Park development capacity: approx. 1 million GSF



Development Density – Factors

Lot Coverage

Definition – Ratio of lot area to building footprint

Goal – Optimize parcel land usage

Range

Low – 20%

Medium – 40%

High - 60% and above

Recommendation

40% (Current City of Marshall standard)

Development Density – Factors

Building Height

Definition – Height in feet

Goal – Ensure fit within context; below existing tree tops (50 – 60 feet)

Range

Low – 1 story (15 to 20 feet)

Medium – 2 to 3 story (30 – 40 feet)

High - 4 story and above (60 feet plus)

Recommendation

Research – 3 story max. (45 feet)

Industrial – 50 feet max.

Development Density – Factors

Parking Ratio

Definition – Ratio of car parking spaces to building area (GSF)

Goals:

- Provide only as required: land bank future parking
- Promote shared parking areas
- Encourage tenants to provide street parking for visitor parking requirements
- Encourage alternative transportation

Recommendation

- Research – 1 car per 400 GSF max.
- Industrial – Follow current City of Marshall standard.

Lot Requirements

Front Setback/Build-to Line

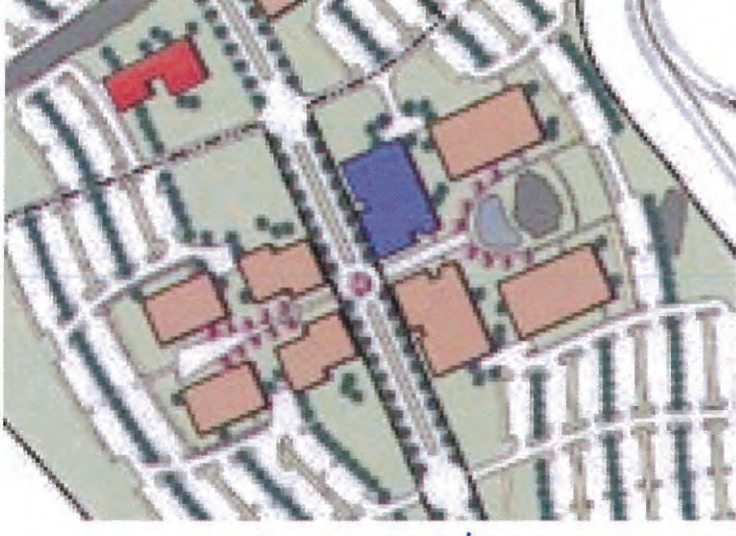
Definition – Minimum/maximum distance of building from road right-of-way

Goal

- Bring buildings closer to the street
- Parking not viewed first

Recommendations

- Internal Roads
 - 20 feet minimum, 50 feet maximum
 - Vary setbacks in response to building mass
 - Encourage smaller setbacks closer to the Park's center
- Kalamazoo Avenue
 - Provide adequate buffer to development (min. 50 feet)
 - Retain existing landscape character



Lot Requirements

Side Setback

Definition – Minimum distance of building or parking from adjoining property to the side

Goal

- Provide for Stormwater conveyance or entry drive as required

Recommendation

- 20 feet minimum each side (40 feet total)
- Provide for City easement for stormwater conveyance

Lot Requirements

Rear Setback

Definition – Minimum distance of building or parking from rear property line

Goal

- Provide adequate buffer to natural areas
- Allow for Stormwater detention where possible

Recommendation

- 50 feet minimum



How It All Comes Together

Goals:

- Optimize land utilization
- Create a street oriented environment
- Contribute to the master plan

Design Priorities:

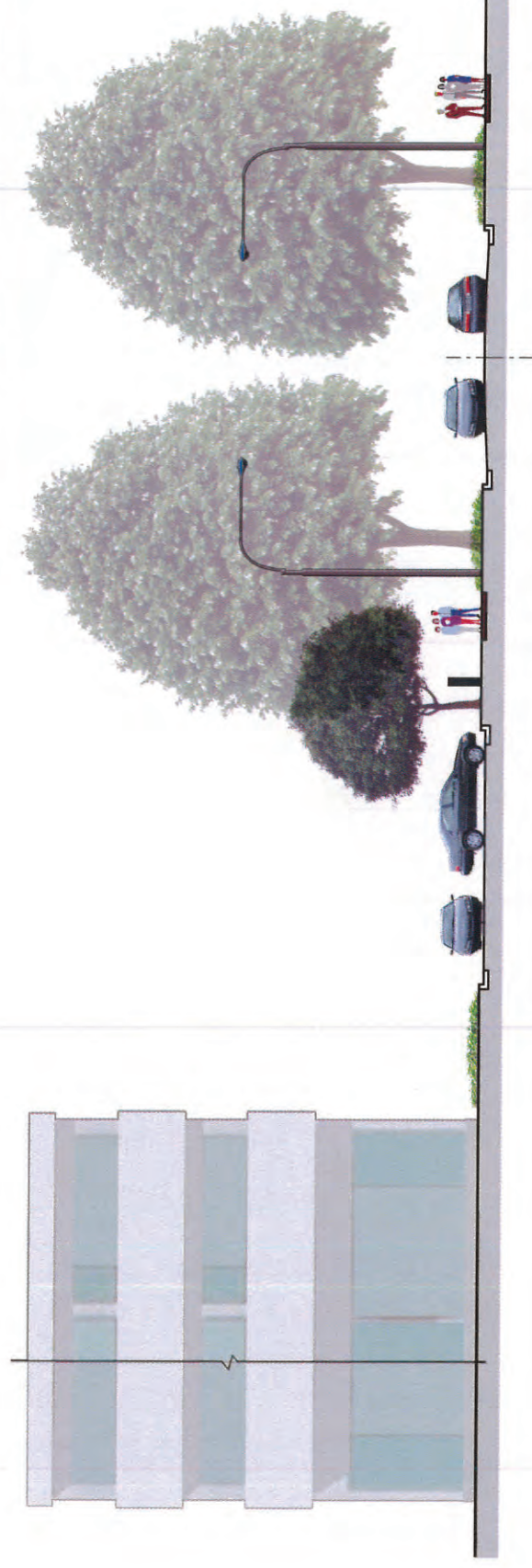
- Creatively locate shared entry drives where feasible
- Provide building entrances to the front and/or side
- Locate parking to the rear of the parcel



How It All Comes Together

An example:

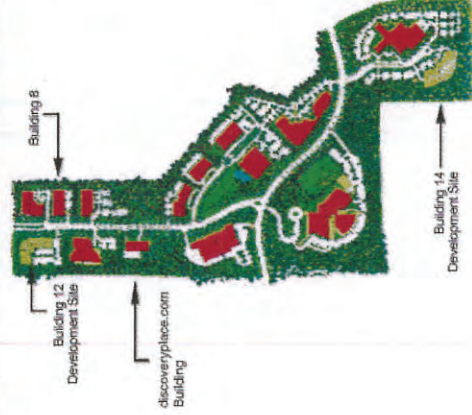
- If required, screen parking using planting materials



Examples Of Other Research Parks



Click on existing buildings for more information.
 (Note: This map shows just one of many possibilities for future development.)



Architecture

- Style
 - Traditional
 - Contemporary
 - Very Modern



Architecture

- Materials/Textures/Colors
 - Masonry
 - Glass
 - Metal
 - Others



Natural Features

Recommendations

- Wetlands – 50 feet min. setback
- Floodplains – 1 foot vertical above
- Wooded Areas – 50 feet min. Setback from drip-line



Premise:

These principles will provide a basis upon which physical planning concepts and implementation plans are developed and evaluated.

Quality of Life:

1. Create a **unique Park setting** that attracts high-skill, high-wage industrial and research tenants from across the country.
2. Create a **natural fit between the Park and the surrounding community** – keep Marshall Marshall!
3. **Develop suitable housing options and amenities** that will entice people to live in Marshall, as well as, work here.

Environment:

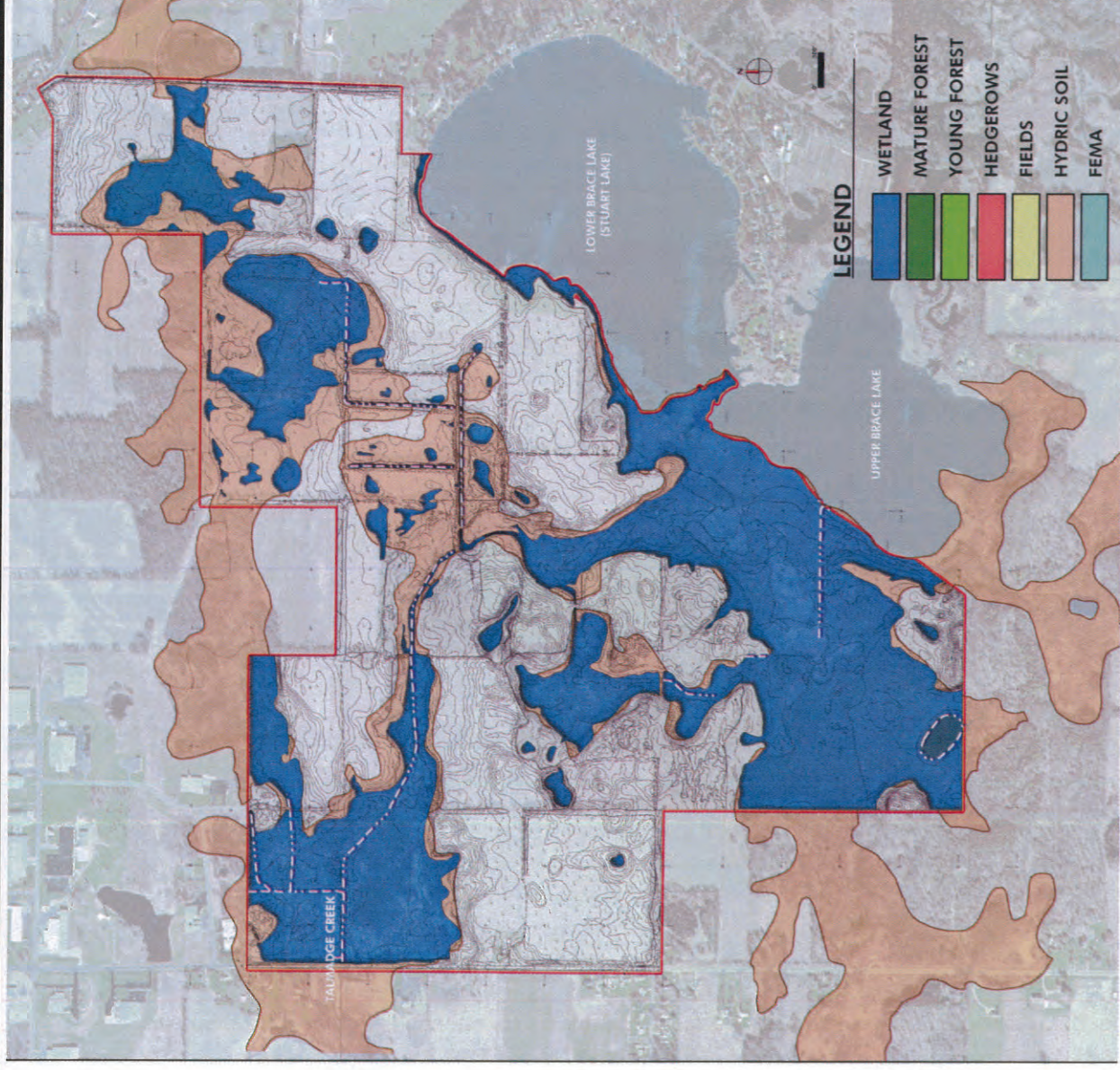
1. **Minimize the environmental impacts of new development** and, to the extent possible, preserve the unique attributes of the site (lake, wetlands, and forested areas)
2. **Integrate innovative Best Management Practices (BMPs)** into the planning, design, construction, and long-term management of the Park

Economic:

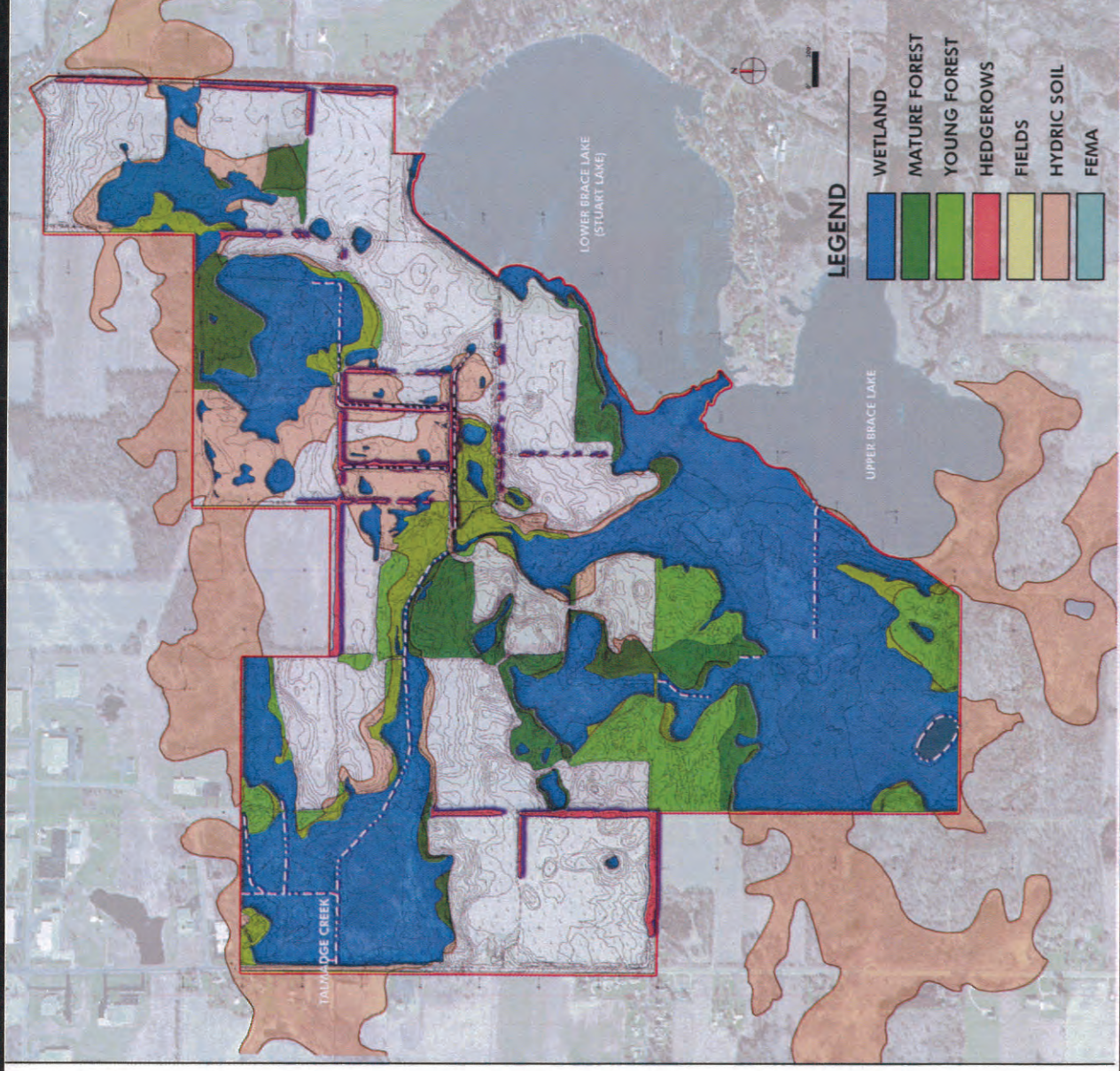
1. **Diversify and expand Marshall's economic base** through the attraction of high-quality, high-paying businesses
2. **Complement Marshall's existing business community** with Park development; do not create services/retail that will detract from other Marshall business centers.
3. Develop a strategy for **phased Park development** – incremental, economically sustainable development

Guiding Principles

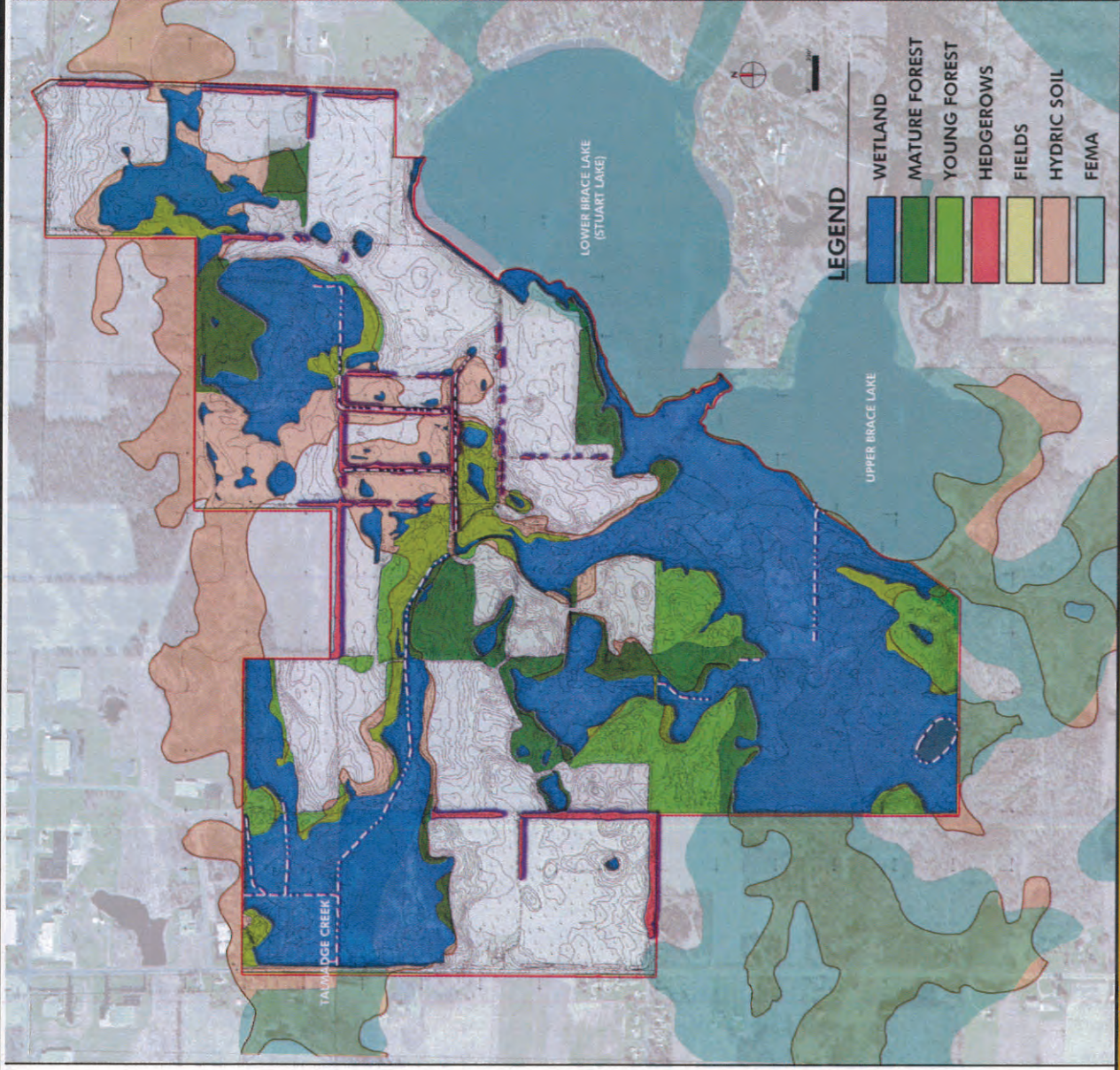
Wetlands and Hydric Soils



Forested Areas



FEMA Flood Map



Analysis Composite

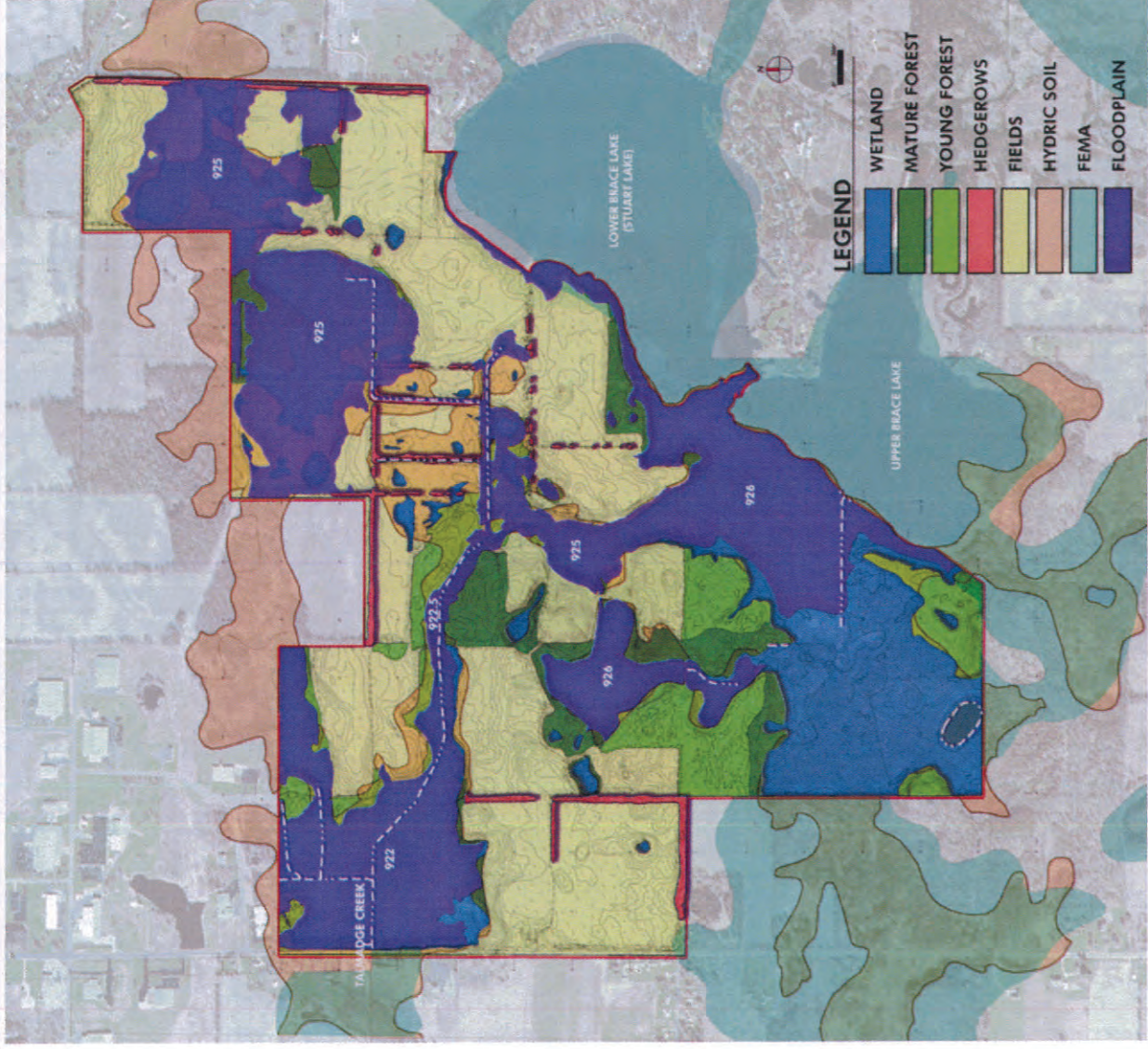


Exhibit D and E

Estimated Annual Impact on Entities from LDFA Tax Capture

| Tax Year | Year End Taxable Value | Growth | LDFA Capture | City General Impact | City Leaf & Brush Impact | City Recreation Impact | City DART Impact | Library Operating Impact | KCC Impact | Marshall Ambulance Authority Impact | Calhoun Co General Impact | Calhoun Co Veterans Impact | Calhoun Co Med Care Impact | Calhoun Co Senior Impact | Calhoun Co Parks Impact |
|----------|---------------------------|--------|-----------------|------------------------|--------------------------------|------------------------------|---------------------|--------------------------------|------------|----------------------------------------------|---------------------------------|----------------------------------|----------------------------------|--------------------------------|-------------------------------|
| 2021 | 27,199,892 | | 609,585 | 321,924 | 14,567 | 17,104 | 18,090 | 31,087 | 67,780 | 13,467 | 100,873 | 1,876 | 4,656 | 13,977 | 4,184 |
| 2022 | 37,657,969 | 38% | 836,842 | 445,987 | 12,660 | 23,783 | 24,769 | 43,356 | 93,900 | 18,597 | 139,747 | 2,599 | 6,450 | 19,364 | 5,630 |
| 2023 | 44,103,756 | 17% | 977,591 | 520,644 | 14,783 | 27,722 | 28,758 | 50,616 | 109,620 | 22,639 | 163,141 | 3,034 | 7,529 | 22,605 | 6,500 |
| 2024 | 49,786,458 | 13% | 1,088,885 | 580,586 | 16,489 | 30,975 | 31,961 | 56,444 | 122,240 | 24,080 | 181,924 | 3,383 | 8,396 | 25,208 | 7,199 |
| 2025 | 51,918,587 | 4% | 1,139,632 | 607,688 | 17,260 | 32,424 | 33,410 | 59,078 | 127,946 | 25,184 | 190,415 | 3,540 | 8,788 | 26,385 | 7,514 |
| 2026 | 52,956,959 | 2% | 1,154,860 | 615,841 | 17,490 | 32,855 | 33,854 | 59,864 | 129,648 | 25,519 | 192,948 | 3,587 | 8,905 | 26,736 | 7,614 |
| 2027 | 54,016,098 | 2% | 1,170,219 | 624,032 | 17,722 | 33,292 | 34,305 | 60,660 | 131,372 | 25,858 | 195,514 | 3,635 | 9,023 | 27,092 | 7,715 |
| 2028 | 55,096,420 | 2% | 1,185,783 | 632,331 | 17,958 | 33,735 | 34,761 | 61,467 | 133,119 | 26,202 | 198,114 | 3,683 | 9,143 | 27,452 | 7,818 |
| 2029 | 56,198,349 | 2% | 1,201,554 | 640,741 | 18,197 | 34,184 | 35,223 | 62,284 | 134,890 | 26,551 | 200,749 | 3,732 | 9,265 | 27,817 | 7,922 |
| 2030 | 57,322,316 | 2% | 1,217,535 | 649,263 | 18,439 | 34,638 | 35,692 | 63,113 | 136,684 | 26,904 | 203,419 | 3,782 | 9,388 | 28,187 | 8,027 |
| 2031 | 58,468,762 | 2% | 1,233,728 | 657,898 | 18,684 | 35,099 | 36,166 | 63,952 | 138,502 | 27,262 | 206,124 | 3,832 | 9,513 | 28,562 | 8,134 |
| 2032 | 59,638,137 | 2% | 1,250,137 | 666,648 | 18,932 | 35,566 | 36,647 | 64,803 | 140,344 | 27,624 | 208,866 | 3,883 | 9,640 | 28,942 | 8,242 |
| 2033 | 60,830,900 | 2% | 1,266,764 | 675,515 | 19,184 | 36,039 | 37,135 | 65,664 | 142,210 | 27,992 | 211,644 | 3,935 | 9,768 | 29,327 | 8,352 |
| 2034 | 62,047,518 | 2% | 1,283,612 | 684,499 | 19,439 | 36,518 | 37,629 | 66,538 | 144,102 | 28,364 | 214,459 | 3,987 | 9,898 | 29,717 | 8,463 |
| 2035 | 63,288,468 | 2% | 1,300,684 | 693,603 | 19,698 | 37,004 | 38,129 | 67,423 | 146,018 | 28,741 | 217,311 | 4,040 | 10,029 | 30,112 | 8,575 |
| 2036 | 64,554,238 | 2% | 1,317,983 | 702,828 | 19,960 | 37,496 | 38,636 | 68,319 | 147,960 | 29,123 | 220,201 | 4,094 | 10,163 | 30,512 | 8,689 |
| 2037 | 65,845,323 | 2% | 1,335,512 | 712,176 | 20,225 | 37,995 | 39,150 | 69,228 | 149,928 | 29,511 | 223,130 | 4,148 | 10,298 | 30,918 | 8,805 |
| 2038 | 67,162,229 | 2% | 1,353,274 | 721,647 | 20,494 | 38,500 | 39,671 | 70,149 | 151,922 | 29,903 | 226,097 | 4,203 | 10,435 | 31,329 | 8,922 |
| 2039 | 68,505,474 | 2% | 1,371,273 | 731,245 | 20,767 | 39,012 | 40,198 | 71,082 | 153,943 | 30,301 | 229,105 | 4,259 | 10,574 | 31,746 | 9,041 |
| 2040 | 69,875,583 | 2% | 1,389,511 | 740,971 | 21,043 | 39,531 | 40,733 | 72,027 | 155,990 | 30,704 | 232,152 | 4,316 | 10,714 | 32,168 | 9,161 |
| | | | | 12,626,069 | 363,992 | 673,472 | 694,918 | 1,227,153 | 2,658,118 | 524,527 | 3,955,932 | 73,548 | 182,574 | 548,155 | 156,507 |

Estimated Annual Tax Capture For All Entities in LDFA

| | | | Capture | Capture | Capture | Capture | Capture | Capture | Capture | Capture | Capture | Capture | Capture | Capture | Capture | Capture |
|----------|---------------|--------|---------|--------------|-------------|------------|-----------|-----------|---------|---------------------|---------|------------|------------|------------|------------|------------|
| | Year End | | | | City Leaf & | City | | Library | | Marshall | | Calhoun Co | Calhoun Co | Calhoun Co | Calhoun Co | Calhoun Co |
| Tax Year | Taxable Value | Growth | LDFA | City General | Brush | Recreation | City DART | Operating | KCC | Ambulance Authority | General | Veterans | Med Care | Senior | Parks | |
| 2021 | 27,199,892 | | | 610,000 | 140,468 | 5,585 | 7,539 | 6,553 | 13,603 | 29,575 | 5,268 | 44,015 | 818 | 2,031 | 6,099 | 1,204 |
| 2022 | 37,657,969 | 38% | | 836,842 | 188,524 | 5,388 | 10,122 | 9,136 | 18,335 | 39,694 | 7,248 | 59,073 | 1,098 | 2,726 | 8,186 | 1,764 |
| 2023 | 44,103,756 | 17% | | 977,591 | 218,560 | 6,243 | 11,727 | 10,741 | 21,255 | 46,017 | 8,471 | 68,484 | 1,273 | 3,161 | 9,490 | 2,114 |
| 2024 | 49,786,458 | 13% | | 1,088,885 | 250,096 | 7,140 | 13,412 | 12,426 | 24,321 | 52,657 | 9,756 | 78,366 | 1,457 | 3,617 | 10,859 | 2,481 |
| 2025 | 51,918,587 | 4% | | 1,139,632 | 253,414 | 7,234 | 13,589 | 12,603 | 24,644 | 53,356 | 9,891 | 79,406 | 1,477 | 3,665 | 11,003 | 2,520 |
| 2026 | 52,956,959 | 2% | | 1,154,860 | 256,784 | 7,330 | 13,770 | 12,771 | 24,972 | 54,066 | 10,023 | 80,462 | 1,497 | 3,714 | 11,149 | 2,554 |
| 2027 | 54,016,098 | 2% | | 1,170,219 | 260,200 | 7,428 | 13,953 | 12,940 | 25,304 | 54,785 | 10,156 | 81,532 | 1,517 | 3,763 | 11,298 | 2,587 |
| 2028 | 55,096,420 | 2% | | 1,185,783 | 263,660 | 7,526 | 14,138 | 13,113 | 25,640 | 55,513 | 10,291 | 82,617 | 1,537 | 3,813 | 11,448 | 2,622 |
| 2029 | 56,198,349 | 2% | | 1,201,554 | 267,167 | 7,627 | 14,326 | 13,287 | 25,981 | 56,252 | 10,428 | 83,715 | 1,557 | 3,864 | 11,600 | 2,657 |
| 2030 | 57,322,316 | 2% | | 1,217,535 | 270,720 | 7,728 | 14,517 | 13,464 | 26,327 | 57,000 | 10,566 | 84,829 | 1,578 | 3,915 | 11,754 | 2,692 |
| 2031 | 58,468,762 | 2% | | 1,233,728 | 274,321 | 7,831 | 14,710 | 13,643 | 26,677 | 57,758 | 10,707 | 85,957 | 1,599 | 3,967 | 11,911 | 2,728 |
| 2032 | 59,638,137 | 2% | | 1,250,137 | 277,969 | 7,935 | 14,906 | 13,824 | 27,032 | 58,526 | 10,849 | 87,100 | 1,620 | 4,020 | 12,069 | 2,764 |
| 2033 | 60,830,900 | 2% | | 1,266,764 | 281,666 | 8,040 | 15,104 | 14,008 | 27,391 | 59,304 | 10,994 | 88,259 | 1,642 | 4,074 | 12,230 | 2,801 |
| 2034 | 62,047,518 | 2% | | 1,283,612 | 285,412 | 8,147 | 15,305 | 14,194 | 27,756 | 60,093 | 11,140 | 89,433 | 1,664 | 4,128 | 12,392 | 2,838 |
| 2035 | 63,288,468 | 2% | | 1,300,684 | 289,208 | 8,256 | 15,508 | 14,383 | 28,125 | 60,892 | 11,288 | 90,622 | 1,686 | 4,183 | 12,557 | 2,876 |
| 2036 | 64,554,238 | 2% | | 1,317,983 | 293,055 | 8,366 | 15,715 | 14,574 | 28,499 | 61,702 | 11,438 | 91,827 | 1,708 | 4,238 | 12,724 | 2,914 |
| 2037 | 65,845,323 | 2% | | 1,335,512 | 296,953 | 8,477 | 15,924 | 14,768 | 28,878 | 62,523 | 11,590 | 93,049 | 1,731 | 4,295 | 12,893 | 2,953 |
| 2038 | 67,162,229 | 2% | | 1,353,274 | 300,902 | 8,590 | 16,135 | 14,965 | 29,262 | 63,355 | 11,745 | 94,286 | 1,754 | 4,352 | 13,065 | 2,992 |
| 2039 | 68,505,474 | 2% | | 1,371,273 | 304,904 | 8,704 | 16,350 | 15,164 | 29,651 | 64,197 | 11,901 | 95,540 | 1,777 | 4,410 | 13,239 | 3,032 |
| 2040 | 69,875,583 | 2% | | 1,389,511 | 308,959 | 8,820 | 16,568 | 15,365 | 30,046 | 65,051 | 12,059 | 96,811 | 1,801 | 4,468 | 13,415 | 3,072 |
| | | | | 23,685,378 | 5,282,944 | 152,394 | 283,318 | 261,923 | 513,700 | 1,112,316 | 205,809 | 1,655,383 | 30,788 | 76,404 | 229,381 | 52,166 |